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ABSTRACT

The progress of vocational education during the first 2 years (program years 1991-1992) of funding from the Carl D. Perkins Vocational and Applied Technology Education Act of 1990 in Idaho was assessed. Research was conducted using data from the measures and standards established by the state and from a variety of other sources including information from the State Occupational Information Coordinating Committee, statistics collected by the Division of Vocational Education, program evaluations, and a number of studies conducted over the 2 years. In addition, some data from an initial assessment conducted in 1991 were used. The assessment analyzed the academic, occupational, training and retraining needs of secondary, adult, and postsecondary students and the capability of vocational programs to provide students with adequate training in industry along with problem-solving and academic skills. Some of the findings include the following: (1) students need to learn about occupations as early as possible; (2) students who completed programs had significant advantages over those who dropped out; (3) minority groups were underrepresented in vocational education; (4) difficulties in delivering programs were observed because of Idaho's highly rural nature; (5) Idaho employers are looking for employees with technical skills as well as good interpersonal skills such as communication, critical thinking, and personal management; (6) there is a need for expansion of the curriculum in both technical and basic skills: (7) there is a need for expansion of career guidance programs; (8) the sequence of courses needs to be examined; (9) approximately 60% of the secondary schools met the standard dealing with competency attainment and the standard related to obtaining a job in related employment or pursuing additional education; and (10) continual updating of vocational-technical curriculums had kept programs relevant to the workplace. Sixteen recommendations were made to improve vocational-technical education in the state. (Two appendixes provide a description of the data sources for the assessment, and occupational employment statistics projections for the years 1987-2000 in Idaho by county and planning area.) (KC)



Assessment

of

Vocational Education

In Idaho

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Introduction

This assessment evaluated the progress of vocational education during the first two years of the Perkins legislation. It built on the initial assessment conducted in 1991, using the same factors and general categories of inquiry.

The research methodology used for the assessment combined statistical tools with ethnographic, descriptive techniques. The data were organized using an ethnographic approach: specifically using a rich variety of local and statewide data sources to create an accurate analysis of the state's vocational delivery system. This approach negated weaknesses in any one study by using triangulation: ensuring validity and reliability by confirming and reconfirming findings through a wide variety of data sources. Another significant advantage of this research methodology was that it allowed a much broader range of information from various interest groups and perspectives. Instead of trying to design one research study to get at all the concerns, this assessment used data collected directly by those groups to insure that their specific issues were addressed by the data.

The assessment used data from the measures and standards established by the state and from a variety of other sources including information from the State Occupational Information Coordinating Committee (SOICC), statistics collected by the Division of Vocational Education, program evaluations, and a number of studies conducted over the past two years. Since many measures put in place by the State Board were just beginning to produce data at the time of this assessment, much of the specific progress had to be measured indirectly - looking at processes, numbers of projects, student enrollments and the like. A detailed list and description of the data sources are listed in Appendix A.

Some data from the 1991 assessment were used in this assessment as well. Many findings on employment opportunities, needs of business and industry, and student needs did not change significantly over the past two years. Best available data were often based on the 1990 Census which was also used in the 1991 assessment. In cases where previous data were used, the data were verified by comparing with more recent studies related to the data, or through directly contacting business, industry, commerce and student representatives directly affected by the issues in question.

Specifically, the assessment analyzed:

- 1. The academic, occupational, training and retraining needs of secondary, adult and postsecondary students.
- 2. The capability of vocational programs to provide students with adequate training in the industry and to provide them with problem-solving and academic skills.

This analysis was accomplished by addressing the factors outlined in the Federal Carl Perkins vocational legislation:

- 1. Integration of academic and vocational education
- 2. Sequential courses of study leading to both academic and vocational



competencies

- 3. Increased student work skill attainment and job placement
- 4. Increased linkages between secondary and postsecondary educational institutions
- 5. Instruction and experience in all aspects of the industry the students are preparing to enter
- 6. The ability of the eligible recipients to meet the needs of special populations with respect to vocational education
- 7. Raising the quality of vocational education programs in schools with high concentrations of poor and low-achieving students
- 8. Relevance of programs to the workplace: both present and future
- 9. Ability of vocational curriculum, equipment and instructional materials to meet the demands of the workforce
- 10. Basic and higher order workplace competencies employers will need

This report is organized into two sections: the needs of the students (including the type of training industry requires); and the capability of current programs to meet those needs. Each category is divided into the pertinent assessment factors listed above.

At the beginning of each section are the major findings drawn from that section.

Note: For information about this assessment, please contact Michael Rush, Director of Research, State Division of Vocational Education. 650 West State Street, Boise, ID 83720. Phone: (208) 334-3216.



Recommendations

(Note: The following recommendations are not listed in priority order.)

- Increase the capacity of the vocational system to deliver secondary, postsecondary and industry specific training.
- 2. Continue to develop more complete integration of vocational and academic skills through professional development, curriculum design, and teacher collaboration.
- 3. Expand career guidance to all schools. Emphasis should be given to comprehensive career planning in the middle school/junior high.
- Improve ways to identify and serve special populations.
- 5. Implement strategies to increase the number of Hispanic and Native American students in vocational programs, including increasing the numbers of vocationally certified bilingual/bicultural teachers.
- 6. Coordinate special population data to better identify needs and demonstrate progress.
- 7. Implement strategies to increase participation of women in high-tech, high-wage jobs.
- 8. Improve the effectiveness of student organizations to provide enhanced occupational skills, (e.g., problem solving, critical thinking, communications, interpersonal skills).
- Develop strategies and models to deliver vocational education in unique ways to meet the diverse needs in a rural state (e.g., school-to-work, alternative cluster models, industry-specific training, Tech Prep).
- 10. Develop strategies to increase business and industry involvement in vocational education (e.g. advisory committees, work-site learning, mentoring, shadowing, teacher upgrade and training).
- 11. Improve the match of vocational programs to current and future job opportunities.
- 12. Increase the linkages between secondary and postsecondary vocational-technical training. (e.g., seamless curriculum, articulation, instructor collaboration).
- 13. Improve professional development through teacher education, inservice, industry mentoring, strategic planning, and formal evaluations.
- 14. Update equipment and technology in vocational programs.
- 15. Define and develop strategies to improve teaching "all aspects of the industry."
- 16. Retain current 70% secondary; 30% postsecondary split for Perkins IIC money.



Major Findings

Related to the

Academic, Occupational, Training and Retraining Needs of Secondary, Adult and Postsecondary Students

A. Needs related to the integration of academic and vocational education

- Students needed to learn about occupations as early as possible to facilitate
 the integration of vocational and academic courses and broad career
 decisions. Career Guidance was essential to better transition into work or
 postsecondary training.
- 2. Applied Academics needed to be expanded.
- 3. The necessity for technicians to have good communication and computational skills emphasized the importance of programs that combine academic and technical skills.

B. The needs of special populations with respect to vocational education

- 1. Increasing numbers of women and minorities in the workforce continued to challenge vocational educators to develop innovative ways to recruit and train these populations.
- 2. Minority unemployment was high, particularly among Native Americans.
- 3. Supplemental services were needed to help special population students succeed.
- 4. Economic disadvantagement was a significant contributor to dropout rates.
- 5. Students who completed programs had significant advantages over those who dropped out.
- 6. Minorities were still not coming through vocational education in sufficient numbers to provide industries with the numbers they needed to meet affirmative action commitments.

C. Keeping programs relevant to the workplace: both present and future

1. Idaho was experiencing significant economic growth. Job opportunities for vocationally trained people were available.



- 2. Because of Idaho's rural nature, delivery of programs needed to promote access in a variety of unique ways. Vocational education needed to work closely with other agencies to meet the needs inherent in a rural, sparsely populated state.
- 3. Business and industry pointed out the need for more vocational-technical education at the high school level.
- 4. Business and industry stressed the importance of vocational-technical training to the nation's and Idaho's economy.
- 5. There was a continued or an increased need for instruction on employability skills and habits or SCANS competencies.
- 6. Individuals who dropped out of school or completed high school without obtaining basic reading and mathematics skills were at a great disadvantage.
- 7. High percentage of post-secondary graduates remained in Idaho and many did not move from their home areas. Therefore, localized training was deemed important to meet local needs.
- 8. Training had not been easily accessible to rural Idaho nor had these areas produced many new jobs.
- 9. Employers were asking vocational education to provide access to upgrading training for their existing employees.
- 10. Existing data and projections showed there was a significant shift from an industry base to services.
- 11. Reduction in defense spending had increased the number of military personnel returning to Idaho looking for civilian jobs requiring skill training in their areas of expertise.
- 12. Eleven out of twenty of the fastest growing jobs in the nation required vocational-technical training.

D. Basic and higher order workplace competencies employers will need

- Advanced skills in communication, science, problem solving, critical thinking, trouble shooting, organizing processes, evaluating and math were necessary for successful technicians.
- 2. Idaho employers were looking for employees with technical skills as well as good interpersonal skills which included effective communication skills,



critical thinking, and personal management.

- 3. Employers had difficulty recruiting qualified technicians with the right set of skills.
- 4. More formal education was needed for existing employees to augment their on-the-job-training.
- 5. Employers were requiring employees and prospective employees to have higher order thinking skills as well as good technical skills.



Academic, Occupational, Training and Retraining Needs of Secondary, Adult and Postsecondary Students

A. Needs related to the integration of academic and vocational education

Business, Labor and Industry Data

(Note: Much of the data related to the needs related to integration are presented under section D, <u>Basic and higher order workplace competencies employers will need.</u>)

Many of the internal studies indicated that the skills needed by technicians included good communication and computational skills. The studies also included the need to combine the technical skills with the ability to collect and analyze data and to make decisions based on that data.

A team of industry representatives, including health care, met to validate skills needed in the workplace (June 6 - 9, 1993 Boise, ID). Representatives were unanimous that students needed to apply math, science and communications on the job. A more recent meeting in San Francisco, CA, August, 1993, of members of a national committee on standards for health care workers who provide therapeutic services (the Therapeutic Cluster of Health Occupations) determined competencies include knowledge and application of sciences, math, communications, teamwork, and higher level thinking skills (critical thinking, problem solving, evaluating, judging).

Evaluations and Technical Visits

Visitation reports from vocational supervisors indicated three student service needs: 1) expand the career guidance of students; 2) expand counseling of students in the transition to post-high school employment and specific job training; and 3) provide more applied academic choices.

Use of the Career Information System (CIS) was recommended.

Comprehensive Guidance Model Assessment

The findings or priorities of the twenty-four school districts centered around the following three areas of need:

- 1) Students need assistance in choosing careers around their unique aptitudes and interests.
- 2) Students need assistance to identify and transition into educational programs beyond high school.
- 3) Students need assistance to better understand themselves and to develop human relationship skills.



B. The needs of special populations with respect to vocational education

Business, Labor and Industry Data

A major employer of technician level employees had considerable difficulty finding qualified technicians especially in meeting its commitment to affirmative action.

In August and September of 1993, while gathering information for submission of a proposal for training members of Hispanic and Native American populations in geriatric home care, administrators of home services to these populations indicted there is great need for the services but a corresponding lack of trained personnel from these ethnic groups. Fort Hall Indian Reservation in Pocatello, Idaho has at least 500 older adults who would benefit from having trained home care providers. Terry Reilly Health Care Clinic personnel, who provide services to the Hispanic population, echoed the same need.

Evaluations and Technical Visits

Five percent of the visitation reports of state supervisors mentioned specifically that special populations were not making adequate progress in the programs based on recently adapted measures and standards, and that in some programs opportunities were not provided for all students to participate because of counseling, class scheduling, curriculum design, classroom procedures, and recruitment and placement inactivity.

Five and ten year evaluations done by the State Division of Vocational Education and Department of Education noted two specific areas of special population student need. One, five percent of the recommendations indicated a need for providing greater supplementary services for special populations in the form of curriculum modification, tutors, and other program/course modification. Second, one-third of the schools evaluated were urged to be much more aggressive in enrolling special populations in vocational programs.

Other identified needs also affected special population students. First, about one-fourth of the visitation reports indicate greater annual and long range planning should exist to provide program direction. In addition, every school evaluation indicated that greater long range planning was needed to provide program direction. Planning would be critical for special population curriculum development, tutor use, recruitment, and data collection of student progress.

Second, individual teacher professional planning and activities may also be implicated with special population needs. One-fourth of all visitations with program instructors revealed the need for providing greater professional development opportunities, and in some cases specifically connected to working with special populations. To meet the intent of the law in providing for special populations, teachers and administrators must change their perspective about vocational education program potential and delivery. For example about one-half of the schools that were evaluated showed a need to have greater awareness of



how to provide supplementary services to special populations. These evaluations also supported the proposition that teachers and administrators needed to have greater understanding of how to determine if special populations are making adequate progress.

Third, student youth organizations have an effect on special populations. Approximately one-half of all programs in the evaluations and visitations showed strong student leadership development commendations. But, one-half of the recommendations of these assessments featured the need for making leadership organizations a more integral part of the vocational program. Vocational philosophy has espoused that student interaction and cooperative learning are strong motivating forces for all vocational students.

Idaho School Profiles

The statewide dropout rate as determined by the State Department of Education was 8.6% in 1993. There were 52 out of 104 or 50% of the districts whose dropout rate was 3 percentage points or more lower than the average (5.6% or less). There were thirteen districts whose dropout rate was 3 percentage points higher than the average (11.6% or higher). This indicated that the larger districts had a greater problem with dropouts than the smaller districts. Dropout rates were higher in districts with high percentages of migrant farm workers and in areas with significant economic problems. Still, there were a number of notable exceptions to this trend. In one instance, two districts of approximately the same size and in the same geographic location had one of the highest and one of the lowest dropout rates in the state. While some of the difference might by attributed to differences in reporting, an analysis of underlying causes would be warranted.

Indicators of High School Dropouts

This survey of students from an Idaho alternative school indicated that the most important reasons contributing to dropping out were: 1) lack of money; 2) drug and alcohol problems; 3) pregnancy or teen parent; 4) school and teachers not caring about the student; 5) being expelled; and 6) family moving frequently. It was significant to note that tack of money was not used by the Department of Education as one of the factors contributing to dropout rate. It was also significant that a number of the school districts having higher than normal dropout rates were areas with significant economic problems. Ability did not appear to be a significant factor in dropout potential.

Postsecondary Vocational-Technical School and Beyond

Approximately 83% of the students became employed full-time or part-time immediately after completing their program of study. Student completers with a certificate or AAS degree were even more likely to be employed full time. <u>Completers</u> who work part-time earned significantly more than leavers who work part-time. Initial salaries of completers and non-completers were about the same, however, the salaries of the completers increased almost twice as fast over a 2-year period. Students who earned a certificate or AAS degree tended to have about one-third more benefits (leave, health insurance, sick,



dental, life, disability, and education) than those who didn't complete. These data pointed to the importance of keeping students in the programs through completion.

Goals and Recommendations for Improving American Indian Education

The following findings consist of the recommendations of the Idaho subcommittee on Indian Education. This is not a comprehensive list of those recommendations; the recommendations presented are those that relate most closely with the role and mission of vocational-technical education.

Primary and Secondary Education K-12

- 1. Help American Indian students understand the connection between what they learn in school and what they must know to live, learn, and work in their community and in society.
- 2. Develop in-service training for educators and school personnel that provides a uniform approach to the education of American Indian students.
- 3. Offer culturally-based math and science, including applied math and physics.
- 4. Provide and update school equipment, buildings and facilities.
- 5. Report test scores, enrollment, graduation and/or dropout data according to ethnicity.
- 6. Designate exit points from high school as college prep, tech-prep, and apprenticeship.

Higher Education

- 1. Increase recruitment, retention and graduation rates of American Indian students in Idaho's two and four-year colleges and universities including postsecondary vocational/technical institutions.
- 2. Increase the number of American Indian faculty and administrative/professional staff at Idaho's colleges and universities.
- 3. Implement the guidelines in the Ethnic/Racial Minority Student Recruitment, Enrollment, Retention and Graduation Action Plan for Higher Education.
- 4. Create or expand student support services at Idaho institutions, e.g., educational advising, child care, tutoring, and mentoring programs. Institutions should also: work with reservation personnel to establish community colleges or at least college/university educational satellite sites.
- 5. Develop an on-going financial aid program of scholarships, endowments, tuition waivers and other forms of financial assistance to ensure adequate financial support for American Indian students.
- 6. Coordinate the various financial assistance programs available to American Indian students for easier, more reliable and timely distribution of financial aid.
- 7. Expand professional development opportunities for American Indian students and faculty.



- 8. Expand opportunities for non-Indian faculty to participate in faculty exchanges at schools with large American Indian populations.
- 9. Request that teacher preparation programs increase efforts to recruit and graduate American Indian teachers and school administrators.
- 10. Routinely report data, such as test scores, grades, retention and attrition rates, by ethnicity.

Community/Tribal/Parental Participation

1. Involve American Indian parents in reviewing curricula and textbooks.

Career Awareness

- 1. Develop comprehensive guidance and counseling programs in Idaho schools that meet the career, educational/training, personal and social needs of American Indian students and their families.
- 2. Provide comprehensive career counseling and guidance that fits the interest and aptitudes of American Indian students, and allows freedom of choice.
- 3. Implement partnerships between tribes, schools, parents, social service agencies, private industry councils/Job Training Partnership Act (JTPA), and business and industry.
- 4. Recruit and hire more certified American Indian counselors.
- 5. Organize and provide career fairs especially targeted to American Indian students.
- 6. Provide support groups, counseling and other appropriate programs for American Indian students who are single parents.
- 7. Provide financial aid counseling and guidance to American Indian students regarding postsecondary vocational and academic opportunities.
- 8. Provide information on scholarships, grants, federal and state programs, including JTPA, designed to assist American Indians who wish to pursue education and training.

Adult Education

- 1. Expand Adult Basic Education programs for American Indians.
- 2. Provide adult vocational, Adult Basic Education, JTPA training and community education classes on or near reservations.
- 3. Provide extension or university satellite sites for community education on reservations.
- 4. Incorporate life-skills training into Adult Basic Education programs.
- 5. Develop partnerships with private industry councils/JTPA, and business & industry to provide workshops, training, and other educational programs on or near reservations.



Determinants of Ideho Hispanic Female Participation in Adult Education Programs

A research study was conducted by the University of Idaho to identify factors related to Idaho Hispanic women participating in adult education programs. Sixty-three Hispanic women were interviewed (in English or Spanish). Thirty-two were participating in an adult education program; thirty-one were not. Hispanic women who were not in adult education programs (nonparticipants) tended to be married, older, less educated and more mobile than those participating in adult education programs. Nonparticipants also expressed more traditional attitudes toward women, a lower degree of acculturation, and more barriers to participation than participants. For nonparticipants, age and barriers to participation served as significant predictors. Significant predictors of participants in adult education included length of residency, marital status, and educational attainment.

Findings of this study indicate that adult educators should consider several factors to increase Hispanic female participation. First, they should consider cultural indicators of participation such as length of residency, marital status, and age. Nonparticipants tend to be more mobile, married, and older than participants -- all indicators of a lower degree of acculturation. Thus, nonparticipants may feel alienated from an educational process that overlooks their Hispanic heritage. Nonparticipants also experienced low educational attainment and, therefore, may not feel comfortable in traditional school settings. Consequently, less threatening environments for educational programs should be explored. In addition, adult educators should consider barriers to participation, especially those institutional in nature such as inconvenient time and course location, lack of financial assistance, and inappropriate course offerings.

This study demonstrates that even within sub-cultures, important differences exist between participants and nonparticipants. As our society becomes increasingly multicultural, educators must strive to meet the cultural needs of such groups as Hispanic women.

Hispanic Youth: Dropout Prevention

The data for this study were collected through a series of community meetings in areas with large Hispanic populations. Although these data were used in the last assessment, the Committee of Practitioners and others confirmed that the data were still relevant to this assessment. The findings are presented primarily in the form of recommendations for improvement. The task force concluded that "a strong education is critical for immigrants and minorities to be assimilated into the mainstream of American society. It provides the freedom for impoverished individuals to grow and prosper. Now, more than ever, the ability to communicate, compute and solve problems is required to move up the socioeconomic scale and receive the benefits our system offers. We need to ensure that all of our citizens take advantage of the opportunities that are available to them." Specific recommendations included:

1. Provide an educational environment in which Hispanic students succeed at



- their own rate of individual progress without risking self-esteem.
- 2. Provide a curriculum that is relevant to the problems and issues our Hispanic youth and their families are facing, not only today but in the near future.
- 3. Provide a curriculum that teaches and promotes family-like cooperation and collaboration in facing and working with the above issues.
- 4. Hire and/or educate instructional, guidance and administrative staff to be sensitive to the special Hispanic culture and language and to work constructively with Hispanic students and patrons.
- 5. Assess vocational education program offerings to assure that programs are perceived as positive options for career development of Hispanic students.
- 6. Employ Hispanic role models in all staff positions so that Hispanic students are encouraged to succeed and remain in school.
- 7. Evaluate the vocational education programs offered to assure Hispanic students are provided adequate information about program opportunities and equal access.
- 8. Develop alternative ways to allow students to get credit, stay in school, and still meet the 90 percent attendance rule.
- 9. Concentrate on serving students in mainstream regular classrooms instead of separate pullout programs; integrate not separate.
- 10. Develop comprehensive guidance and counseling programs in Idaho schools that will meet the career and educational, personal, and social needs of Hispanic students and their families.
- 11. Implement the Idaho Comprehensive Guidance and Counseling program model adopted by the State Board of Education.
- 12. Provide Hispanic cultural awareness training to school counselors.
- 13. Provide parenting education to Hispanic parents and families.
- 14. Provide increased career awareness through experience-based career education, volunteering, and use of Career Information System.
- 15. Encourage active participation of Hispanic community leaders, organizations, and Hispanic parents/families in the educational process and career planning of their children.
- 16. Establish Parent/Student Learning Center.
- 17. Develop and implement a Cultural Awareness Training Model for certified and non-certified personnel, parent groups, students, and the community.
- 18. Develop community based partnerships to help identify employment opportunities, personal development resources, and financial assistance.

Idaho State Council on Vocational Education Public Meeting

A plea was made to provide more resources for those people who were reentering the education.

Table: 1992 Statewide - Population

This table shows the population by minority group and their participation rate in the labor force. Other Nonwhite and Hispanics have the highest participation rates.



1992 STATEWIDE - POPULATION

MINORITY STATUS	POPULATION		PERCE DISTRIBI		LABOR FORCE PARTICIPATION RATE	
	TOTAL	FEMALE	TOTAL	FEMALE	TOTAL	FEMALE
TOTAL	1,067,000	535,436	100.00	100.00	65.53	56.07
WHITE	1,007,705	507,905	94.44	94.86	65.30	55.92
BLACK	3,872	1,614	0.36	0.30	65.98	60.78
NATIVE AMERICAN	15,555	7,598	1.46	1.42	63.73	57.28
ASIAN/PACIFIC	9,640	5,073	0.90	0.95	63.34	54.57
OTHER NONWHITE	30,228	13,245	2.83	2.47	76.39	62.49
HISPANIC, ALL RACES	54,772	24,916	5.13	4.65	74.97	63.77
ALL MINORITIES	59,295	27,531	5.56	5.14	69.87	59.36

Source: Idaho Department of Employment - Idaho Affirmative Action Statistics 1992

Table: Population Projections by Race/Ethnic Group by County

The following tables lists the County population figures as well as a count of minorities and the percent of total minorities in each county. The table showed that Hispanics were the largest minority group in Idaho with largest concentration located in Canyon county. These data along with the Census table on Language Spoken at Home and Ability to Speak English demonstrated the need for English as a Second Language programs.



POPULATION PROJECTIONS BY RACE/ETHNIC GROUP BY COUNTY FISCAL YEAR 1994

BASED ON 1990 CENSUS DATA

				AMERICAN	S. PACIFICI	OTHER	HISPANIC	PERCENT
COUNTY	TOTAL	WHITE	BLACK	INDIAN	ASIAN	RACE	ORIGIN	MINORITY
NDA	224,835	217,310	1,047	1,510	3,154	1,814	8,071	3.35%
IDAMS	3,555	3,509	2	45	1	8	42	1.29%
BANNOCK	72,142	87,481	471	1,833	778	1,599	2,994	6.49%
EAR LAKE	6,648	6,555	0	27	5	80	149	1.40%
IENEWAH	8,872	7,952	7	658	31	25	135	8.30%
IINGHAM	41,084	35,444	43	2,857	298	2,422	3,949	13.69%
BLAINE	14,807	14,487	11	59	114	157	434	2.29%
BOISE	3,834	3,749	2	38	15	30	92	2.22%
BONNER	29,088	28,838	40	240	78	92	385	1.55%
BONNEVILLE	78,895	75,880	325	427	751	1,733	3,288	4.10%
BOUNDARY	9,104	8,586	3	184	28	222	339	4.58%
BUTTE	3,188	3,091	0	24	5	88	110	3.05%
CAMAS	794	778	2	9	3	2	4	2.08%
CANYON	98,419	87,898	191	751	1,078	8,503	12,935	10.69%
CARIBOU	7,808	7,458	8	24	14	108	210	2.00%
CASSIA	21,341	19,208	3	188	105	1,839	2,886	9.99%
CLARK	833	752	0	5	0	75	86	9.71%
CLEARWATER	9,293	9.027	11	197	23	35	122	2.88%
CUSTER	4,518	4,419	2	38	21	38	98	2.15%
ELMORE	23,189	20,848	849	187	495	990	1,745	10.88%
FRANKLIN	10,087	9,890	5	42	13	137	259	1.95%
FREMONT	11,950	11,225	10	74	40	801	833	8.07%
GEM	12,941	12,371	14	152	58	348	872	4.41%
GOODING	12,711	11,894	8	47	34	728	1,118	8.42%
IDAHO	15,060	14,817	3	378	37	24	135	2.94%
JEFFERSON	18,075	17,074	8	133	44	818	1,282	5.54%
JEROME	18,540	15,829	10	128	59	717	1,112	5.519
KOOTENAI	78,260	74,802	103	738	358	281	1,149	1.919
LATAR	33,453	32,110	190	225	775	153	491	4.019
LEMHI	7,538	7,400	2	54	25	57	153	1.839
LEWIS	3,842	3,630	4	185	20	3	48	5.529
LINCOLN	3,814	3,530	3	24	13	44	213	2.33
MADISON	25,887	24,847	47	118	323	531	823	3.849
MINIDOKA	21,154	18,072	47	220	109	2,708	4,081	14.579
NEZ PERCE	36,880	34,815	52	1,849	231	133	458	8.14
ONEIDA	3,815	3,749	4	21	9	33	81	1.75
OWYHEE	9,169	7,577	24	302	83	1,183	1,538	17.38
PAYETTE	17,958	18,819	15	207	173	943	1,311	7.45
POWER	7,742	8,727	8	222	44	742	1,024	13.11
SHOSHONE	15,221	14,882	17	199	44	80	270	2.23
TETON	3,758	3,871	2	14	1	89	259	2.30
TWIN FALLS	58,543	55,945	71	338	573	1,817	3,394	4,44
VALLEY	8,875	8,543	9	88	30	28	117	1.98
WASHINGTON	9,342	8,370	8	50	142	772	1,000	10.41
STATEWIDE	1,100,000	1,038,497	3,682	15,057	10,232	32,542	57,830	5.59

^{*}OATA SUPPRESSED BY CENSUS BUREAU
** MAY NOT AOD TO TOTALS DUE TO ROUNDING SOURCE: IDAHO DEPARTMENT OF EMPLOYMENT IDAHO DEMOGRAPHIC PROFILE



1990 Census of Population and Housing Summary Tapa File 3A IDAHO

AGE BY LANGUAGE SPOKEN AT HOME AND ABILITY TO SPEAK ENGLISH

Universe: Persons 5 years and over

5 to 17 years:		
Speak only English		214,550
Speak Spanish:		
	Speak English "very well"	6,264
	Speak English "well"	1,979
	Speak Spanish: English "not well" or "not at all"	1,728
Speak Asian/Pl language:		
	Speak English "very well	558
	Speak English "well"	118
	Speak English "not well"/"not at all"	96
Speak other language:		
	Speak English "very well"	1,786
	Speak English "well"	346
	Speak English "not well" or "not at all"	366
18 to 64 years:		
Speak only English		537,234
Speak Spanish:		*****
	Speak English "very weil"	14,518
·	Speak English "well"	4,473
	Speak English "not well" or "not at all"	6,635
Speak Asian/PI language:		2.042
	Speak English "very well"	2,042
	Speak English "well"	1,179
	Speak English "not well"/"not at all"	691
Speak other language:		0 111
	Speak English "very well"	8,111 1,723
	Speak English "well"	
	English "not well" or "not at all"	1,168
65 years and over:		447 004
Speak only English		115,924
Speak Spanish:		000
	Speak English "very well"	889 255
	Speak English "well"	340
	Speak English "not well" or "not at all"	340
Speak Asian/PI language		172
	Speak English "very well"	118
	Speak English "well"	85
• • • •	Speak English "not well"/"not at all"	00
Speak other language:	Sheek English "very well"	2,359
	Speak English "very well"	632
	Speak English "well" or "not at all"	364
	Speak English "not well" or "not at all"	304



Statewide Labor Force Data

The tables on the following pages provide information on the statewide labor force.

The table: 1992 Statewide Labor Force showed a breakdown of Idaho's Labor Force by minority group and females and their unemployment rate. The unemployment rate for Native Americans was the highest by far illustrating the need for programs to target this particular group.

The table: <u>Projected Labor Force by Race/Ethnic Group by County and Area</u> showed Idaho's labor force projected for 1994.

The table: <u>Projected Annual Average Unemployment Data for the Year 1994</u> showed the total number of unemployed persons in 1994 by county, area, and minority group. These data showed, for instance, the highest numbers of unemployed in Area III and Area I.

The table: <u>Percent of Labor Force Unemployed, 1990 to 1993</u> showed the trends in the unemployment rate over a three year period by county. Generally, the unemployment rates for the smaller counties increased while the rates for the larger counties decreased.

The table: <u>Summary of Occupations by Gender and Race/Ethnicity</u> showed that large numbers of Hispanic males working as laborers, an occupational category traditionally low paying and subject to seasonal layoffs.



1992 STATEWIDE LABOR FORCE

PERCENT DISTRIBUTION

SEX & MINORITY STATUS	CIVILIAN LABOR FORCE	EMPLOYED	UNEMPLOYED	LABOR FORCE	EMPLOY.	UNEMPLOY.	UNEMPLOY- MENT RATE
-BOTH SEXES-							
TOTAL	518,000	485,000	33,000	100.00	100.00	100.00	6.50
WHITE	490,283	460,50	6 29,776	94.66	94.95	90.23	6.07
BLACK	1,508	1,34	7 161	0.29	0.28	0.49	10.69
NATIVE AMERICAN	7,027	5,73	4 1,293	1.35	1.18	3.92	18.40
ASIAN/PACIFIC ISLAND	4,507	4,29	0 217	0.87	0.88	0.66	4.81
OTHER NONWHITE	14,675	13,12	2 1,553	2.83	2.71	4.71	10.58
HISPANIC, ALL RACES	25,455	22.83	0 2,625	4.91	4.71	7.96	10.31
ALL MINORITIES	27,717	24,49	4 3,224	5.34	5.05	9.77	11.63
-FEMALE-							
TOTAL	227,161	212,80	16 14,355	100.00	100.00	100.00	6.32
WHITE	216,354	203,39	12,958	95.25	95.58	90.2	7 5.99
BLACK	601	52	28 73	0.26	0.29	5 0.5	1 12.10
NATIVE AMERICAN	3,122	2 2,69	38 485	1.37	1.2	4 3.3	8 15.52
ASIAN/PACIFIC ISLAND	2,08	5 1,98	30 106	0.92	0.9	3 0.7	4 5.06
OTHER NONWHITE	5,00	4,2	65 734	2.19	2.0	O 5.1	2 14.69
HISPANIC, ALL RACES	9,51	4 8,1	95 1,319	4.18	3.8	5 9.1	9 13.86
ALL MINORITIES	10,80	8 9,4	10 1,397	4.75	4.4	2 9.7	3 12.93

DATA MAY NOT ADD TO TOTALS DUE TO ROUNDING.

Source: Idaho Department of Employment - Idaho Affirmative Action Statistics 1992



PROJECTED LABOR FORCE BY RACE/ETHNIC GROUP BY COUNTY AND AREA FISCAL YEAR 1994

BASED ON 1990 CENSUS DATA

			DAGES ON 1990	DEMODO DA	**		
					NATIVE	ASIANI	
					AMERICAN	PACISLE	
COUNTY	TOTAL	WHITE	HISPANIC	BLACK	MINIENIGAN	FACISEE	OTHER
ADA	129,268	125,203	3,098	710	1,036	1,411	908
	1,665	1,630	27	Û	30	0	6
ADAMS	32,585	30,781	1,064	138	595	423	648
BANNOCK			70	.00	14	0	37
BEAR LAKE	2,496	2,444	70 43	0	204	10	6
BENEWAH	3,608	3,388					
BINGHAM	17,628	15,468	1,584	34	1,078	133	1,114
BLAINE	8,824	8,664	218	5	29	69	57
BOISE	1,649	1,627	21	0	18	2	2
BONNER	13,311	13,125	172	5	135	16	30
BONNEVILLE	40,127	38,206	1,720	191	283	446	1,001
BOUNDARY	4,499	4,293	143	4	117	9	76
	1,715	1,658	57	Ó	15	0	42
BUTTE		381	ő	Ŏ	2	Ŏ	Ō
CAMAS	383		-	38	437	510	3,748
CANYON	45,914	41,182	5,745			19	47
CARIBOU	3,387	3,311	54	O	10		
CASSIA	8,421	7,543	1,102	0	80	31	766
CLARK	823	713	99	0	12	0	99
CLEARWATER	4,322	4,221	81	0	73	8	20
CUSTER	2,561	2,518	39	0	31	7	5
	8,242	7,364	750	212	77	167	422
ELMORE		3,724	111	- 0	26	6	47
FRANKLIN	3,802		331	ă	60	5	232
FREMONT	4,968	4,670		ŏ	74	15	125
GEM	5,093	4,879	244			14	354
GOODING	5,611	5,215	548	0	28		
IDAHO	6,878	6,720	60	0	145	0	13
JEFFERSON	7,672	7,134	490	4	112	20	400
JEROME	6,533	6,161	412	0	46	18	308
KOOTENAI	40,528	39,685	525	70	515	15 9	98
	14,711	14,252	186	31	102	266	60
LATAH	3,276	3,193	86	0	77	0	. 5
LEMHI		1,837	20	Ŏ	106	7	0
LEWIS	1,950			5	12	ż	14
LINCOLN	1,747	1,714	103			119	206
MADISON	8,767	8,393	309	26	23		1,273
MINIDOKA	10,374	8,920	1,894	13	100	68	
NEZ PERCE	17,676	16,741	224	19	736	85	95
ONEIDA	1,168	1,141	16	3	12	2	_11
OWYHEE	3,673	2,962	760	13	114	42	542
PAYETTE	8,992	8,365	586	0	123	108	396
	2,632	2,273	355	3	61	18	278
POWER		4,804	83	2	77	13	16
SHOSHONE	4,913	1,826	167	7	15	Õ	35
TETON	1,883	1,020				274	763
TWIN FALLS	29,032	27,737	1,559	19	238	5	23
VALLEY	4,323	4,263	74	6	27		
WASHINGTON	4,169	3,695	443	0	1	105	367
IDAHO TOTAL	531,999	501,768	19,767	1,422	4,812	3,941	290
	·		nati				
	TOTAL	WHITE	NON-				
AREA I	66,859	65,296	1,563				
AREA II	45,537	43,771	1,766				
AREA III	212,989	201,169	11,819				
AREA IV	70,925	66,336	4,589				
	63,898	59,142	4,756				
AREA V		68,312	3,480				
AREA VI	71,792	00,312	3,700				

^{*}DATA SUPRESSED BY CENSUS BUREAU



^{**}DETAILED RACE DATA IS NOT AVAILABE FOR ALL AREAS

Source: Idaho Department of Employment - Idaho Demographic Profile

PROJECTED ANNUAL AVERAGE UNEMPLOYMENT DATA FOR THE YEAR 1994

	UNEMPLOYED						
COUNTY	TOTAL	WHITE	BLACK	AM IND	ASIAN	OTHER	HISPANIC
ADA	5,409	4,990	44	132	58	53	132
ADAMS	245	230	0	8	0	4	4
BANNOCK	2,199	1,800	17	161	25	90	105
BEAR LAKE	140	133	0	1	0	3	4
BENEWAH	434	389	0	38	0	2	5
BINGHAM	1,296	778	12	244	17	10 <u>1</u>	14 <u>4</u>
BLAINE	679	665	0	0	0	7	7
BOISE	133	129	0	0	0	0	4
BONNER	1,355	1,311	3	18 57	0 0	8 96	16
BONNEVILLE	2,061	1,749 338	13 3	3	2	23	146 32
BOUNDARY	400 125	118	0	0	0	23 4	4
BUTTE	32	32	0	0	0	ā	õ
CAMAS	3,429	2,348	4	5 2	18	364	643
CANYON Caribou	212	212	õ	0	ő	Ö	0.0
CASSIA	695	399	Ö	24	5	119	148
CLARK	34	21	Ŏ	Ö	Ŏ	7	7
CLEARWATER	588	566	ŏ	12	Ö	Ô	11
CUSTER	174	158	Ö	12	Ō	0	5
ELMORE	606	511	19	12	7	7	50
FRANKLIN	155	148	0	5	0	0	1
FREMONT	424	324	0	20	0	36	45
GEM	457	381	0	9	0	23	45
GOODING	296	241	0	•	0	27	27
IDAHO	747	704	Ō	28	0	0	15
JEFFERSON	539	435	2	18	10	36	38
JEROME	505	339	.0	13	0	74	79
KOOTENAI	2,802	2,665	16	52	.9	0	60
LATAH	651	624	0	3	17	0	7
LEMHI	370	356	0	2	0	0	13
LEWIS	106	84	0	20	0	0	2 3
LINCOLN	134	127	3 10	0	7	9	9
MADISON	481	445 472	10	21	0	105	227
MINIDOKA	826	472 756	1	133	ů	14	25
NEZ PERCE	9 2 9 63	756 56	<u> </u>	133 5	Ö	17	0
ONEIDA	228	139	Ó	10	2	34	42
OWYHEE	777	604	Ö	18	õ	56	99
PAYETTE POWER	249	161	3	17	Ö	37	42
SHOSHONE	1,104	1,066	Ŏ	24	3	. 0	11
	98	77	Ŏ	Ö	Ŏ	0	21
TETON TWIN FALLS	2,064	1,705	0	28	33	88	210
VALLEY	383	376	2	5	0	0	0
WASHINGTON	364	240	0	0	0	57	67
IDAHO TOTAL	34,636	29,182	155	1,193	212	1,426	2,488
AREA I	6,094	5,768	21	134	14	32	124
AREA II	3,0 21	2,734	1	195	17	14	60
AREA III	12,0 33	9,949	69	246	84	599	1,086
AREA IV	5,2 31	3,981	4	86	38	420	702
AREA V	4,315	3,289	34	423	42	232	296
AREA VI	4,306	3,682	26	108	17	187	287
Source: Idaho De	epartment of Employmen	nt - Idaho Demogr	aphic Profile				



Percent of Labor Force Unemployed 1990 to 1993

County	1990	1991	1992	1993
Ada	3.8%	4.1%	4.1%	3.6%
Adams	12.7%	14.1%	14.3%	14.7%
Bannock	6.4%	6.3%	6.5%	6.2%
Bear Lake	5.9%	5.3%	5.4%	6.3%
Benewah	10.7%	12.4%	11.6%	11.5%
Bingham	6.8%	6.4%	7.0%	6.7%
Blaine	3.7%	6.3%	7.5%	6.0%
Boise	6.8%	7.8%	7.8%	8.9%
Bonner	8.8%	9.9%	9.9%	10.2%
Bonneville	4.7%	4.5%	5.0%	5.3%
Boundary	7.9%	8.8%	8.6%	8.7%
Butte	4.8%	5.7%	7.1%	6.4%
Camas	9.2%	6.8%	8.2%	5.9%
Canyon	7.5%	7.8%	7.2%	7.4%
Caribou	5.2%	5.5%	6.1%	6.6%
Cassia	8.6%	6.6%	8.0%	8.4%
Clark	2.7%	2.8%	4.1%	4.0%
Clearwater	12.5%	13.8%	13.2%	13.6%
Custer	3.8%	4.8%	6.6%	9.8%
Elmore	6.1%	6.0%	7.1%	6.7%
Franklin	4.3%	3.9%	3.9%	3.7%
Fremont	8.3%	7.8%	8.3%	8.1%
Gem	7.7%	8.9%	8.7%	8.2%
Gooding	4.3%	4.7%	5.1%	5.0%
idaho	7.9%	10.4%	10.5%	11.5%
Jefferson	6.6%	6.1%	6.8%	6.2%
Jerome	6.1%	6.8%	7.5%	7.3%
Kootenai	7.0%	7.0%	6.7%	7.1%
Latah	4.0%	4.3%	4.3%	4.2%
Lemhi	8.8%	11.4%	10.9%	11.1%
Lewis	6.6%	. 5.4%	5.3%	6.1%
Lincoln	5.0%	6.8%	7.4%	6.7%
Madison	5.6%	4.8%	5.3%	5.1%
Minidoka	7.7%	6.5%	7.7%	8.3%
Nez Perce	4.9%	5.6%	5.1%	4.9%
Oneida	4.2%	4.3%	5.2%	4.3%
Owyhee	5.2%	5.6%	6.0%	5.1%
Payette	6.8%	7.5%	8.4%	9.1%
Power	10.3%	8.4%	9.2%	7.4%
Shoshone	10.3%	19.6%	21.8%	22.0%
T⊍ton	5.5%	4.7%	5.0%	5.1%
Twin Falls	4.7%	5.5%	6.9%	6.1%
Valley	8.1%	8.8%	8.6%	8.9%
Washington	7.9%		8.5%	9.4%
Statewide	5.8%	6.1%	6.5%	6.3%

Source: Idaho Department of Employment, Research and Analysis Bureau



SUMMARY OF OCCUPATIONS BY GENDER AND RACE/ETHNICITY

EQUAL EMPLOYMENT INDICATORS
SUMMARY OCCUPATIONS BY RESEARCH AND ANALYSIS BUREAU, IDAHO DEPARTMENT OF EMPLOYMENT

SUMMARY OCCUPATIONS BY SEX AND RACEJETHNICITY

STATE OF IDAHO

AMERICAN ASIANI PACIFIC INDIAN **ISLANDER** ALASKA OTHER TOTAL BLACK NOT NOT NATIVE, NOT NON-ALL WHITE NOT SUMMARY HISPANIC HISPARIC HISPANIC HISPANIC **HISPANIC** HISPANIC MINORITY RACES OCCUPATIONS TOTAL LABOR FORCE OFFICIALS & MANAGERS **PROFESSIONAL TECHNICIANS** SALES WORKERS OFFICE & CLERICAL CRAFT WORKERS **OPERATIVES LABORERS** SERVICE WORKERS TOTAL MALE **OFFICIALS & MANAGERS PROFESSIONAL TECHNICIANS** SALES WORKERS OFFICE & CLERICAL **CRAFT WORKERS OPERATIVES** LABORERS SERVICE WORKERS TOTAL FEMALE **OFFICIAL & MANAGERS PROFESSIONAL TECHNICIANS** SALES WORKERS OFFICE & CLERICAL **CRAFT WORKERS OPERATIVES LABORERS** 3885? SERVICE WORKERS



[•] Please note: Census summary occupations have been defined to meet employer EEO - 1 requirements.

^{**}Unemployed not included in this report

^{***}Based on 1990 census data.

C. Keeping programs relevant to the workplace: both present and future

Idaho State Council on Vocational Education Public Meeting

Several people pointed out the need for more vocational education at the high school level.

Boise Business Barometer (Most Information Derived from the Economic Outlook Forum, 1993)

Idaho continues to rank as one of the top states for employment growth for 1993. As of July, total non-agricultural employment reached 428,000, a gain of 3.2 percent for 1992 levels. Nonagricultural employment increased at a rate of 4.6 percent in 1992, compared to 3.3 percent in 1991. Statewide employment growth should remain strong for 1994. Employment is expected to outpace population growth, increasing 2.8% annually through the year 2000 and 1.7% per year from 2000 to 2010. Population growth during that same period is expected to increase 2.1% to the year 2000 and 1.1% from 2000 to 2010.

Manufacturing added an additional 2,400 jobs in 1992, a gain of 3.8 percent. The electronic and machinery manufacturing employment accounted for 54 percent of the new employment.

Construction employment increased 10.4 percent from 1992 with 25,100 employees. In Ada County, the residential real estate market continued its record pace during 1993. For the first 9 months of 1993, the value of all construction totaled \$411 million, up 25% from last year. Year-to-date, the number of residential permits increased 50 percent. The prospect for continued growth remain positive. Ongoing business expansion and a growing number of retirees moving to Boise will help to fuel the demand for housing. Also, in-migration to Boise will continue as technology allows people to conduct business farther away from larger metro areas. Commercial real estate development increased 50 percent from 1992 to a total of 150 million by year-end. The trade and service sector had gains of 4.8 and 5.4 percent respectively. Only the mining industry reported losses during 1992.

Employment in the trade and service sector is projected to increase 3 percent. Only the mining and agriculture employment sectors are projected to decline. The majority of the growth will be in Ada and Canyon counties. Other growth areas include Twin Falls, Coeur d'Alene, and Post Falls.

Idaho agriculture has survived the last drought years and has returned to a more normal production pattern. Farm-gate receipts should be in the \$3 billion range with processing contributing an additional \$4 billion to the Idaho economy.

The Boise area has one of the strongest retail markets in the United States. Retail sales growth has increased 10 percent over 1992. The Bon Marche reports that Boise continues to be the number one percentage growth market for Bon Marche stores. New retailers,



national and local, continue to enter the markets. For 1994, Boise will continue to be a regional hub with sales growth of 6 to 7 percent.

The tourism industry continues to gain strength in Idaho. A combination of strong demand and increasing rates have pushed hotel sales up 8.5 percent from 1993 levels. Collections for the Boise Auditorium District, a 4 percent tax on hotel and motel rooms in northern Ada county, have increased 13 percent for the first 9 months of 1993 compared with the same period in 1992.

Business, Labor and Industry Data

The critical importance of vocational-technical training to the nation's economy was stressed.

A major employer of technical employees had difficulty recruiting qualified technicians with the right set of skills. This company expected the demand for technicians to increase and the difficulty of finding qualified technicians to continue.

One finding indicated that more formal education was needed for existing employees to augment the on-the-job-training that currently existed. This formal training would focus on skills required to manage projects and assist engineers as well as math and communication skills.

Healthcare Needs Assessment

Keeping Health Occupations Programs current and relevant to the workplace was the first incentive for conducting a statewide needs assessment for needed health care workers (April, 1993). One hundred and forty-three health care providers were interviewed and the top five needed workers were prioritized for need now and in the future. This assessment provided data for strategic statewide planning that is an ongoing process fostered by a Health Occupations Statewide Strategic Planning Task Force. The Task Force met three times to discuss and determine vocational training needs in healthcare.

The first priority for need was the licensed practical nurse (LPN). A survey by the Idaho Board of Nursing (January, 1992) of health care facilities indicated vacancy rates for LPNs throughout the state varied from 0% to 17%.

The report also cited Idaho's aging population, higher in rate of growth than the national average, and the increased demand for services to people with disabilities as two reasons why the need for training in Health Occupations would continue to increase.

Idaho State Council on Vocational Education Public Meeting

Several of the attendees testified to the need for health care workers. A local hospital cited the need for employees in medical records, medical transcription, and secretaries. One speaker stressed the need for mid-level health professionals and the fact that those



people needed strong skills in science. Another speaker indicated the need for health care workers and pointed out the tremendously high turnover rate of approximately 80% for LPN's and similar occupations. One speaker pointed out that salaries for LPN's were about \$5.00 per hour and that this created problems. Another speaker pointed out that health care training needs to be provided at the high school level so that workers can start earlier - particularly in the beginning, lower paid jobs.

Postsecondary Vocational-Technical School and Beyond

Eighty-two percent of students continued work in the state, and almost all these continued work in the area of the institution in which they trained. This statistic points out the importance of local labor demand to the types of programs offered. It also indicates the importance of programs that are accessible to the local populace.

Table: Population Density by County and Area

The following table shows Idaho counties and planning area population density. The counties and areas are sorted in descending order of the population as divided by the size of the county/area as expressed in square miles.

The non-shaded counties are those which do not contain a city of 20,000 or greater population. This is not the Census Bureau definition of "Rural", which is any place of fewer than 2,500 residents or one not included in an urbanized area.

One of the biggest challenges facing Vocational Education was the delivery of services and meaningful programs to those residents who live in the rural areas of Idaho. Idaho's rural areas had not enjoyed the benefits of the State's robust economy to the degree the urban areas had. The rural areas were often characterized by a narrow industrial base - many having only a single resource-based industry. These areas were especially vulnerable to economic stresses caused by that often declining industry. Because of the great distances, poor infrastructure, and relatively small tax bases, a large number of Idaho residents were handicapped in their access to training programs.



POPULATION DENSITY BY COUNTY AND AREA

Fiscal Year 1994

Based on Preliminary 1990 Census Data

COUNTY	SQUARE MILES	1994	PROJECTED POPULATION PER
		POPULATION	SQUARE MILE
ADA	1,052	224835	213.7
CANYON	584	98419	168.5
BANNOCK	1,112	72142	64.9
KOOTENAI	1,240	76260	61.5
MADISON	468	25867	55.3
PAYETTE	405	17956	44.3
NEZ PERCE	845	36880	43.6
BONNEVILLE	1,840	78895	42.9
LATAH	1,077	33453	31.1
TWIN FALLS	1,944	58543	30.1
MINIDOKA	758	21154	27.9
JEROME	601	16540	27.5
GEM	558	12941	23.2
BINGHAM	2,096	41064	19.6
GOODING	728	12711	17.5
BONNER	1,727	29088	16.8
JEFFERSON	1,093	18075	16.5
FRANKLIN	664	10087	15.2
STATE OF IDAHO	82,413	1,100,000	13.3
BENEWAH	784	8672	11.1 8.4
TETON	448	3758	
CASSIA	2,560	21341	8.3 8.0
LEWIS	478	3842	7.5
ELMORE	3,071	23169	7. 3 7.2
BOUNDARY	1,268	9104	7.2 6.7
BEAR LAKE	990	6648	6.7 6.5
FREMONT	1,852	11950	6.4
WASHINGTON	1,454	9342	5.8
SHOSHONE	2,641	15221	5.6
BLAINE	2,635	14807 7742	5.5
POWER	1,403		4.3
CARIBOU	1,763	7608 929 3	4.2
CLEARWATER	2,236	3815	3.2
ONEIDA	1,200	3614	3.0
LINCOLN	1,205	3555	2.6
ADAMS	1,362	3834	2.0
BOISE	1,901	15060	1.8
IDAHO	8,497	6675	1.8
VALLEY	3,670		1.7
LEMHI	4,564	7538 2188	1.7
BUTTE	2,236	3188	1.2
OWYHEE	7,643	9169 4516	0.9
CUSTER	4,927	4516 704	0.5
CAMAS	1,071	794	0.7
CLARK	1,763	833	U.3

Shaded counties have cities of 20,000 or more and are considered "Urban"

PLANNING	SQUARE MILES	1994	PROJECTED POPU	ILATION PER
AREAS		POPULATION	S	QUARE MILE
AREA III	21.700	409896		18.9
AREA I	7,660	138345		18.1
AREA V	9,228	149106		16.2
AREA IV	11,502	149505		13.0
AREA VI	19,191	154620	2.3	8.1
AREA II	13,133	98528	ÜÜ	7.5



Table: Projected Statewide and Area Population by Age

This table shows the projected counts of Idaho's population by age group and the six planning areas of the state. The largest concentrations of possible users of Vocational Education services were found in Areas III and VI. These data were useful in planning the allocation of resources by planning area.

PROJECTED STATEWIDE AND AREA POPULATION BY AGE Fiscal Year 1994

Based on 1990 Census Data

AREA	TOTAL	14 TO 15 YEARS	16 TO 21 YEARS	22 TO 54 YEARS	55 YEARS & OLDER	TOTAL 16 & OLDER
IDAHO	1,100,000	36,293	99,366	480,690	217,436	797,491
AREA I	138,345	4,523	10,351	61,572	32,141	104,064
AREA II	98,528	2,590	10,532	44,161	21,971	76,664
AREA III	409,896	12,762	34,828	188,249	78,832	301,909
AREA IV	149,505	5,224	11,457	63,000	32,483	106,940
AREA V	149,106	5,646	13,189	61,273	26,913	101,375
AREA VI	154,620	5,548	19,009	62,434	25,096	106,539

Source: Idaho Department of Employment - Idaho Demographic Profile

Major Industry Group Projections

The following tables reflects employment projections based on the 1980 census and actual employment based on the 1990 census. The employment categories on the two tables were not comparable since the projections used the SIC coding system and the census numbers used its own coding system.

The projection data reflected the number of jobs in any occupation, not the number of people, since no attempt was made to correct for multiple job holders. No differentiation was made between full and part-time workers. The data presented were valid at the statewide level. Because the sample was drawn at a statewide level stratified by Standard Industrial Code (SIC) and size (employment), validity is reduced by any attempt to "fit" the data into regional, age, sex, or race categories. Also, the data reflected conditions which existed in 1987, so did not reflect changes that had occurred since that time.

In order to project occupational employment the following assumptions were made:

1. The Idaho economy and population would continue to grow, reflecting past trends



without major external factors impacting them (i.e. natural disaster, war, energy crisis, etc.)

- 2. The national staffing patterns, change factors, and separation rates applied to the data were valid for Idaho.
- 3. No dramatic increase or decrease in any specific industry would occur over the projected time frame.

The following projections table showed the continued shift in industry employment to the Services sector as well as positive growth in all of the other sectors. The Mining industry was one industry in the state which moved contrary to these projections. Over the past few years this industry declined dramatically and it is doubtful it will recover, let alone increase, by the year 2000.

The table based on the census data had significantly higher numbers of workers in some sectors such as agriculture, forestry and fisheries and construction. These differences were due to the way different jobs within the industry were classified.



IDAHO'S LABOR FORCE AND OCCUPATIONAL PROJECTIONS MAJOR INDUSTRY GROUP PROJECTIONS

INDUSTRY	EMPLOYMENT					
	1987	2000	PERCENT CHANGE	NUMERICAL CHANGE		
AG., FORESTRY, & FISH. (SIC 01-08)	10,961	13,021	18.79%	2,060		
MINING (SIC 10-14)	2,552	3,908	53.13%	1,356		
CONSTRUCTION (SIC 15-17)	13,685	16,384	19.72%	2,699		
DURABLE GOODS MANUFAC. (SIC 24, 25, 32-39)	26,834	34,444	28.36%	7,610		
NONDURABLE MANUFAC. (SIC 20-23, 26-28, 30, 31)	27,249	30,372	11.46%	3,123		
TRANSPORTATION (SIC 40-47)	13,026	16,301	25.14%	3,275		
COMMUNICATIONS (SIC 48-49)	7,234	8,058	11.39%	824		
WHOLESALE TRADE (SIC 50, 51)	20,656	22,400	8.44%	1,744		
RETAIL TRADE (SIC 52-59)	64,239	77,256	20.26%	13,017		
FIN., INSUR., & REAL EST. (SIC 60-67)	16,074	19,769	22.99%	3,695		
SERVICES (SIC 70-89)	148,884	186,027	24.95%	37,143		
GOVERNMENT (SIC 90, 91)	31,752	33,845	6.59%	2,093		

Source: Idaho Department of Employment - Occupational Employment Statistics



IDAHO EMPLOYMENT BY INDUSTRY 1990 Census Data

Universe: Persons 16 years and over

INDUSTRY	EMPLOYMENT
AG., FORESTRY, & FISH.	39,790
(000-039) MINING	3,638
(040-059)	0,000
CONSTRUCTION	28,940
(060-099)	• "
DURABLE GOODS MANUFAC.	37,024
(230-399)	
NONDURABLE MANUFACT.	28,270
(100-229)	
TRANSPORTATION	1 <i>1,</i> 494
(400-439)	0.011
COMMUNICATIONS & UTILITIES	9,911
(440-499) WHOLESALE TRADE	21,292
(500-579)	21,202
RETAIL TRADE	76,669
(580-699)	
FIN., INSUR., & REAL EST.	22,387
(700-720)	
BUS. & REPAIR SERVICES	17,516
(721-760)	
PERSONAL SERVICES	13,301
(761-799)	E
ENTERT. & REC. SERVICES	5,558
(800-811) HEALTH SERVICES	29,598
(812-840)	20,000
EDUCATIONAL SERVICES	40,768
(842-860)	
OTHER PROF. & REL. SRVCS.	28,682
(841, 861-899)	
PUBLIC ADMINISTRATION	22,865
(900-939)	•

Occupational Projections

The following occupational projections raised several concerns. These concerns applied in general to Idaho as well as the nation, in as much as Idaho's population, labor force, industrial make-up, and economic trends mirrored that of the Nation as a whole. The concerns focused on the relationship of productivity growth to future increases in the nation's standard of living. They also focused on the national and global competitiveness and the need for educational preparation consistent with the type of jobs the economy was generating, particularly for minorities who were a fast-growing segment of the labor force.

Nationally, specific issues identified by the U.S. Department of Labor were:

- 1. The rate of economic growth will be much slower through 2005 than during the 1970's and mid-1980's when the baby-boom generation entered the workforce. This slowdown is largely driven by demographics. It does not mean that overall job prospects for individuals will be significantly different than during the earlier period, as measured in terms of a balance of the supply and demand for workers. Growth of demand stems in large part from growth of the labor force, which drives demand for consumer goods and services, business investment, government purchases of goods and services, and imports.
- 2. The demographic picture of the labor force by race and Hispanic origin will change, but not drastically. Although minority groups will grow faster than average, white, non-Hispanics will still account for the vast majority of workers in 2005, as they did in 1990. White, non-Hispanics made up 78.5 percent of the workforce in 1990; their share will decline by 5.5 percentage points over the 1990-2005 period. Growth in the proportion of Hispanics will account for more than half of the change. By 2005, the number of Hispanics in the labor-force will be approaching the number of blacks.
- 3. Women's share of the labor force will continue to increase as a larger proportion of them look for jobs.
- 4. The average age of the labor force will increase as the baby-boom generation ages.
- 5. Industry employment growth will be very concentrated. The services and retail trade industry divisions will account for three-fourths of the growth in employment. Health, education, business services, and eating and drinking places will account for a very large part of the growth.
- 6. Because most occupations are concentrated by industry, the growth of these industries is a major factor in the growth of occupations. The large health services industry will continue to grow much faster than average. Consequently, health occupations will be among the occupations having rapid growth and providing favorable job prospects at all levels of education.



- 7. Defense expenditures are expected to decline through most of the 1990-2005 period. This will affect defense-related industries and limit the growth of occupations concentrated in those industries.
- 8. Exports are projected to increase faster than any other demand category. This will cause the output of many manufacturing industries to rise significantly and thereby limit the decline of employment in this large division. In order for U.S. companies to compete in international markets, technological advances, changes in business practices, and improvements in production methods must all contribute to productivity growth.
- 9. Workers with the most education and training will have the best opportunities for obtaining high-paying jobs in growing occupations because of the changing workforce and the changing structure of work within occupations. Although the projections indicate that jobs will be available for those without training beyond high school, prospects for high-paying jobs will increasingly be far better for those having postsecondary education and training. An important factor is that the high-paying jobs for workers without education beyond high school in our Nation's manufacturing establishments are declining in number for a combination of reasons, including technological change and changing business practices. Thus, individuals who drop out of school or complete high school without obtaining basic reading and mathematics skills will be at a great disadvantage in the workplace of 2005.
- 10. Technology will continue to change the structure of employment and how work is done. Computer technology will be used to an increasing extent in a wide variety of functions. As a result, systems analyst and programmer will be among the fastest growing occupations, and more and more workers in other occupations will need to be computer literate. Improved office technology will continue to limit the growth of administrative support occupations, which will be among the slower growing groups of occupations.
- 11. The manner in which businesses operate is changing so that greater interpersonal skills and greater analytical skills are needed. In order for future workers to have these skills, our educational system must provide more than the basic 3 R's.

Following are two tables which showed the fastest growing occupations (as measured by percentage growth) in both the U.S. and Idaho. Those occupations requiring vocational-technical training at either the secondary or post-secondary level, but less than a college degree were indicated by (V). Of the 20 fastest growing jobs in the nation, 11 require vocational-technical training. It is clear that occupations demanding the most education will grow faster than occupations with the lowest educational requirements.



Fastest Growing Jobs - USA 1990 - 2005

	EMPLOYMENT	PER	CENT
OCCUPATION	1990	2005	CHANGE
Home Health Aides (v)	287,000	550,000	91.7
Paralegals (v)	90,000	167,000	85.2
Systems analysts and computer scientists	463,000	829,000	78.9
Personal and home care aides (v)	103,000	183,000	76.7
Physical therapists	88,000	155,000	76.0
Medical assistants (v)	165,000	287,000	73.9
Operations research analysts	57,000	100,000	73.2
Human services workers	145,000	249,000	71.2
Radiologic technologists and technicians (v)	149,000	252,000	69.5
Medical secretaries (v)	232,000	390,000	68.3
Physical and corrective therapy assistants a aides (v)	nd 45,000	74,000	64.0
Psychologists	1 25,000	204,000	63.6
Travel agents (v)	132,000	214,000	62.3
Correction officers	230,000	372,000	61.4
Data processing equipment repairers (v)	84,000	134,000	60.0
Flight attendants	101,000	159,000	58.5
Computer programmers (v)	565,000	882,000	56.1
Occupational therapists	36,000	56,000	55.2
Surgical technologists	38,000	59,000	55.2
Medical records technicians (v)	52,000	80,000	54.3

Idaho Department of Employment



⁽v) Occupations requiring vocational-technical training, but less than a baccalaureate degree.

Fastest Growing Jobs - Idaho 1990 - 2005

	EMPLOYMENT	PEI	RCENT
OCCUPATION	1988	2000	CHANGE
Medical records technicians and	213	401	88.3
technologists (v)			
Electrical/electronic engineers	1192	2127	78.4
Electrical/electronic technicians (v)	1088	1838	68.9
Paralegal personnel (v)	132	221	67.4
Farm managers (v)	646	1078	66.9
Travel agents (v)	379	627	65.4
Physical therapists	270	445	64.8
Electronics repairers, com. and ind. (v)	267	429	60.7
Occupational therapists	73	115	57.5
Mechanical engineers	891	1385	55.4
Surgical technicians (v)	62	95	53.2
Physical and corrective therapy assistants ar aides (v)	nd 141	215	52.5
Metallurgists and related engineers	72	109	51.4
Registered nurses	4792	7156	49.3
Underwriters	121	180	48.8
Computer systems analysts	695	1028	47.9
Respiratory therapists (v)	151	223	47.7
Chemists, except biochemists	278	410	47.5
Operations and systems analysts	93	136	46.2
Industrial engineers, exc. safety	205	298	45.4
Dental hygienists	432	627	45.1
Medical assistants (v)	335	485	44.8

Idaho Department of Employment

(v) Occupations requiring vocational-technical training, but less than a baccalaureate degree.



While it was important to track the fastest growing occupations because they served to indicate how the labor force requirements were changing (jobs for technicians in health and industry were growing the fastest), those occupations which had the greatest growth in sheer numbers were also critical to the vocational training market. The following jobs represented the best opportunities for the greatest number of jobseekers. The first table represented figures for the country and the second reflected figures for Idaho.

Occupations with the Largest Job Growth - USA 1990 - 2005

	EMPLOYMENT	NUI	MERICAL
OCCUPATION	1990	2005	CHANGE
Salespersons, rotail (v)	3,619,000	4,506,000	887,000
Registered nurses	1,727,000	2,494,000	767,000
Cashiers	2,633,000	3,318,000	685,000
General office clerks (v) .	2,737,000	3,407,000	670, 000
Truckdrivers, light and heavy	2,362,000	2,979,000	617,000
General managers and top executives	3,086,000	3,684,000	598,000
Janitors & cleaners, including maids &	3,007,000	3,562,000	555,000
Housekeeping cleaners			
Nursing aides & orderlies (v)	1,274,000	1,826,000	552,000
Food counter, fountain, and Related workers	1,607,000	2,158,000	550,000
Waiters and waitresses	1,747,000	2,196,000	449,000
Teachers, secondary school	1,280,000	1,717,000	437,000
Receptionists and information clerks (v)	900,000	1,322,000	422,000
Systems analysts and computer scientists	463,000	829,000	366,000
Food preparation workers	1,156,000	1,521,000	365,000
Child care workers	725,000	1,078,000	353,000
Gardeners and groundskeepers, except farm	874,000	1,222,000	348,000
Accountants and auditors	985,000	1,325,000	340,000
Computer programmers (v)	565,000	882,000	317,000
Teachers, elementary	1,362,000	1,675,000	313,000
Guards	883,000	1,181,000	298,000



⁽v) Occupations requiring vocational-technical training, but less than a baccalaureate degree.

Occupations with the Largest Job Growth - Idaho 1988 - 2000

	EMPLOYMENT	NUi	MERICAL
OCCUPATION	1988	2000	CHANGE
Salespersons, retail (v)	13,603	17,229	3,626
Truck drivers (v)	11,908	15,031	3,123
Registered nurses	4,595	7,156	2,561
General managers and top executives	11,032	13,382	2,350
Cashiers	8,617	10,702	2,085
Waiters and waitresses	6,727	8,520	1,793
General secretaries (v)	8,333	10,109	1,776
Gardeners and groundskeepers (v)	3,839	5,438	1,599
Janitors and cleaners	5,612	7,194	1,582
Teachers, elementary	5,203	6,680	1,477
Teachers, secondary	4,687	6,146	1,459
Child care workers (v)	5,308	6,623	1,315
General office clerks (v)	7,083	8,239	1,156
Accountants and auditors	3,380	4,523	1,143
Electrical and electronic engineers	1,114	2,127	1,013
Maintenance repairers (v)	3,884	4,823	939
Food preparation workers (v)	3,686	4,583	897
Nursing aides and orderlies (v)	3,697	4,586	889
Electrical/electronic technicians (v)	1,026	1,838	812
All other assemblers	2,890	3,644	754

Idaho Department of Employment

(v) Occupations requiring vocational-technical training, but less than a baccalaureate degree.



D. Basic and higher order workplace competencies employers will need

Business, Labor and Industry Data

One source cited the skills listed in the SCANS report as being critical to employees entering their industry. Included were: 1) basic skills of reading, writing, mathematics, listening and speaking; 2) thinking skills of creative thinking, decision making, problem solving, organizing symbols and other information, knowing how to learn, and reasoning; and 3) personal qualities of responsibility, self-esteem, sociability, self-management and integrity. The five competency areas were also cited: 1) identifies, organizes, plans and allocates resources; 2) works with others; 3) acquires and uses information; 4) understands complex interrelationships; and 5) works with a variety of technologies.

Skills cited by employers in the service industries were: (1) ability to locate, understand, and interpret information; (2) ability to communicate thoughts, ideas, information, and messages in writing; (3) ability to perform basic computations and approach practical problems by choosing appropriately from a variety of mathematical techniques; (4) ability to organize ideas and communicate by responding to verbal messages; (5) ability to generate new ideas; (6) ability to recognize problems and devise and implement plans of action; (7) ability to use efficient learning techniques to acquire and apply new knowledge and skills; (8) belief in their self-worth and ability to maintain a positive view of self; (9) ability to demonstrate understanding, friendliness, adaptability, empathy and politeness in group settings; (10) ability to choose ethical courses of action; (11) ability to select goalrelevant activities, rank them, allocate time, and prepare and follow schedules; (12) ability to acquire, store, allocate, and use materials or space efficiently; (13) ability to contribute to a group effort; (14) ability to work to satisfy customers' expectations; (15) ability to work well with men and women from diverse backgrounds; (16) ability to use computers to process information; (17) ability to know how relationships of people, systems, and departments interrelate and operate effectively with them.

One company implemented a system of tests for 4 level: of plant employees. The tested areas were: math; reading comprehension using plant specific data; word knowledge using words common to the industry comparisons; statistics; and technical knowledge. The first three areas were tested for all job classifications. Comparisons were only tested for Class 1 and 2 jobs, statistics were only evaluated for top production jobs and TQM positions, and technical tests were limited to maintenance positions. The results since September of 1993 are: Class 1: 26 passed of 34 tested (76%); Class 2: 104 passed of 183 tested (57%); Class 3: 4 passed of 11 tested (36%); and Garage Mechanic: 5 passed of 12 tested (42%). The overall percentage who passed was 58%. The company has since begun an educational program to improve communication and computational skills.

Another company did extensive analysis of the skills required by employees working primarily in production. Skills areas evaluated were: math; reading; writing; verbal communication; problem solving; 10 key operation; calculator operation; computer skills; and mechanics. Two specific job classifications analyzed required basic levels of math,



reading, writing, problem solving, verbal communication, computer, calculator and mechanics. The employees also needed to be able to affiliate with diverse groups, selfmotivated, team focused, be reliable, adaptable to change, detail oriented and work well under production demands. This company also evaluated skills needed of all entry level workers. They were: basic reading, writing and math; keyboard skills; and hands-on machine/equipment experience. Work attributes needed at all levels were: 1) ability to pay close attention to detail; 2) ability to work under pressure; 3) flexibility - ability to work in an environment of "creative chaos"; 4) willingness to talk to supervisors about what is needed to improve the process. need to be actively involved - not passive participants; 5) ability to problem solve and think creatively; 6) takes pride in workmanship - need workers who get pleasure from doing the job right the first time; 7) willingness to take responsibility - will refuse to send defective product along in the hope someone else will catch the problem; 8) willing to work hard - need people who understand that every minute of their time is important to keep the company alive and competitive; 9) has understanding that education is on-going; 10) in short - need employees to be in the habit of operating at their best when they arrive at our front door.

Another company that did an analysis of the skills required by technician level employees found that the types of skills needed were changing. Technicians needed to be able to do more troubleshooting and organizing of processes. They also needed to be able to document those processes so that operators could do the maintenance. With the operators being able to do the maintenance, technicians would have more time to be able to serve as a resource to the engineers - organizing and analyzing data, conducting experiments and presenting the results. Good written and oral communication skills are therefore needed. The analysis concluded that the automation of the manufacturing lines changed the need for pure mechanical and electrical technicians to ones with electromechanical skills and considerable software knowledge.

One employer specified skills needed by four levels of technicians: (1) very traditional electronics background - DC, AC transistors, digital, but no microprocessors; (2) skills in #1 plus filters, power supplies and microprocessor basics, specifically how interrupt is used during the microprocessor power-up. Often uses circuit as analysis tool to evaluate overall candidate qualifications, evaluating ability to describe the integration of various components and circuits. The value of an individual project completed by the interviewee with documentation is very important; (3) extensive understanding of skills in #1 including filters, resonance, FET's some thyristors, drawing transistor circuit with values and walk-through analysis, integration of various components and circuits, op-amps with gain, and microprocessors. Also indicated the value of an individual project completion by interviewee, and the ability to describe design process and system operation; (4) must include microprocessors and machine language program with strong emphasis on operational amplifiers.

Equipment that the employer expected the interviewee to be able to use included: DMM, oscilloscope (most important). Function generator and logic probe/pulsar were important to some but not all. Logic analyzer background was helpful.



Future skills anticipated by the employer were experiences with DOS and microcomputer file structure. Familiarity with a UNIX-based workstation was also said to be valuable.

Another employer cited the following as areas in which a technician needed skills: AC/DC theory including resistors (voltage dividers, filters), capacitors (reactance), diodes, including Zeener diodes, and series/parallel circuits; transistor theory including biasing, current relationships, and switching; operational amplifiers including gains, biasing, configurations (i.e. integrator, comparator, filter), and summing amps; digital including logic gates, timing diagrams, combinational logic, tracing signal through, flip-flops (i.e. J-k,D), counters and shift registers, and multiplexers; micro-processors including buffers, lines (i.e. data, control), block diagram, basic registers, and explanation of how a microprocessor works; behavioral skills including commitment to task, assertiveness, coping, tolerance, decisiveness, and team building.

One employer cited the following as qualities of a good technician: assertiveness, initiative, enthusiasm, strong electronics basics, good analytical skills, trust, dedication/loyalty, ability to cope under pressure, initiative to learn more, ability to work with people, strong microprocessor skills.

One company cited the need for the addition or expansion of the following vocational classes: retail marketing strategies; middle management; soil science; computer basics; reading/writing literacy; and courses preparing people to pass the Crop Consultant Advisor test. Classes currently being used by the company included: electrical; instrumentation; machinist; diesel mechanic; welding; and computer basics.

Another company involved in retail sales stated that employees needed to be able to: fill out employment applications and W-2 forms; understand the particular related technical field; read and comprehend information; understand and be able to use the metric system; use computers; perform basic math skills including measurement; communicate effectively; and exhibit a good attitude and good work skills;

Learning Outcome Priorities Survey Results

Employers rated the learning outcome "workers" (19.6% rated #1) as the highest priority. The definition of workers was students who finish what they start, who are willing to put in the time and energy to see that something is done right. The rest of the outcomes were ranked as follows: communicators (17.6%), risk takers (14.8%); rule followers (13.6%); consumer (10.6%); masters of core (8.6%); well-rounded (8.5%); and employees (6.9%).

Idaho State Council on Vocational Education Public Meeting

Several people testified to the need for improved technology education. They pointed out that software needs to be current and teachers need to be up-to-date.



Major Findings

Related to the Capability of Vocational Programs to Provide Students With Adequate Training

A. Integration of academic and vocational education

- 1. There was a need for expansion of the curriculum in both technical and the basic skills (math, science and communications).
- 2. There was a need to expand the career guidance of students, especially to facilitate student transition to post-high school employment and specific job training.
- 3. Integration of academic and vocational education occurred in limited ways few of which involved true working partnerships among academic and vocational teachers. Applied subjects were expanded, but were taught as stand alone courses. These applied courses needed to be integrated.
- 4. Students in vocational sequences did not possess the same level of academic skills as the general population of students. They did, however, do as well or better on an authentic assessment of writing skills.
- 5. Students who received their education in Idaho appeared to do better on academic tests than students who moved into the state.

B. Sequential courses of study leading to both academic and vocational competencies

- 1. Courses needed to be developed in a sequential manner which integrated skills into vocational courses. There were attempts made to integrate and sequence the technical content, but there was little evidence to show that the academic skills were similarly sequenced.
- 2. The use of the Career Information System (CIS) and the number of vocationally certified counselors increased significantly over 2 years.
- 3. New curriculum guides took into account the integration of academic and vocational skills.

C. Increased student work skill attainment and job placement

1. Competency profiles were beneficial measurement tools for determining



student success.

- 2. Approximately 60% of the secondary schools met the standard dealing with competency attainment and the standard related to obtaining a job in related employment or pursuing additional education.
- 3. Vocational programs were doing well in placing students.

D. Increased linkages between secondary and postsecondary educational institutions

- 1. Articulation agreements and curriculum alignment were developed in all regions of the state. Consistent State Board guidelines were developed.
- 2. Tech Prep activity focused on laying the groundwork, building capacity and establishing secondary/postsecondary linkages. Two tech prep programs were approved to meet State Board guidelines during this period.
- 3. Curriculum development in the State of Idaho focused on the total sequence of skills needed involving both secondary and postsecondary levels.

E. Instruction and experience in all aspects of the industry the students are preparing to enter

- 1. The statewide technical committee process identified a broad range of skills necessary for successful employment.
- 2. Participation in student organizations had grown, but the participation rate had dropped slightly from 18.5 to 17.4 percent.
- There was a need for the curriculum to support and reinforce employability skills.
- 4. Additional business and industry input was recommended.
- 5. State did not clearly define teaching "all aspects of the industry."

F. The ability of the eligible recipients to meet the needs of special populations with respect to vocational education

1. Minority enrollment in secondary programs had expanded significantly over the two years of the Perkins legislation. Secondary Hispanic and Native American enrollments increased 28% and 57% respectively over the past



two years. Almost all of the specific program areas increased absolute number of minorities and increased the percentage of minorities as a function of the total number of students in the programs. Enrollment at the postsecondary level increased 65% for Hispanics and 24% for Native American.

- 2. Hispanic dropout rates were higher, but schools with high numbers of Hispanics were able to reduce the dropout rate significantly with appropriate intervention.
- 3. Data indicated that few direct barriers were keeping students from existing programs. Subtle barriers still existed such as the availability of supplementary services and the lack of representatives from special populations on local evaluation teams.
- 4. Few supplementary services were being provided at the secondary level.
- 5. The number of bilingual/bicultural vocational teachers had not increased.
- 6. There was a need for additional pre- and inservice training to vocational teachers regarding the educational needs of ethnic minorities and other members of special populations.
- 7. Individual Educational Plans (IEPs) for students with disabilities often did not identify the specific occupational objectives and vocational goals of those students. Vocational teachers were informed of IEP information in a variety of ways.
- 8. Eighty two point three percent (82.3%) of schools reported that they provided 100% of the students & parents with information about the opportunities available through vocational education.
- 9. Fifty three point five percent (53.5%) of the school districts indicated 100% of their students had career/educational plans by the end of 1993.
- 10. Active recruitment of nontraditional and minority students was a frequent recommendation resulting from evaluations and technical visits.
- 11. A small follow-up study of non-traditional students based on gender showed that the majority were working full-time in jobs related to their training. Satisfaction with the training was high.
- 12. Transition programs were using least restrictive environments, but lacked tracking mechanisms for students.
- 13. The comprehensive guidance portfolios were being used in most of the



districts that were reviewed.

- 14. Few school districts conducted the previous year's local evaluation focusing on special populations.
- 15. OCR reviews showed few non-compliance problems. The primary recommendations made during the seven on-site reviews involved the need for an "equal opportunity" disclaimer on publications and the development of non-discrimination policies.
- 16. The vocational education system in general served students with disabilities well. Most were served in mainstream programs.
- 17. "Youth at risk" rather than "disadvantaged" was a prevalent program descriptor.
- 18. Single parents and homemakers were served through Centers for New Directions at the six postsecondary schools using assessments, career and education counseling and program instruction. Approximately 2150 (62%) clients found jobs or further schooling through these centers.
- 19. Equity grants had been made covering a wide variety of activities to assist non-traditional students to succeed.
- 20. Correctional students were served by coordinating JTPA, Carl Perkins, ABE and Chapter One activities.
- 21. Over 11,700 special population students were mainstreamed in secondary vocational programs in FY93.
- 22. Most IIC projects served special population students indirectly through guidance, recruitment, integration, articulation and enhancement of mainstream programs.
- 23. JTPA and vocational education entities usually worked well together as partners.
- 24. Cooperative agreements had been developed between/among several agencies.
- 25. Most secondary programs had reasonable gender balance with the exception of Trade and Industrial Programs. (Industrial Technology was not balanced either, but since the enrollments were only recorded for those schools receiving a grant for that particular year, no general conclusions could be drawn.) Postsecondary enrollments were balanced in agriculture and marketing, but not in the other divisions.



G. Raising the quality of vocational education programs in schools with high concentrations of poor and low-achieving students

- 1. A project in one small, rural school with high numbers of economically disadvantaged students demonstrated the effectiveness of interagency cooperation and aggressive intervention.
- Lack of cultural awareness or sensitivity, inadequate guidance and teacher interest, poor childhood education opportunities, the 90 percent attendance rule, the C average in core classes, and school district regulations were cited as factors leading to dropouts or pushouts for minorities.
- 3. Minimal bilingual staffs and services were cited as a problem.

H. Relevance of programs to the workplace: both present and future

- 1. The continual updating of vocational-technical curricula with the assistance of technical committees brought workplace relevance to vocational-technical programs.
- 2. Idaho's system of vocational-technical education delivered a number of vocational programs in every area of the state. This included 321 secondary occupational programs and 125 postsecondary occupational programs.
- 3. All vocational program areas in the state made major curriculum changes with titles and content updated to meet industry standards.
- 4. Secondary program enrollments increased over 27% in the past two years. Regular postsecondary enrollment decreased slightly, but short-term enrollment increased by over 35%.
- 5. The percentage of secondary added-cost funding dropped from 62% to 33% over 11 years while the number of programs increased from 307 to 321 from FY91 to FY93.
- 6. Traditional Industrial Arts programs were updated to meet the standards for Industrial Technology.
- 7. The Idaho Vocational Foundation provided funds for 15 instructors over the past two years to upgrade their technical skills and return to industry.
- 8. Sixty percent of the postsecondary students (in a five-year follow-up study) said their current job was closely related to the one they had planned for while in postsecondary training.



- 9. The average salary of postsecondary completers two years after graduation was \$21,122 (1990). Average increase was \$5,404 over two years.
- 10. Employers were generally satisfied with postsecondary vocational-technical graduates.
- 11. Supply and demand data suggested a mismatch between some vocational offerings and available occupations.
- 12. Corrections enrollments dropped reflecting a significant change in programming which included replacing short-term remediation with skill training.
- 13. Current funding formula split between postsecondary and secondary produced a balanced use of the funds.

I. Ability of vocational curriculum, equipment and instructional materials to meet the demands of the workforce

- Measures and standards data were collected for secondary and
 postsecondary programs to be used as base-line data to identify ways to
 improve vocational education. Many of the schools, however, did not collect
 all of the measures data.
- Capacity of the system was inadequate. Eighty five percent (85%) of the districts met the standard of 1 FTE vocational teacher for every 300 students. The overall ratio of students to teachers was 221:1. However, the largest districts representing 33% of the students did not meet the 300:1 FTE standard.
- 3. Increased numbers of high school students put pressure on the postsecondary system to develop additional capacity as well as offer programs at non-traditional times to provide opportunities for more students.
- 4. There was a need for better equipment, better technology and better teacher education training.
- 5. Technology had advanced beyond the ability of existing skill training programs to equip labs and to keep pace with industry.
- 6. There was more need for work-based experience to provide quality skill training.
- 7. Vocational teachers were not significantly involved in the budgeting and planning processes.



- 8. A majority of programs reviewed showed: 1) Facilities and equipment needed improvement in cleanliness and safety; 2) Equipment was not systematically up-dated, maintained and inventoried, 3) Adequate storage space was not available.
- 9. A need existed in up to 20% of the programs for appropriate personal protective equipment for students.
- 10. Improvements were needed in leadership development.
- 11. More business and industry input was needed in curriculum decisions.
- 12. Professional development was a critical component in improving vocational-technical education.
- 13. Additional tools, laboratory supplies, equipment and facilities were needed to adequately support the curriculum.
- 14. The Vocational-Technical Education Foundation received and placed over \$190,000.00 in donated equipment and furniture during the past two years.
- 15. Participants in Idaho postsecondary vocational-technical institutions were very satisfied with their choices of schools and programs.
- 16. A positive climate had been maintained for postsecondary training for adults through short-term classes, convenient times and locations, apprenticeship-related instruction and self employment/small business management offerings.



Capability of Vocational Programs to Provide Students With Adequate Training

A. Integration of academic and vocational education

Technical Committee Data

Health Occupations curricula clearly identify the academic and vocational competencies students need to develop. The sciences of anatomy and physiology, pathology relating to wellness/illness and disease and microbiology underlying infection control/universal precautions are integral to the applied procedures in all occupational careers. Students learn, practice and then apply these procedures in the workplace. Communications and math, plus technology are identified in each curriculum where they appropriately apply.

Idaho became a member of the V-TECS group to address three items relating to curriculum development; integration of academic skills, competency testing, and to enhance the existing development system. Idaho had always included academic competencies in the tasks to be completed by students and had always included industry personnel in the development of the task lists. V-TECS materials were developed in a manner which was totally compatible with Idaho's process and the list of occupations far exceeded those currently available to Idaho programs.

The membership in V-TECS was also designed to fill the gap of developing test items by providing approximately 30 test item banks for existing programs. V-TECS also provided instructional support in the form of lesson planning and resource identification. The newest component of V-TECS materials was the Related Academic Skills (RAS) lists which had been developed for many of the program titles. The RAS was designed to allow Idaho schools to establish integration patterns for academic skills.

Idaho hoped to correlate the Applied Academic series from AIT and CORD with the lists provided in the V-TECS materials when new curriculum was developed and hoped to retrofit existing guides, where possible. This area was planned to assist in the development of more relevant instructional sequences for Tech Prep initiatives in the state.

Evaluations and Technical Visits

Visitation reports from vocational supervisors indicated three student service needs: 1) expand the career guidance of students; 2) expand counseling of students in the transition to post-high school employment and specific job training; and 3) provide more applied academic choices.

Five and ten year evaluations highlighted two student guidance needs. One, over one-half of the evaluations showed a need to extend the career guidance of students to help them focus early on broad career goals with appropriate course selection. Second, local educators believed that students would benefit from more career information if



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purposefully used. In about one-fourth of the 10 year and 5 year evaluations, current career and postsecondary training information were not being sufficiently provided.

The 17 school evaluations analyzed for this report indicated that slow progress, with a few exceptions, had been made in truly integrating academic and vocational education. A few commendations cited the cooperation among teachers and school departments in the teaching of employability skills. Recommendations were noted in three general areas which directly involve integration. Half of 17 schools evaluated received vocational recommendations to offer classes that meet a sequence of courses for the program areas including integration of academic and occupational skills. Second, fifteen recommendations noted some programs lacked state-approved competency-based curriculum for the program area. Third, although there were some positive expansion activities regarding reinforcement of basic skills, there were as many recommendations that greater emphasis be placed on providing curriculum that reinforces basic skills and employability skills.

From the 102 technical visits recorded by state program supervisors, 526 recommendations were written and these reflected the school evaluations mentioned above to a great degree. There were 244 recommendations regarding program of study improvement with four major areas of recommendations resulting from technical visitations. One, over half of the recommendations for program improvement involved strengthen or creating student youth organizations and advisory committees. Second, one-fourth of the recommendations indicated the need for more instruction to be provided in order to support ongoing curriculum. It was suggested that support should include audio visual, reference materials, tools, and laboratory supplies. Third, one-fourth of the recommendations indicated the need for curriculum support of basic skills and employability skills. Fourth, about one-eighth of the comments on visitations forms indicated class schedules and educational requirements limited the students ability to take a vocational class, and this is further compounded when students want to take a sequence of vocational classes.

Tech Prep Regional Reports

The first two years for Tech Prep activities in Idaho were targeted for the development of Tech Prep programs. The development process focused primarily on two activities. These were the integration of academic and vocational education and creating linkages between secondary and postsecondary institutions.

Inservice training was provided to certify teachers in applied math, English, Principles of Technology, and Applied Biology and Chemistry. Training was offered in all six vocational regions in Idaho. These training sessions included both vocational and academic teachers. Over 1100 educators and business people have been exposed to training in integration over the past two years in Idaho. As an outcome of these implementation activities one or more of the applied courses are being offered in approximately 85% of the schools in Idaho.



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Measures and Standards - Secondary

Five measures addressed the improvement and attainment of academic skills. Academic performance was only an indirect measure of the extent of integration of academic and vocational education and was based on the presumption that integration will improve academic skills. Since improvement of those skills, however, is the goal of integration, the performance of students on academic skills was deemed as an important indicator. Another problem with interpreting the results of these measures was that four of them were based on 11th grade data. This excluded a number of students participating in 11th and 12th grade vocational education and also allowed for less time for vocational education to have an impact on the students.

The first academic measure focused on 12th grade students and compared the number of vocational completers who received a "C" average in 14 core academic courses to the percentage of all the students in the same school who received a "C" average. Of those schools reporting, 76.4% met this standard.

The next four academic measures were applied to students who had completed three or more semesters of a vocational program sequence by the second semester of their junior year.

The Direct Writing Assessment was the first of these measures. It used a scoring rubric from 1 to 5. Three was considered to be the minimum for a competent writer and was the standard set for this measure. Of the schools reporting, 51.4% met this standard. It should be noted, however, that the standards for the direct writing assessment given in February of 1993 were raised over the previous years. A sample that would have scored a "three" the year before, only scored a "two" in 1993. The statewide average score was 2.90. The average of the scores reported by the schools for the vocational students was 2.91. (Note: This is an average of the average scores submitted by the schools and does not therefore reflect an average of all the vocational students.)

The next measure compared the average vocational students' standardized scores on the Tests of Achievement and Proficiency (TAP) with the average score for all students. The standard was that the vocational student average would be equal to or greater than the average for all students. Of the schools that reported these data, only 32.3% met this standard. The difference between the scores, however, was not very great. The average basic composite score for the vocational students was 187.4. The average basic composite score for all the 11th grade students was 191.2. This points out, however, that students in vocational sequences did not possess the level of academic skills possessed by the general population of students.

Gain scores were evaluated in the next two measures to determine how much students had improved from 8th to 11th grades. The standard for the Direct Writing Assessment was that the students' average score would increase from 1990 to 1993. Of the schools reporting, 39.6 percent met this standard. Because of the change in the rubric, however, this percentage is significant. The average of the schools' 11th grade scores for the



vocational students was 2.90 compared to an average 8th grade score of 2.92. Furthermore, the statewide average for all students went down from 3.06 in 1990 to 2.90 in 1993. This seems to indicate that the vocational students did as well or better than the students as a whole.

The second gain measure compared the 8th grade Iowa Test of Basic Skills (ITBS) with the 11th grade Tests of Achievement and Proficiency (TAP). The standard stated that the average TAP test score would be 21 points higher than the average ITBS score. Of the schools reporting, 64.4% met this standard. When taken as a whole, the increase between the average ITBS score for vocational students (167.5) and the TAP test (189.2) was 21.7.

It should be noted that the average TAP test score for all the 3-semester vocational completers was slightly lower (187.4) than the average score for those 3-semester completers for which an 8th grade match could be found (189.2). Since the match was only effective for in-state students, those students who received their education in Idaho did better than those students who moved in from out-of-state.

Percentile rankings for vocational students and for all students in specific subject areas were (all student average rankings are in parentheses(): 1) using sources of information - 56 (61); 2) reading comprehension - 55 (61); 3) math - 50 (55); 4) written expression - 50 (57); and science - 62 (67). Vocational students ranked in the 54th percentile using the basic composite score. The percentile ranking for all students on the basic composite score was 59.

Measures and Standards - Postsecondary

Three measures addressed academic performance. The first and second measures were the number of programs in which 75% of the students had a 2.0 GPA in the required academic courses and the number of programs in which 75% of the students completed the required academic courses. None of the schools met either standard of 100% of programs meeting the standard. The percentages ranged from 58% of the programs to 93.8% with four out of six institutions on the first measure and three out of six on the second measure above 90%. The third measure dealt with pre and post-test scores on either the ASSET or CPT exams. Only three of the institutions submitted data for this measure. Difference scores were calculated for the subtests of writing, reading and numerical skills. The standard was that the posttest score would be one quarter (¼) of a standard deviation higher than the pretest score. None of the institutions met the standard for all three subtests. One institution met the standard on writing, one met the standard on numerical skills and two met the standard on reading.

Idaho CPT Assessment

Two studies were conducted simultaneously during the 1992-93 school year to help the State of Idaho ascertain information regarding the Computerized Placement Test (CPT). The CPT's is an assessment program based on computer adaptive testing techniques.



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The first study, an attempt to correlate scores from the ASSET test with the CPT, was somewhat successful. Correlation coefficients ranged from .76 to .88¹. While these are lower than correlations to other tests (SAT, ACT) similar in nature, it is safe to assume that the CPT and the ASSET have enough of a relationship to develop a conversion scale. This scale will allow students who have taken the ASSET at one institution to transfer that information to another institution that uses the CPT.

The second study, an attempt to analyze test scores, based on the pre-post testing of the student, proved less successful. Although it appeared that the standard set for the statewide measures and standards was met (1/4 gain in the standard deviation from pretest to post-test) it was unclear as to which majors, if any, were performing better. Further research is being conducted in this area.

Some interesting by-products were noticed during the process of conducting the first two studies. Background questions on the CPT were analyzed. Most students had studied English and math for at least two years in high school (85%) while significantly fewer students had taken high school algebra (47%). This seems to indicate a lack of necessary entry skills for most students accepted in the various programs. Another interesting by-product was looking at the means of Idaho's students when compared to means of other institutions administering the CPT's. While Idaho's means, in general, were lower, they were not significantly lower. This appears to be in line with Idaho students applying for admission to purely academic institutions.

Perkins On-Site Reviews

The majority of sites visited were not integrating academic and vocational subjects according to the following criteria: (a) team teaching and shared planning time; and (b) courses that were sequentially arranged to include appropriate academic and vocational courses. Several schools were doing an excellent job.

Certification Data

One integration effort involved vocational teachers modifying vocational curricula an becoming certified in order to make certain vocational courses eligible to meet graduation and college entrance requirements. At the time of this assessment, 33 vocational teachers held English certification and 21 held science certification. In almost all of these cases, the science certifications were held by agriculture teachers and the English certifications by Business teachers.

¹ Correlation Coefficients	
CPT Reading to ASSET Reading	.76
CPT Sentence Skills to ASSET Language Usage	.88
CPT Arithmetic to ASSET Math	.82



B. Sequential course of study leading to both academic and vocational competencies

(Note: Also refer to section A, <u>Integration of academic and vocational education</u> for data pertinent to this section.)

Technical Committee Data

Sequential courses of study leading to academic and vocational competencies are delineated in Orientation to Health Occupations Year One (11th grade), a program of two semesters that emphasizes foundation building for all occupations. Year II (12th grade) of Health Occupations is composed of more specific courses of study leading to multiple career pathways. Competencies reflect the application of academic and vocational skills in nursing, physical therapy, occupational therapy, dental assisting, and medical/clerical fields. Year Two will be expanded to provide more options and flexibility for students.

Evaluations and Technical Visits

About one half of the schools assessed in the five-year and ten-year evaluations had recommendations to meet sequence of courses for a program area including integration of academic and occupational skills. Fourteen of the 102 technical visits to vocational programs indicated a need to establish a sequence of courses including academic and vocational integration.

Division Statistics: Enrollment, Special Populations, Program and Follow-up

A key element in making sure students had a proper sequence of courses was the guidance provided to those students. One element of this guidance was the use of the state's Career Information System. This system expanded significantly over two years from 120 secondary sites in FY91 to 186 secondary sites in FY93.

Another significant development was the increase in the number of counselors who became vocationally certified over the past two years. The number increased from three vocationally certified counselors to 55.

Comprehensive Guidance Model Assessment

The State of Idaho has developed model guides (K-12 and adult) for comprehensive guidance and counseling programs patterned after the NOICC National Career Development Guidelines. Both documents have been adopted by the State Board of Education as the official guides for Idaho. A 5-year plan was developed in 1989 (The Idaho Comprehensive Guidance Project) designed to assist Idaho school districts in designing and implementing their local programs. Forty eight of Idaho's 113 school districts (42%) have participated in this project. In 1992 a counselor team consisting of 12 junior and senior high school counselors developed a kit consisting of activities designed to be used with the K-12 Idaho



model guide. This kit (Idaho Comprehensive Guidance Kit) is currently being used in the majority of Idaho schools.

Current efforts are underway to develop and field test an 8th grade curriculum for Idaho at six junior high school sites. This curriculum, 2001: A Career Odyssey, "a curriculum to discover your future in the 21st century", will be delivered to students in three modules through the Language Arts Department. The product of the curriculum will be the development of an initial career plan for every student.

Foundational to the above curriculum is a biographical student assessment initially developed in 1947 by Dr. Bernard Haldane. This assessment, which is currently known as The Dependable Strengths articulation process, requires students to first recall their enjoyable life achievements and then write about them in detail. Student peers assist individuals to uncover their dependable strengths patterns.

The long term vision calls for all Idaho schools to be equipped to deliver the 2001: A Career Odyssey curriculum at the 8th grade level. Additional curriculum modules will be developed to update this process at the 10th grade level in preparation for a more specific job training plan relevant to the students' career major.

Postsecondary Vocational-Technical School and Beyond

Eighty percent of participants completed the prescribed course of study resulting in certificates or AAS degrees.

Curriculum Assessment

As a result of the curriculum assessment, it was determined that the new curriculum guides developed under the process of a technical committee and a curriculum development committee included the integration of academic and vocational skills. Curriculum developed prior to the technical committee process had some references to academic skills, but these skills were predominately isolated or taught in separate course arrangements. The following list of programs have academic skills identified within the learning categories for the occupational fields:

- a. Autobody Technician
- b. Auto Mechanics
- c. Welding Technology
- d. Graphics Arts/Printing Technology
- e. Machining Technology
- f. Agriculture Science & Technology Curriculum
- g. Office Systems Supervisor (Business Education Secretarial)
- h. Drafting Technology
- i. Industrial Maintenance Technology
- j. Marketing and Business Education Combined Curriculum Referred to as Business Technology



- k. Adult and Teen Living
- Industrial Technology Service

Applied academic courses of mathematics, communications, principles of technology, chemistry and biology have also been developed to provide the basis for sequential instruction of academic competencies. At this time however, no formalized sequence of instruction using these curricula has been put into effect for Idaho vocational programs. Sample sequences were developed and distributed upon request.

C. Increased student work skill attainment and job placement

Measures and Standards - Secondary

Occupational skill attainment was measured through student competency profiles rated by the vocational teachers. Schools had the option to use competency exams, but none chose that option. The standard was that a minimum of 90% of the students would meet 80% of the approved competencies. The competencies were identified by business and industry through a statewide technical committee process. The schools also had the option of modifying the list of competencies upon recommendation by the local advisory committee.

Of the schools that reported data for this measure, 63.5% met the standard. An additional 17.6% reported between 80 and 90% of the students meeting 80% of the competencies.

Placement data were collected on completers who had graduated the previous year (May, 1992). Two separate standards were applied: 1) positive termination rate (which includes any outcome other than not in the labor force or unemployed) will be 90% or greater; and 2) percentage of student obtaining a job related to training or pursuing additional education will be 75% or greater.

Of the schools that reported positive termination rate, 75.5% met the standard. An additional 17.9% had a positive termination rate of between 80 and 90%. Fifty eight point five (58.5) percent met the standard for obtaining a job related to training or pursuing additional education. An additional 23.6% fell between 65 and 75%.

Measures and Standards - Postsecondary

Occupational skills were measured at the postsecondary level through completion rates, grade point average (GPA), and placement rates. Two of the six institutions (33%) met the standard of 75% completion rate across all vocational programs. All of the institutions reported that 70% of the students or greater had a 2.5 GPA across all the programs. Fifty percent of the institutions met the standards of a 90% positive termination² and 75%



²Positive termination rate includes placement in any employment, further education or military.

placement in a training-related job, further education or the military.

Completion rate was the measure used for short-term training programs. All of the institutions met the standard of 85%.

Follow-Up Statistics

The Division collects annual data on what happens to vocational students after they complete secondary and postsecondary vocational programs. These data show what happens within the first year and are supplemented with five-year follow-up studies. These data indicated that current vocational programs were doing well in placing students. Positive placement for secondary vocational completers was 93%. Positive placement for postsecondary vocational completers was 91%. Positive placement included placement in a training or non-training related field, military, or continuing education. Of the postsecondary students, 66% were working in a training related field. The secondary students placed only 19% in a training-related field, but had much higher numbers going for further training (56%). Both had fairly low percentages in non-training related employment (14 and 12 percent).

Additional statistics are presented in the following three tables. The first two tables provide data on secondary students. The first of these divides the follow-up data into program areas. The second combines the program areas, but divides the data into regions. The third table provides data on postsecondary students.



SECONDARY VOCATIONAL TECHNICAL EDUCATION

Condensed 1993 Follow-Up Report On Students Graduating Spring of 1992 Classified By Division

	AG	Marketing	Occup Home Ec	Health Occ	т& і	Office Occ	Multi- Occ	State Totals
				0.1	50 /	4 (77)	-	7 (20
Number of Completers	750	147	199	94	504	1,672	54	3,420
# Completers Responding	722	141	192	93	475	1,558	50	3,231
Number of Seniors	1,469	463	242	107	970	3,998	90	7,339
% of Seniors Completing	51 %	32 %	82 %	88 %	52 %	42 %	60 %	47 %
Placement								
Military Service	6 %	4 %	3 %	0 %	8 %	4 %	2 %	5 %
Employed/Training Related	25 %	30 %	26 %	22 %	22 %	13 %	46 %	19 %
Employed/Non-Trng Related	9 %	1 %	13 %	17 %	22 %	14 %	12 %	14 3
Additional Educ/Vocational	19 %	15 %	16 %	9 %	28 %	12 %	0 %	16,
Additional Educ/Academic	33 %	48 %	33 %	47 %	15 %	50 %	34 %	40 :
Seeking Employment	2 %	0 %	3 %	0 %	3 %	3 %	2 %	2 :
Not in Labor Force	6 %	2 %	7 %	5 %	3 %	4 %	4 %	4 :
Deceased	0 %	o %	0 %	0 %	0 %	0 %	0 %	0
Positive Placement *	92 %	98 %	91 %	95 %	95 %	93 %	94 %	93

Positive Placement is calculated by adding the percentage of Completers who are reported as being in full time Military Service, Employed in a field Related to Training, Employed in a field Not Related to Training, and Pursuing Additional Education.

NOTE: Not all percentages within categories will equal the totals due to rounding of numbers.



SECONDARY VOCATIONAL TECHNICAL EDUCATION

Condensed 1993 Follow-Up Report On Students Graduating Spring of 1992 Classified by Region

Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	State Totals
259	263	1,100	767	479	552	3,420
247	256	1,044	705	460	519	3,231
695	383	2,413	1,197	1,353	1,298	7,339
37 %	69 %	46 %	64 %	35 %	43 %	47 %
2 %	8 %	6 %	6 %	5 %	1 %	5 %
21 %	13 %	21 %	20 %	15 %	20 %	19 %
18 %	9 %	16 %	9 %	16 %	13 %	14 %
13 %	23 %	11 %	18 %	20 %	16 %	16 %
38 %	42 %	39 %	40 %	34 %	44 %	40 %
2 %	2 %	3 %	2 %	3 %	1 %	2 %
6 %	2 %	3 %	6 %	6 %	5 %	4 2
0 %	0 %	0 %	0 %	0 %	0 %	0 %
92 %	96 %	94 %	93 %	90 %	94 %	93
	259 247 695 37 % 2 % 21 % 18 % 13 % 38 % 2 % 6 % 0 %	259 263 247 256 695 383 37 % 69 % 2 % 8 % 21 % 13 % 18 % 9 % 13 % 23 % 38 % 42 % 2 % 2 % 6 % 2 % 0 % 0 %	259 263 1,100 247 256 1,044 695 383 2,413 37 % 69 % 46 % 2 % 8 % 6 % 21 % 13 % 21 % 18 % 9 % 16 % 13 % 23 % 11 % 38 % 42 % 39 % 2 % 2 % 3 % 6 % 2 % 3 % 0 % 0 % 0 %	259 263 1,100 767 247 256 1,044 705 695 383 2,413 1,197 37 % 69 % 46 % 64 % 2 % 8 % 6 % 6 % 21 % 13 % 21 % 20 % 18 % 9 % 16 % 9 % 13 % 23 % 11 % 18 % 38 % 42 % 39 % 40 % 2 % 2 % 3 % 2 % 6 % 2 % 3 % 6 % 0 % 0 % 0 % 0 %	259 263 1,100 767 479 247 256 1,044 705 460 695 383 2,413 1,197 1,353 37 % 69 % 46 % 64 % 35 % 2 % 8 % 6 % 6 % 6 % 5 % 21 % 13 % 21 % 20 % 15 % 18 % 9 % 16 % 9 % 16 % 13 % 23 % 11 % 18 % 20 % 38 % 42 % 39 % 40 % 34 % 2 % 2 % 3 % 6 % 6 % 6 % 6 % 2 % 3 % 6 % 6 % 6 % 0 % 0 % 0 % 0 %	259 263 1,100 767 479 552 247 256 1,044 705 460 519 695 383 2,413 1,197 1,353 1,298 37 % 69 % 46 % 64 % 35 % 43 % 2 % 8 % 6 % 6 % 5 % 1 % 21 % 13 % 21 % 20 % 15 % 20 % 18 % 9 % 16 % 9 % 16 % 13 % 13 % 23 % 11 % 18 % 20 % 16 % 38 % 42 % 39 % 40 % 34 % 44 % 2 % 2 % 3 % 2 % 3 % 1 % 6 % 2 % 3 % 6 % 6 % 5 % 0 % 0 % 0 % 0 % 0 % 0 %

Positive Placement is calculated by adding the percentage of Completers who are reported as being in full-time Military Service, Employed in a Field Related to Training, Employed in a Field Not Related to Training, and Pursuing Additional Education.

NOTE: Not all percentages within categories will equal the totals due to rounding of numbers.



State of Idaho Division of Vocational-Technical Education Postsecondary Follow-up Summery Report for 1993 On Students Completing Programs during 1991/1992

Statewide Totals	8 S U	c s I	EITC	ISU	L C S C	NIC
1,852	451	357	243	512	127	162
92.66%	94.46%	88.52%	97. 94 %	96.09%	85.83%	83.33%
0.41%	0.23%		0.42%	0.61%		1.48%
66.43X	70.42%	68.04%	45.38%	70.73%	73.39%	65.93%
12.41%	8.69%	4.43%	26.89%	12.40%	13.76%	16.30%
11.95%	8.22%	22.78%	15.55%	9.35%	3.67%	8.15%
6.47%	8.92%	2.85%	10.08%	5.08%	5.50%	6.67%
2.33x	3.52x	1.90%	1.68X	1.83%	3.67%	1.48%
91.20%	87.56%	95.25%	88.24%	93.09%	90.83%	91 . 85%
	1,852 92.66% 0.41% 66.43% 12.41% 11.95% 6.47% 2.33%	1,852 451 92.66% 94.46% 0.41% 0.23% 66.43% 70.42% 12.41% 8.69% 11.95% 8.22% 6.47% 8.92% 2.33% 3.52%	Totals B S U C S I 1,852 451 357 92.66% 94.46% 88.52% 0.41% 0.23% 66.43% 70.42% 68.04% 12.41% 8.69% 4.43% 11.95% 8.22% 22.78% 6.47% 8.92% 2.85% 2.33% 3.52% 1.90%	Totals B S U C S I E I T C 1,852 451 357 243 92.66% 94.46% 88.52% 97.94% 0.41% 0.23% 0.42% 66.43% 70.42% 68.04% 45.38% 12.41% 8.69% 4.43% 26.89% 11.95% 8.22% 22.78% 15.55% 6.47% 8.92% 2.85% 10.08% 2.33% 3.52% 1.90% 1.68%	Totals B S U C S I E I T C I S U 1,852 451 357 243 512 92.66x 94.46x 88.52x 97.94x 96.09x 0.41x 0.23x 0.42x 0.61x 66.43x 70.42x 68.04x 45.38x 70.73x 12.41x 8.69x 4.43x 26.89x 12.40x 11.95x 8.22x 22.78x 15.55x 9.35x 6.47x 8.92x 2.85x 10.08x 5.08x 2.33x 3.52x 1.90x 1.68x 1.83x	Totals B S U C S I E I T C I S U L C S C 1,852 451 357 243 512 127 92.66% 94.46% 88.52% 97.94% 96.09% 85.83% 0.41% 0.23% 0.42% 0.61% 66.43% 70.42% 68.04% 45.38% 70.73% 73.39% 12.41% 8.69% 4.43% 26.89% 12.40% 13.76% 11.95% 8.22% 22.78% 15.55% 9.35% 3.67% 6.47% 8.92% 2.85% 10.08% 5.08% 5.50% 2.33% 3.52% 1.90% 1.68% 1.83% 3.67%

	AG SCIENCE	MARKETING	HEALTH OCCUP	OFFICE OCCUP	HOME EC	TECHNICAL OCCUP	TRADE & INDUSTRIAL
COMPLETERS							
Number	133	76	213	249	51	263	867
Responding	98.50%	90.79%	93.90%	90.76%	84.31%	98.10%	91.00%
PLACEMENT						0.700	0.51%
Militery	}	1.45%				0.78%	
Employed/Related	90.84%	55.07%	80.00%	61.06%	69.77%	56.20%	64.64%
Employed/Non-Releted	2.29%	20.29%	6.00%	11.95%	6.98%	14.34%	14.83%
Continuing Education	4.58%	13.04%	6.50%	16.81%	6.98%	18.22%	11.28%
Unemployed	1.53x	5.80%	4.00%	6.64%	4.65%	9.30%	7.10%
Not in Labor Force	0.76%	4.35%	3.50%	3.54%	11.63%	1.16%	1.65%
Positive Placement *	97.71%	89.86%	92.50%	89.82%	83.72%	89.53%	91.25%

Positive Placement is calculated by adding those Completers who are reported as being in full-time Military Service, Employed in a Field Related to Training, Employed in a Field Not Related to Training, and pursuing Additional Education, and dividing by the total number of Completers responding.



D. Increased linkages between secondary and postsecondary educational institutions

Tech Prep Regional Reports

The Tech Prep activities had been focused on building partnerships between secondary and postsecondary institutions. These included the development of six consortiums covering all regions of Idaho. Each secondary school district was invited to join the consortium in their region. These consortiums brought together teachers and administrators from secondary and postsecondary institutions to develop articulation agreements and unduplicated courses of study. Following is a brief description of the regional activities:

Region 1 -- Instructors from North Idaho College and the secondary schools met to develop articulation agreements in the area of business. This developed into an articulation curriculum committee. The committee successfully articulated five secondary business courses with North Idaho College, created an instructor's articulation guide, a student application for articulation, and a certification for students successful articulation. The consortium was working on articulating drafting and industrial technology courses.

Region 2 -- Workshops between secondary and postsecondary teachers were held for the development of vertical integration and articulation agreements. These workshops produced articulation agreements for at least two courses from each of the school districts in the consortium.

Region 3 -- Articulation of curriculum between secondary and postsecondary institutions was initiated by having teachers identify program competencies from the approved curriculum guides. These formed the basis for the development of articulation agreements.

Region 4 -- Articulation meetings were held with secondary teachers and teachers from the College of Southern Idaho. These meetings dealt with the areas of auto mechanics, electronics technology, and home economics. These meetings led to the development of a high school advisor's handbook and preliminary course articulation agreements.

Region 5 -- Instructors from Idaho State University's School of Applied Technology met with secondary instructors. These meetings produced articulation agreements for the area of business education.

Region 6 -- Secondary and postsecondary instructors developed competency lists or adopted established lists in the following occupational areas: Drafting and Design Technology, Business Systems Specialist, Printing/Graphic Arts Technology, Precision Machining Technology, Autobody Technology, and Applied Welding Technology, Licensed Practical Nursing, Pharmacy Technician, Consumer Homemaking, Electronics, and Dental Assisting. These competency listings made up the basis for vertical integration between the secondary schools and the postsecondary institution.



Curriculum assessment

The curriculum assessment indicated that linkages between secondary and postsecondary educational institutions have existed in part for a number of years in Idaho. It was suggested that continued efforts be pursued to increase the secondary and postsecondary linkage in Idaho.

One of the activities currently existing in Idaho is a statewide curriculum development activity that is designed for both secondary and postsecondary instruction. The curriculum focuses on the total sequence of competencies necessary for the occupation and therefore can be used to articulate between secondary and postsecondary. Additional activities include upgrade training of secondary instructors conducted by postsecondary personnel and the sharing of equipment and components in the trades area.

E. Instruction and experience in all aspects of the industry the students are preparing to enter

(Note: Additional data for this factor can be found in Section B, <u>Sequential course of study leading to both academic and vocational competencies.</u>)

Evaluations and Technical Visits

As in the last Assessment of Idaho Vocational Education, the school evaluations and technical visits suggested that more work needed to be done to make sure programs addressed industry needs. Of the 17 school evaluations, 72 recommendations were made to improve and establish business and industry input. Of the 526 technical visitation recommendations, 118 indicated the same need. About one-third of the programs received commendations for their work with the community through the advisory committees. The following recommendations were included in these assessments by order of occurrence:

- 1. Establish a committee that is active, meeting a minimum of two times per year. Minutes are to be taken and kept on file.
- 2. Develop an annual budget, including long and short range plans and goals and objectives. Instructor should be involved in this process.
- 3. Curriculum should support employability skills.
- 4. Investigate opportunities to expand and/or update the curriculum. Assure that the program meets or exceeds the State Division of Vocational Education guidelines and that texts and resource materials are current and up-to-date.

Several recommendations in both the school evaluations and the technical visitation reports indicated that the curriculum must support and reinforce in a greater way the employability skills of its students; furthermore, providing more work-based experience in programs was mentioned in 10% of the recommendations.



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Curriculum assessment

Several activities were directly related to this area, including the background of the technical committee members selected for that activity, and the industry training opportunities for instructors through ICAR and ASEP programs in the automotive field. In addition, postsecondary instructors provided dealership training and all instructors in the trades area were required to have eight (8) years active work experience prior to becoming an instructor in the program. Additionally, postsecondary programs, along with some secondary programs, provided business personnel with upgrade training in new technologies such as word processing, spread sheet and data base instruction. Instructional staff also returned to industry for seminars and workshops on new technology applications in all program areas.

Division Statistics: Enrollment, Special Populations, Program and Follow-up

Key elements in the ability of vocational programs to deliver instruction in all aspects of the industry were the youth organizations. Although the enrollment in youth organizations increased over the past two years, overall enrollment increased at a greater rate. The overall percentage of youth organization enrollment dropped from 18.5% to 17.4% over two years. The following chart details the change in enrollments for the various youth organizations.



Secondary Youth Organization Enrollment FY91 to FY93

	Business / BPA		
•	FY 91	FY 92	FY 93
Enrollments	11,481	12,378	13,550
BPA Membership	1,414	1,419	1,445
% of Students	12.32%	11:46%	10.66%
	Agriculture / FFA		
	FY 91	FY 92	FY 93
Enrollments	5,938	6,883	6,928
FFA Membership	3,225	3,415	3,673
% of Students	54.31%	49.61%	53.02%
	Trade & Industry / VI	CA	
	FY 91	FY 92	7Y 93
Enrollments	4,727	5,190	5,120
VICA Membership	393	404	365
% of Students	8.31%	7.78%	7.13%
	Home Economics / Fi	HA	
	FY 91	FY 92	FY 93
Enrollments	14,513	14,473	14,712
FHA Membership	1,400	1,427	1,367
% of Students	9.65%	9.86%	9.29%
	Marketing/DECA		
	FY 91	FY 92	FY 93
Enrollments	1,085	1,217	1,273
DECA Membership	539	511	39
% of Students	49.68%	41.99%	30.71%
Total Num	ber of Students / Studer	nt Organizations 1	
	FY 91	FY 92	FY 93
Enroliments	37,744	40,141	41,58
Organization Members	6,971	7,176	7,24
% of Students	18. 7%	17.88%	17.419



The number of Industrial Technology/TSA student organization members for FY93 was 153. Due to the fact that enrollments are not collected on all industrial technology programs, this information was not included in the table.

F. The ability of the eligible recipients to meet the needs of special populations with respect to vocational education

Measures and Standards - Secondary

Providing information about vocational opportunities and providing adequate career planning are key to meeting the needs of special populations. Two measures specifically addressed these two concerns. The first measure focused on the number of districts who provided 100% of the students and parents information about the opportunities available through vocational education. Of the schools that reported, 82.3% met this standard.

The second measure dealt with the number of districts who had career/educational plans for 100% of their students by the end of 9th grade. Fifty three (53.3) percent of the school districts met this standard.

Measures and Standards - Postsecondary

Three measures specifically addressed the progress of special populations in regular AAS/Certificate programs. Four out of six of the institutions met the first standard requiring the percentage of special populations who achieved a 2.0 GPA in required academic courses to be the same as the percentage of students-at-large. Only one of the institutions met the standard for the second measure of special populations having the same completion rate for academic courses as the at-large population of students. Two of the institutions met the third standard of special populations having the same program completion rate.

The short-term measure for special populations was only completed by two institutions. In neither case, did the special population students have the same completion rate as the population in general. One institution had almost the same completion rate, however (96.4% compared to 96.8%).

Evaluations and Technical Visits

Data collected in school evaluations and technical visits indicated few direct barriers keeping students from existing programs. There were about as many commendations as recommendations in regard to nondiscriminatory counseling, curriculum design, classroom procedures, and placement services. On the other hand, the most recommendations that were made in both methods of assessment dealt with actively recruiting non-traditional and minority students.

Women at Work: Following Postsecondary Female Vocational Students in Programs Nontraditional to Their Gender

This study followed a group of women who were enrolled in or a graduate of a vocational-technical program nontraditional to their gender. Nineteen women were currently in



training, fifteen had completed their program, and ten had left the program. Fifteen vocational training programs were identified. Of those who had completed training, the majority were working full-time in jobs closely related to training. Employment status was significant in accounting for satisfaction with training. Training and income were significant factors in job satisfaction; that is, women who were working in high paying jobs similar to their vocational training were significantly more satisfied than those employed in low paying unrelated jobs. Job availability was the most often cited problem although securing employment in their chosen field did not appear to be a problem for most subjects. Gender-related problems were NOT reported. Overall attitude toward equity was one of moderate to high liberalism.

Tech Prep Regional Reports

During the first two years the Tech Prep activities had limited student involvement. Activities were directed at insuring the successful development of quality Tech Prep programs. The needs and accessibility of Tech Prep to special populations and nontraditional, sex equity was an integral part of the planning for Tech Prep Programs. In considering how to establish Tech Prep consortiums, it was decided that equitable participation would be best served if all schools could be a part of a consortium.

Perkins On-Site Reviews

There was little evidence that supplementary services were being provided at the secondary level. Schools often had difficulty in viewing supplementary services in the context of vocational education. They described what they provided in general, but were not specific to vocational education.

Overall, the districts were doing a good job providing services in the least restrictive environment possible. The major concern with the transition programs was that the state did not have a mechanism to track the students. This may have led to an underreporting of effort.

Responses from school districts on providing the required information to 100% of the special population students and their parents ranged from 100% to 0%. In some districts the information was very comprehensive and in others it was marginal. An ongoing project by the Division of Vocational Education and the University of Idaho on providing quality career information should greatly enhance the state's efforts in this area.

The guidance portfolios were being used in most of the districts visited (or they were planning to implement them) The portfolios are very comprehensive. Most of the districts were doing counseling with individuals with disabilities but, the IEP's were very weak in identifying the specific occupational objectives and vocational goals for the students. The transition plans required the identification of a vocational goal, and where these were in place, they were adequate. The information in the IEP's was being provided to the vocational teachers in various ways. Some districts were doing an excellent job and were involving the vocational staff and others just gave the teacher a copy of the IEP.



Most of the school districts had not performed a local evaluation in the previous year. They either did not know that they had to do one, or they just had not done it.

Civil Rights Compliance Annual Report (1992)

The desk audit revealed no obvious problems with-compliance with the Civil Rights Act. Schools were generally in compliance with the civil rights guidelines. Six secondary and one postsecondary schools were selected, however, for on-site reviews according to predetermined criteria. The on-site reviews resulted in six recommendations involving the need for an Equal Opportunity disclaimer on all publications, three recommendations calling for the development of a district policy on non-discrimination, one recommendation asking for improved physical access, one recommendation calling for improved minority recruitment, and one recommendation on gender free language in publications.

Biennial Carl D. Perkins Job Training Partnership Act Evaluation Report

Generally, the vocational education system served handicapped² persons well. Teachers and communities approached the needs of the handicapped with special concern and compassion. School administrators and the districts and communities they serve were also usually aware of their responsibility to this population. Also, active advocacy for this population by special education interests highlighted the need for training the handicapped and contributed to support for programs conducted for such training.

At the secondary level 1,498 handicapped were served in mainstream programs while 245 were served in 17 separate projects. All 326 handicapped persons at the postsecondary level were served in mainstream programs.

The disadvantaged populations profited from the concern and compassion with which school administrators and teachers attempted to fulfill their needs. The popular tendency to refer to this population as "youth at risk" rather than as "disadvantaged", alleviated some of the stigma of being identified as a member of this group. Too, this designation promoted development of curriculum and strategies designed particularly to solve the special needs confronting this population. Though generally satisfactorily served, this population at times faced obstacles to accessing quality vocational programs. Some of those were: 1) Local scheduling; 2) Choosing appropriate vocational education electives would delay high school graduation; 3) Minimal summer school makeup opportunities

At the secondary level 8,478 disadvantaged persons were served in mainstream programs while 447 were served in 14 separate programs. All 1,208 persons at the postsecondary level were served in mainstream programs.

Single parents or displaced homemakers received assessment of their needs, career and



²The proper term is "individuals with disabilities." The author of this study used the term used in the original legislation.

education counseling and program instruction on making the transition from dependence to independence at the Centers for New Directions. These centers are located at the six postsecondary vocational-technical institutions. Working in coordination with the institution in which the Center is housed, the local Private Industry Council, and referral agencies, the Centers placed 779 clients in employment and 809 in further schooling or training. These results represented a 48 percent measurable success rate for clients who often faced poor personal financial circumstances, negative self-esteem and lack of assisted child care. Not so easily quantified was the number of clients who altered self-defeating behaviors, negative attitudes and thinking, and unrealistic self-concepts. (Note: Please see the next study, Special Population Enrollments for FY92 statistics.)

It is difficult to measure the results of vocational equity grants in quantitative terms. Those grants, however, did establish projects designed to develop materials free of gender bias and stereotyping, address research equity issues, furnish vocational equity materials, provide financial incentives to students seeking nontraditional careers and establish support groups for students enrolled in nontraditional career programs. The results of such indirect services cannot be ascertained accurately. It is well to observe, however, that as ever-increasing number of students enroll in nontraditional career programs, teachers and students are more aware of and are making efforts to avoid language leading to bias and stereotyping, and that vocational equity grants promote proactive measures to solve vocational equity problems. (See Idaho Postsecondary (and Secondary) Student Enrollment: Proportions by Gender tables.) There is a sense that vocational bias is less intense as a result of vocational equity grants.

Criminal offenders in correctional institutions are usually well served by instructional personnel, programming curriculum, counseling, and employment placement. The high level of service provided in these components was possible only because JTPA 8% Education and Coordination, Carl D. Perkins Vocational Education Act, Adult Basic Education 10% Set Aside, and Chapter 1 Neglected and Delinquent funds boosted the funding for the minimal correctional education program provided through the Idaho Department of Correction budget.

The principal of the Robert Janss School who administers education programs for the Idaho Department of Correction used 90% of these federal funds - which amounted to 38% of funds available for the education of offenders in correctional institutions - for instructional and counseling personnel. The application of these funds for these components resulted in a high degree of service to this population.

Only occasionally, however, were offenders adequately served by support personnel, equipment, facilities, and follow-up. Inadequate facilities and lack of equipment were serious blocks to the continuation of the high level of programming provided by instructional and counseling components. The lack of support personnel to provide program coordination, recordkeeping, and library activities severely limited services to this population.



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- Special Population Served

- 6,133 special populations students were enrolled in approved mainstream occupation programs
- 43,153 special populations students were identified on IIC applications for Perkins funds as eligible for services provided by IIC funds.
- Many projects funded under IIC did not serve special populations students through traditional classroom structure. Rather those projects often aided special populations students indirectly through such programs as guidance, recruitment, integration and articulation, and enhancement of mainstream programs. Enrollment count of special populations, therefore, would not be a realistic measure of successful used funds.
- The six postsecondary vocational-technical institutions enrolled special populations students in IIC projects.
- Tech-prep contributions and projects aimed at capacity building serve special populations indirectly making it impractical to ascertain the number of individuals served.
- Idaho Department of Corrections 389 special populations persons incarcerated in Department of Correction institutions were enrolled in two skills training projects, applied mathematics instruction, and guidance and counseling for re-entering the free society and world of work. Special populations in the institutions were served indirectly by improvement of skills training and equipment and material and professional development activities for vocational education staff.

During this reporting period SDA/Ds and Vocational Education complied with coordination criteria and statutory directive in numerous ways. Perhaps their most successful efforts to coordinate were the attempts of the entities to increase each other's understanding of the variations which exist in their training and employment goals, to collaborate on matters of mutual concern and to comply with substantive coordination criteria requirements. Some of these efforts are reviewed in the following communication and planning section. Less successful in terms of quantitative measurement were the coordinated efforts to utilize the vocational infrastructure to provide JTPA participants training through Title II A funds. These results are addressed in the following Utilization of Vocational Education For JTPA Title IIA Training.

Communication and Planning

JTPA and vocational education are partners in training the populace for the world of work and in providing employers a workforce capable of meeting the demands of the modern workplace. Even though Title IIA of JTPA emphasizes shorter term training and timely employment which vocational education stresses longer term training and delayed employment, each entity has contributed to the other as a partner in a common cause in most instances. Some notable examples of supportive activities are reviewed as follows:



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Transition Process Form Old To New Perkins Act

The many activities aimed at making the transition from the old to the new Perkins Act provided the JTPA community information about the changes in planning for and delivery of services instituted by SDPVATEA. Members of the JTPA community contributed to the transition process by participating in public hearings, submitting pertinent comments, providing input for the assessment of vocational education included as part of the State Plan, and reviewing the State Plan. These activities certainly enhanced the SDA/D's understanding of the vocational education system and provided them a vehicle to collaborate in the effort to improve training services.

Cross Representation

Members of SDA/D's served on vocational advisory committees and members of the vocational education community served as members of Private Industry Councils. Such cross representation promoted understanding of the plans and operations of the other and provided the opportunity to avoid actions which might lead to duplication of effort. Perhaps more importantly, such activity created a sense of partnership and encouraged further cooperative efforts.

Cooperative agreements for vocational education program planning between the State Division for Vocational Education, each regional postsecondary vocational-technical institution, and each regional SDA/D address coordination activities.

These agreements establish the structure and state the activities through which coordination can be accomplished. The effectiveness of such agreements depends on the determination of the agreement parties to implement the activities contained in the agreement.

Jobs Opportunities and Basic Skills (JOBS) Cooperative Agreement

The Family Support Act of 1988 allows the State Department of Health and Welfare (DHW) to arrange for state or local agencies, JTPA agencies, or other public or private organizations or institutions to provide JOBS programs and services. A coordination agreement between the DHW and the Idaho State Board for Vocational Education Division establishes the basis for coordination of services and delivery systems between the DHW and the postsecondary vocational-technical education system regarding JOBS program clients. It also defines the respective responsibilities of the DHW and its regional offices and the State Division of Vocational Education and the postsecondary vocational education delivery system.

The Cooperative Agreement recognizes the programs and services which



postsecondary vocational-technical institutions provide: preparatory programs, remediation programs short-term training programs, and Centers for New Directions which serve single parents and displaced homemakers. The Agreement also contains the assurance by the Division of Vocational Education that services provided to AFDC recipients receiving services will be maintained at \$26,000. This annual maintenance of effort will be reported to DHW yearly.

Coordination efforts to meet the need of welfare recipients of services provided by JOBS program included informal meetings between DHW, Job Service, and State Division personnel. Such efforts coupled with the Agreement terms has resulted in delivery of services to JOBS clients by postsecondary vocational-technical institutions in 5 of the 6 vocational education regions.

Division Statistics: Special Population Enrollments

Centers for New Directions

In FY91, the Centers served 3284 clients. A total of 779 entered the labor market and 809 entered school (48%). In FY92 the Centers served 3493 clients. Of those, 1019 entered the labor market and 1138 entered school (62%).

Enrollments by Gender, Special Populations and Minority Status

Division statistics indicated that improvements in gender balance had been made, but many programs were still heavily weighted toward one gender. Most of the secondary programs were reasonably balanced with the exception of Agriculture, Trade and Industry, and Industrial Technology. Agriculture did have over 20% non-traditional enrollment which represented a 7% increase since 1985. Trade and Industry only had 9% females, but this was twice the percentage of 1985.

The picture was somewhat different on the postsecondary level with Agriculture having a nearly balanced enrollment and Health, Business and Office, Occupational Home Economics and Trades heavily skewed to one gender. It should be noted that all occupations except for occupational home economics remained nearly the same over the past year.

The Division also collected data on the number of disadvantaged students in the vocational programs in Idaho. The total disadvantaged and handicapped numbers in secondary vocational programs was 11,793.

Improvements in the enrollments of the two major minority groups in Idaho - Hispanic and Native American - were particularly significant over the past two years. Secondary Hispanic enrollment increased from 2211 students to 2830 students, an increase of 28%. Native American student enrollment increased from 558 to 876, an increase of 57%. The



<u>Secondary and Hispanic and Native American Enrollment</u> table also includes the percentages of those populations as a function of total enrollment. The overall percentage increased with percentage increases shown in almost every program area for both minority groups.

At the postsecondary level, Hispanic enrollment increased 65% from 98 students to 162 students and Native American enrollment increased 24% from 104 students to 129 students.

Postsecondary minority enrollments for FY93 for Hispanics were: Ag - 3/370 (.8%); Marketing - 10/308 (3.3%); Health - 15/378 (4.0%); Business and Office - 49/1176 (4.2%); Home Economics - 16/165 (9.7%); Technical - 16/781 (2.1%); and Trade and Industry - 53/1675 (3.2%). Postsecondary enrollments for Native Americans were: Ag - 4/370 (1.1%); Marketing - 14/308 (4.6%); Health - 2/378 (.5%); Business and Office - 48/1176 (4.1%); Home Economics - 4/165 (2.4%); Technical - 17/781 (2.2%); and Trade and Industry - 40/1675 (2.4%).

The next three tables provide specific statistics on gender balance and enrollments of disadvantaged, students with disabilities, and minorities students for both the secondary and postsecondary levels.



IDAHO POSTSECONDARY STUDENT ENROLLMENT Proportions By Gender

Division	1985		1	1991		1992		1993	
	Male	Female	Male	Female	Male	Female	Male	Female	
AGR I CULTURE	86%	14%	64%	36%	60%	40%	61%	39%	
MKTNG/MULTI OCCUP	51%	49%	47%	53%	43%	57%	43%	57%	
HEALTH	15%	85%	8%	92%	10%	90%	11%	89%	
HOME EC OCCUP *	52%	49%	22%	78%	22%	78%	6%	94%	
BUSINESS & OFFICE	15%	85%	12%	88%	11%	89%	12%	88%	
TRADES/TECHNICAL/ INDUSTRIAL	89%	11%	86%	14%	86%	14%	86%	14%	
				<u> </u>				. 5407	

Culinary Arts enrollments were counted in the Home Ec Occupations division during FY91 and 92. In FY93 those enrollments were included under the Trades/Technical/Industrial division. If those enrollments had been included in the Home Ec Occupations division in FY93, the percentages would have been 25% male and 75% female.

IDAHO SECONDARY STUDENT ENROLLMENT Proportions By Gender

Division		1985	1	1991 1		992	1993	
	Male_	Female	Male	Female	Male	Female	Male	Female
AGR I CULTURE	83%	17%	81%	19%	76%	24%	76%	24%
MARKETING/MULTI OCCUP	43%	57%	48%	52%	49%	51%	50%	50%
HEALTH	12%	88%	31%	69%	37%	64%	41%	59%
HOME ECONOMICS	27%	73%	31%	69%	31%	69%	34%	66%
BUSINESS & OFFICE	27%	73%	39%	61%	40%	60%	41%	59%
TRADE & INDUSTRIAL	96%	4%	93%	7%	93%	8%	91%	9%
INDUSTRIAL TECHNOLOGY	Not A	vailable	Not Av	ai lable	87%	13%	89%	11%
					1000			

NOTE: Due to rounding of numbers, some totals may equal more than 100%.



Fiscal Year 1993 Special Population Enrollments

Secondary - by Division

DIVISION	TOT ENRL	DISDV	IND W/ DISAB	LEP
Multi-Occupations	119	42	0	1
Production Ag	6,928	1,355	161	55
Marketing	1,273	269	20	9
Health	290	96	3	0
Business & Office Ed	13,550	3,072	221	210
Cons Homemaking	14,273	3,424	548	393
Occupational HE	439	162	11	13
industrial Technology	1,467	215	43	11
Trade & Technical	4,830	1,206	181	72
TOTALS:	43,169	9,841	1,188	764

Secondary - by Region

REGION	TOT ENRL	DISDV	IND w/ DISAB	LEP
Region 1	3,774	1,188		18
Region 2	2,360 438		88	2
Ragion 3	12,412	2,855	367	266
Region 4	6,807	1,269	207	163
Region 5	9,347	2.555	218	190
Ragion 6	8,469	1,536	187	125
TOTALS:	43,169	9,841	1,188	764

Postsecondary - by Division

DIVISION	TOT ENRL	DISDV	IND w/ OISAB	LEP	NON-TRAD
Agriculture	370	13	2	0	0
Marketing	308	53	9	2	0
Health	378	134	5	3	0
Business	1,176	260	36	4	0
Home Economics	165	22	4	0	0
Trade & Industry	2,456	808	147	16	7
Pre Voc	99	58	20	0	0
TOTALS:	4,952	1,348	223	25	7



Secondary Hispanic and Native American Enrollments Fiscal Year Comparison

HISPANIC

	_	FY91			FY92			FY93		
	ENR	L		EN	ENRL			RL .		
DIVISION	Total	Hisp	%	Total	Hisp	%	Total	Hisp	%	
AG	5,938	243	4.09	6,883	255	3.70	6,928	250	3.61	
Multi-Occ	118	9	7.63	127	14	- 11.02	119	12	10.08	
Mktng	1,085	56	5.16	1,217	81	6.66	1,273	111	8.72	
Health ·	207	3.	1.45	244	6	2.46	290	13	4.48	
Business	11,481	569	4.96	12,378	688	5.56	13,550	770	5.68	
Cons HE	14,222	987	6.94	13,921	1,106	7.94	14,273	1,219	8.54	
HE Occup	291	18	6.19	552	46	8.33	439	47	10.71	
T&1	4,520	326	7.21	4,946	384	7.76	4,830	408	8.45	
TOTALS	37,862	2,211	5.84	40,268	2,580	6.41	41,702	2,830	6.79	

NATIVE AMERICAN

		FY91			FY92		FY93		
	EN	RL		EN	RL		ENRL		
DIVISION	Total	Na Am	%	Total	Na Am	%	Total	Na Am	%
AG	5,938	159	2.68	6,883	191	2.77	6,928	319	4.60
Multi-Occ	118	0	0.00	127	5	3.94	119	11	9.24
Mktng	1,085	8	0.74	1,217	14	1.15	1,273	11	0.86
Health	207	6	2.90	244	4	1.64	290	5	1.72
Business	11,481	150	1.31	12,378	228	1.84	13,550	214	1.58
Cons HE	14,222	174	1.22	13,921	169	1.21	14,273	259	1.81
HE Occup	291	4	1.37	552	4	0.72	439	6	1.37
T&1	4,520	57	1.26	4,946	59	1.19	4,830	51	1.06
TOTALS	37,862		1.47	40,268	674	1.67	41,702	876	2.10



Postsecondary Hispanic and Native American Enrollments Fiscal Year Comparison

12/93

HISPANIC

		FY89		FY93						
DIVISION	ENRL			ENRL						
DIVISION	Total	Hisp	%	Total	Hisp	<u></u> %				
AG	270	5	1.85	370	3	0.81				
Mktng	399 ¹	9	2.88	308	10	3.25				
Health	343	10	2.92	378	15	3.97				
Business	991 1	22	2.27	1,176	49	4.17				
HE Occup	129	4	3.10	165	16	9.70				
Tech Occ	665	11	1.65	781	16	2.05				
Trade & Ind	1,398	37	2.65	1,675	53	3.16				
TOTALS 2	4,195	98	2.34	4,853	162	3.34				

NATIVE AMERICAN

		FY89		FY93						
DIVICION	ENRI	L .		ENR	L .					
DIVISION	Total	Na Am	%	Total	Na Am	%				
AG	270	0	0.00	370	4	1.08				
Mktng	399 ¹	34 ³	10.90	308	14	4.55				
Health	343	3	0.87	378	2	0.53				
Business	991 '	22	2.27	1,176	48	4.08				
HE Occup	129	4	3.10	165	4	2.42				
Tech Occ	665	9	1.35	781	17	2.18				
Trade & Ind	1,398	32	2.29	1,675	40	2.39				
TOTALS 2	4,195	104	2.48	4,853	129	2.66				

The Marketing and Business totals include 87 and 22 students (respectively) not broken down by ethnicity. Those students were not included in computing the percentages.



The total enrollment numbers do not include 86 (FY89) and 99 (FY93) Pre-vocational students

³ This number includes 15 students from the Fort Hall Marketing program which was discontinued in FY00.

G. Raising the quality of vocational education programs in schools with high concentrations of poor and low-achieving students

Hispanic Youth - Dropout Prevention

The Hispanic Task Force identified reasons for the high Hispanic dropout rate and low participation in vocational programs. Part of the findings stated, "School centered concern brought out at the meetings included the lack of cultural awareness or sensitivity, inadequate guidance and teacher interest, poor childhood education opportunities, the 90 percent attendance rule, the C average in core classes, and school district regulations leading to dropouts or pushouts. Minimal bilingual staffs and services were also cited as school concerns.

Some of the home and community oriented concerns raised were the lack of parental encouragement, language difficulty, poor self esteem, inadequate goal setting skills, moving or migrating, the lack of Hispanic role models, and low expectations by society."

Wilder Project

The following citation was issued by the Wilder Board of Trustees. It describes the effectiveness of a project targeted to an at risk school. "Whereas the Idaho Division of Vocational Education have been leaders in working with students at risk of dropping out of school; and Whereas they have consistently and faithfully worked with the at-risk students from Wilder Jr/Sr High School, empowering them to be successful and self-sufficient not only in school but also in the pursuit of their careers; and Whereas their collaboration and cooperation with the Wilder Jr/Sr High School family and with the Southwest Idaho Private Industry Council over the past four years has resulted in a partnership that has produced our state and nationally recognized Wilder-PIC Valued Youth Tutoring Program, our successful school-to-work Mentoring Program, our before and after school study center, the Think Tank and our very successful PIC-Wilder Summer Learning Laboratories; the Wilder School District 133 Board of Trustees wishes to publicly express our deepest appreciation.

Division Statistics: Enrollment, Special Populations, Program and Follow-up

Two alternative schools in Idaho had Health Occupations programs for at-risk students. Students were employed as a result of this training.

H. Relevance of programs to the workplace: both present and future

(Note: Also refer to section A, <u>Integration of academic and vocational education</u> and section I, <u>Ability of vocational curriculum</u>, <u>equipment and instructional materials to meet</u> the demands of the <u>workforce</u> for data pertinent to this section.)



Division Statistics: Enrollment, Special Populations, Program and Follow-up

Capacity of the secondary and postsecondary systems to deliver vocational training is a key element in the ability of the system to deliver relevant training. It is estimated that the number of high school graduates in Idaho will increase 36% by 2000. (Western Interstate Commission for Higher Education) The number of secondary occupational programs has increased from 307 in FY1992 to 321 in FY1994. At the same time, however, funding for new secondary programs has remained relatively static. The percentage of "added costs" paid for with state vocational money dropped from 62% in 1982 to 33 percent in 1993. The number of Consumer Home Economics programs remained about the same with 143 programs in FY92 and 142 programs in FY94. Industrial Technology programs increased substantially over the two year period from 66 in FY92 to 85 in FY94. Almost all of this increase was due to Industrial Arts programs changing their curriculum to meet standards for Industrial Technology. In most cases the change involved only a portion of the classes - not the entire schedule.

At the postsecondary level, the fall enrollment for 1993 was 3,730 full and part-time students. That represented between 68 and 100 percent of capacity at the six institutions with an average of 85%. Since the average age of the students at the postsecondary institutions was 28.5, the number of slots for graduating seniors was even less. The number of programs at the postsecondary level increased from 124 in FY92 to 125 in FY94.

Number and types of programs

The state currently has 321 Secondary occupational programs of which 79 are agriculture, 15 are marketing, 4 are multi-occupations, 15 are health, 127 are business and office occupations, 13 are occupational home economics, 26 are auto mechanics, 3 are auto body, 8 are industrial mechanics, 2 are cabinetmaking/millwork, 7 are carpentry, 4 are drafting, 4 are electronics, 3 are graphic arts, 1 is photography, 1 is television production, 3 are machine shop and 6 are welding. In addition, the state has 142 secondary consumer home economics programs and 65 secondary industrial technology programs. Specific programs offered throughout the state are: Ag Science & Technology; Data Processing; Machine Shop; Marketing Education; Drafting; Health Occupations; Welding; Business & Office Education; Electronics; Equipment; Mechanics; Food Service; Child Dev/Care & Guidance; Graphic Arts; Auto Mechanics; Auto Body; Television Production; Multi-Occupations; Small Engine Repair; Ind Mechanics; Building Construction Trades; Ind Technology; Dental Assistant

The state currently has 125 Postsecondary occupational programs of which 6 are agriculture, 10 are business and office occupations, 8 are occupational home economics, 9 are marketing, 16 are health, 26 are technical and 50 are trade and industrial.

Courses Offered

All of the vocational program areas in the state have made major curriculum changes,



including the development of statewide course titles and descriptions. The titles and content have been updated to match current industry standards. A complete list of these courses is available from the Division of Vocational Education as well as each school district in the state.

Perkins Funding History

For the first three years of the Perkins funding, the split between secondary and postsecondary was 70% secondary and 30% postsecondary. This split resulted in substantially more federal money going to the postsecondary system which was matching by a increase in state money going to regular secondary vocational programs. The postsecondary system had a regular enrollment of 4964 (11%) in 1991 compared to a secondary enrollment of 40,365. In 1993, the share of the postsecondary enrollment dropped slightly to 10%. This was offset, however, by the fact that the postsecondary vocational funding was responsible for a much larger part of the vocational education program than the secondary vocational funding. It was also offset by the large number of short-term enrollments at postsecondary institutions and by the increased responsibility postsecondary institutions have assumed for secondary/postsecondary coordination.

An analysis of the Perkins spending history in the secondary and postsecondary systems indicates that in 1992 the secondary system spent 96.5% of its allocation while the postsecondary system spent 93.5%. In 1993 the secondary system dropped to spending 93.2% of its allocation while the postsecondary system increased to spending 95.1%. Over the two year period, the postsecondary system returned 5.6% of its funds while the secondary system returned 5.3% of its funds.

Program Enrollments

Enrollments in secondary vocational education have increased by over 27% the past five years. Enrollment in health programs has doubled over the last five years and agriculture, occupational home economics and business programs have all made gains greater than 20%.

Regular postsecondary vocational enrollment has decreased slightly over the past five years although postsecondary short-term enrollment has increased by over 35%.

The drop in Corrections enrollment from 989 to 195 reflects extensive changes in programming. The programs are shifting from high enrollment remediation programs to skill training programs with less capacity.

Specific enrollment data are presented in the next two tables.



IDAHO ENROLLMENTS SECONDARY VOCATIONAL-TECHNICAL EDUCATION

	1988	1989	1990	1991	1992	1993	2-Yr % Change
HIGH SCHOOL '	58,305	58,359	58,823	60,078	63,653	66,541	10.76
VOCATIONAL	33,751	34,929	36,976	40,365	42,198	43,169	6.95
AGRICULTURE	4,663	4,880	5,296	5,938	6,883	6,928	16.67
BUSINESS	10,557	9,331	10,737	11,481	12,378	13,550	18.02
HEALTH	145	213	186	207	244	290	40.10
CONSUMER HOMEMAKING	12,106	13,083	13,465	14,222	13,921	14,273	0.36
OCCUP'L HOME EC	275	303	351	291	552	439	50.86
MARKETING	1,038	878	1,359	1,085	1,217	1,273	17.33
INDUSTRIAL TECH ²	361	1,180	933	1,846	1,930	1,467	-20.53
TRADE/INDUSTRIAL	3,910	4,260	3,894	4,520	4,946	4,830	6.86
MULTI-OCC	266	193	102	118	127	119	0.85
SPECIAL NEEDS	430	608	653	657	t)ata not colle	cted ³
SPECIAL POPULATIONS	(8,442)	(9,963)	(11,272)	(10,227)	(11,015)	(11,793)	15.31
CORRECTIONS '		769	1,124	989	395	195	-80.28
TEEN PARENTING 4	· No	t Collected	412	478	451	588	23.01

- 1 Public School Grades 9-12. Numbers do not include ungraded secondary students.
- 2 Industrial Technology enrollment includes only those students in programs (grades 9-12) which received grants.
- 3 Due to changes in legislation, the Stand-Alone special needs enrollment is no longer collected.
- 4 Most of the Special Populations, Corrections and Teen Parenting students are mainstreamed into vocational programs. Therefore these figures are not included in the totals above.



POSTSECONDARY VOCATIONAL-TECHNICAL EDUCATION Fiscal Year Enrollment History

	1990	1991	1992	1993	2-Year % Change
Boise State University					
AAS/Certificate					
Student VFTE	778	676	746	708	4.73
Accrued Headcount	893	1,038	1,014 4	1,036	·0.1 9
Short-Term					
Student VFTE	195	266	288	243	-8.65
Accrued Headcount	7,005	7,548	7,896	7,592	0.58
College of Southern Idaho					
AAS/Certificate					
Student VFTE	517	534	567	583	9.18
Accrued Headcount	977	1,056	1,146	1,091	3.31
Short-Term					
Student VFTE	176	91	151	122	34.07
Accrued Headcount	4,257	3,515	5,125	4,286	21.93
Eastern Idaho Tech College					
AAS/Certificate					
Student VFTE	438	413	415	379	-8.23
Accrued Headcount	478	460	445	403	-12 39
Short-Term				!	
Student VFTE	121	143	191	152	6.29
Accrued Headcount	5,849	5,973	6,973	5,54 <i>1</i>	-7.13
Idaho State University					
AAS/Certificate					
Student VFTE	1,059	1,121	1,167	1,111	-0.89
Accrued Headcount	1,238	1,410	1,438	1,467	4.04
Short-Term					
Student VFTE	105	148	138	140	-5.41
Accrued Headcount	4,620	4,309	5,447	6,844	58.83

⁴ BSU Midmanagement enrollments for FY92 were reported with the academic enrollments.



	1990	1991	1992	1993	2-Year % Change
Lewis-Clark State College					
AAS/Certificate					
Student VFTE	439	447	420	428	-4.70
Accrued Headcount	582	600	542	543	-9.50
Short-Term					
Student VFTE	106	141	131	134	-4.96
Accrued Headcount	5,198	5,093	6,483	5,086	-0.14
North Idaho College					
AAS/Certificate				i	
Student VFTE	250	291	314	308	5.84
Accrued Headcount	266	400	418	412	3.00
Short-Term					
Student VFTE	163	113	140	105	∙7.08
Accrued Headcount	4,270	2,957	4,549	4,289	45.05
TOTAL					
AAS/Certificate					
Student VFTE	3,481	3,482	3,629	3,515	0.95
Accrued Headcount	4,434	4,964	5,003	4,952	-0.24
Short-Term					
Student VFTE	866	902	1,039	896	-0.67
Accrued Headcount	31,199	29,395	36,473	33,644	14.45



Curriculum Assessment

Idaho works very closely with the State Council on Vocational Education (SCOVE) and takes an active role in coordination of activities with the State Council. The annual report prepared by the SCOVE is prepared from information gathered at a public meeting. Suggestions in that report are used by the Division to modify any program activity and direction. In addition, the state continues to promote the use of local advisory committees by all programs reimbursed through the Division and continually updates advisory committee handbooks to establish policy and procedural levels for operation of local advisory committees. Membership on the Technical Committees is comprised of incumbent workers for industry selected for their knowledge of industry practices.

Idaho uses the process of technical committee validation of task lists for each program area. This validation of tasks ensures that the content of vocational programs is relevant to the current and future needs of industry in the state and region.

Technical Committee Data

Second year health occupation programs provided at least 50% workbased training and in some programs at least 80% workbased training. Health Occupations curricula were constantly being developed to meet training needs. In the last two years, twelve (12) separate programs were either revised, updated, or created, and new ways of program delivery were put into place to meet the needs of students and recipients of the services provided by program graduates. Six of the new programs provided specialized training in services to people with disabilities.

Idaho Vocational-Technical Education Foundation Report

As a result of cash contributions received in 1991-92 the Foundation was able to provide nine postsecondary instructors with an opportunity to upgrade their teaching skills by attending various workshops and return-to-industry experiences provided outside their teaching assignments.

in 1992-93, cash contributions received from business and industry allowed six instructors to return to industry to upgrade their technical skills so that they could better inform and train their students in the latest skills needed for success in workplace.

Postsecondary Vocational-Technical School and Beyond

Sixty percent of the respondents indicated that their current job (four years after graduation) was quite to very related to the job they had planned for while in their postsecondary program. Seventy-three percent of the students were working full-time or were self employed four years after program completion. Only 5.5% reported that they were looking for work. The average salary of full-time employed students two years after completion of a certificate or AAS degree was \$21,122. Students who completed the certificate or AAS degree found their salaries increased \$5,404 over a 2-year period.



Employers were satisfied on the following measures regarding this population: attendance, dependability, use of tools and equipment, cooperativeness, safety, initiative, quality of work, quantity of work, selection and care of space, materials, and supplies, accepting advice and supervision, appearance, job know-how, and adaptability to new situations. Over 59% of the employers indicated that the postsecondary vocational-technical employee had better technical knowledge and abilities in comparison to their other employees who may not have participated in a postsecondary vocational-technical education program. Another thirty percent of employers indicated the vocational-technical employee was equally well prepared in relation to other employees. Almost 60% of the employers who hired 1987-88 students indicated the postsecondary vocational-technical institutions of Idaho were an important source of employees, and only 14% reported these institutions were not normally a source of Almost 72% of the employers rated postsecondary vocational-technical institutions of Idaho as good to excellent on their preparation of potential employees in terms of technical knowledge and abilities. The characteristic employers rated the students lowest on was their adaptability to new situations. Even then, however, the rating was between good and excellent.

Current Idaho supply and demand data grouped by cluster

The supply and demand data suggested a mismatch between available occupations and the number of people being trained for those occupations. Clusters of occupations where demand was far higher than supply included general marketing and distribution, food production and service, building maintenance and cleaning, truck and bus driving, horticulture and landscape, child care, guidance and instruction, other agriculture-related occupations, typing and general office clerical, miscellaneous clerical and administrative support and accounting and bookkeeping. Clusters where supply was far greater than demand included automotive repair, barbering/cosmetology, real-estate services marketing, agribusiness and agricultural production, secretarial-stenographic, nursing assisting, and insurance marketing. In many cases the mismatch was caused simply by an imprecision in the data collection procedure. High school Business and Office programs, for example, often prepare students in bookkeeping and in miscellaneous and clerical support - areas with strong demand - but the supply data were lumped into the secretarial - stenographic cluster. The secondary programs often prepared for a broader scope of occupations than could be easily summarized with supply and demand data. These data provided a good starting point, however, when starting and revising programs to make sure that new programs and content of existing programs were focused on the right occupations.

The following table represents a Cluster Analysis Summary of the Idaho Occupational Information System. This system related occupational projections to the state's training programs. Within each cluster were employment estimates from the Occupational Employment Statistics (OES) program and a count of completers of the related vocational-technical training programs. The Idaho Department of Employment surveyed Idaho employers to determine current employment levels by occupation and made projections on future occupational demand. The supply data represented the number of persons completing less than four year programs at Idaho secondary vocational-technical programs, post-secondary vocational-technical schools, colleges and universities, private trade



schools, and the Job Corps. The Cluster Analysis Summary table was sorted in descending order by the difference between the total annual openings and the total number of program completers. The clusters showed the overall balance between the occupations and the completers of related training programs; however, there may have been wide variations within each cluster, with one or more occupations or programs dominating the overall statistics. It is, therefore, best to examine each cluster individually when making decisions on the viability of specific vocational-technical programs. The elements in the table are:

<u>EMPL 1991</u> - The number of workers currently in an occupation. This number was actually a projection from the base year of 1987 in the OES survey.

EMPL 1996 - The projected number of workers expected in the year 1996.

<u>PERCENT CHANGE</u> - The percent growth or decline in employment between 1991 and 1996. <u>AVERAGE ANNUAL GROWTH</u> - The yearly increase or decrease in the number of workers in an occupation due to economic expansion (or decline) in the industries employing those workers.

<u>AVERAGE ANNUAL REPLACEMENTS</u> - The yearly number of openings generated by the need to replace workers who leave due to death, retirement, or who withdraw from an occupation for other reasons.

<u>TOTAL ANNUAL OPENINGS</u> - The sum of average annual growth and average annual replacements.

<u>POST-SECONDARY COMPLETERS</u> - The number of persons who completed less than four year training at Idaho post-secondary vocational-technical schools, colleges and universities, private trade schools, and Job Corps during the period of 7-90 to 6-91.

<u>SECONDARY COMPLETERS</u> - The number of persons who completed secondary vocational-technical programs at Idaho secondary schools during the period 7-89 to 6-90.

TOTAL COMPLETERS - The sum of post-secondary and secondary completers.

<u>TOTAL OPEN MINUS TOTAL COMPLETERS</u> - Total annual openings minus the total number of completers.

Note: It is also important to note that the match between the supply (completers from vocational training programs) and demand was not very accurate in some areas, particularly for the secondary numbers. The secondary job training prepared students for more of the cluster areas than are represented on the table. Secondary completer data in Idaho are not collected on a job or cluster level. For example, the agriculture programs prepared students in the clusters of agricultural mechanics, animal technology and other ag related occupations, but the supply data was all listed under agribusiness/agricultural production.



CURRENT IDAHO VOCATIONAL-TECHNICAL DEMAND AND SUPPLY DATA

The following tables show Idaho's current demand and supply data for the vo-tech occupations listed in the previous tables as being either 'fastest growing' or those with the 'largest job growth.'

IDAHO DEMAND & SUPPLY SUMMARY

					ANN	JAL [••
CLUSTER NUMBER	CLUSTER TITLE	EMPLOY MENT 1991	EMPLOY MENT 1996	PERCENT CHANGE	GROWTH	REPLACE MENTS	TOTAL ANNUAL OPENINGS	POST SECOND- ARY COM- PLETERS 1-90 TO 6-91	SECOND- ARY COM- PLETERS 7-89 TO 6-90	TOTAL COM- PLETERS	TOTAL OPEN MINUS TOTAL COM- PLETERS
0810	GENERAL MARKETING AND	37702	40722	8.0	604	1287	1891	77	227	304	1587
2030	FOOD PRODUCTION AND SERVICE	24212	26294	8.6	416	613	1029	34	46	80	949
3083	BUILDING MAINTENANCE & CLEANING	9892	10762	8.8	174	600	774	٥	0	0	774
6010	TRUCK & BUS DRIVING	13229	14469	9.4	248	404	652	110	0	110	542
0150	HORTICULTURE & LANDSCAPE	4547	5192	14.2	129	360	489	17	0	17	472
2010	CHILD CARE, GUIDANCE, & INSTRUCTION	9034	9879	9.4	169	325	494	15	45	60	434
0190	ALL OTHER AG. & AG. RELATED	11762	11477	-2.4	-57	453	396	0	0	0	396
0750	TYPING AND GENERAL OFFICE CLERICAL	25126	26456	5.3	266	673	939	122	588	710	229
0760	MISC. CLERICAL AND ADMIN. SUPPORT	5034	5359	6.5	65	162	227	0	0	0	227
0710	ACCOUNTING & BOOKKEEPING	10121	9976	-1.4	-29	351	322	100	0	100	222
0825	BUSINESS MANAGEMENT	4365	4735	8.5	74	129	203	3	0	3	 _
0799	ALL OTHER MANAGERIAL & ADMINISTRATIVE	3499	3754	7.3	51	147	198	0	0	0	
3080	INDUSTRIAL MACHINERY MAINTENANCE	5946	6439	8.3	99	147	246	19	48	67	179
0140	FOREST PRODUCTION	4262	4651	9.1	77	99	176	i	0		
2080	FOOD PROCESSING	5081	5158	1.5	18	154	169		0		
6020	CONSTRUCTION EQUIPMENT OPERATION	2684	2934	9.3	50	96	149	3	0		<u> </u>
3190	OTHER CONSTRUCTION TRADES	3594	3790	5.5	41	10	6 14	6	21	25	<u> </u>
1799	ALL OTHER DIAGNOSTIC AND TREATMENT	152	2 174	14.8	4	5 5	9 10	4	0	(
3015	AUTO PARTS DISTRIBUTION	294	7 307:	2 4.2	2	5 7	8 10	+	1 0	 	10
8045	MEATCUTTING	265	2 278	7 5.1	2		9 9	`		} -	
0720	BANKING AND RELATED FINANCIAL SERVICES	374	386	3.1	2	3 7	2 9	<u> </u>	0 0		9
3120	CARPENTRY	251	7 274	3 9.0	4	5 6	5 11		`	1!	+
8080	WOODWORKING	222	7 234	7 5.4	2		6 10				9
3180	PIPEFITTING & STEAMFITTING	G 199	5 218	5 9.5	3	8 5	1 8	9	0 0	<u> </u>	0 8



					4400						
<u> </u>		EMPLOY	EMPLOY		ANN	UAL	TOTAL	POST SECOND- ARY COM- PLETERS	SECOND- ARY COM- PLETERS 7-89 TO	TOTAL	TOTAL OPEN MINUS TOTAL
CLUSTER NUMBER	CLUSTER TITLE	MENT 1991	MENT 1996	PERCENT CHANGE	GROWTH	REPLACE MENTS	ANNUAL OPENINGS	1-90 TO 6-91	6-90	COM- PLETERS	COM- PLETERS
3125	PAINTING & DECORATING	1621	1791	10.5	34	53	87	3	0	3	84
0850	RECREATION SERVICES MARKETING	1198	1295	8.1	19	41	60	0	0	. 0	60
3110	ELECTRICIAN	1911	2091	9.4	36	37	73	13	0	13	60
7050	MUSIC INSTRUCTION	761	866	13.8	21	38	59	5	0	5	54
6099	MISC. TRANSPORT. & VEHICLE OPER.	3770	3970	5.3	40	113	153	0	0	0	53
8020	COMMERCIAL ART	1077	1184	9.9	21	38	59	6	0	6	53
2065	DRYCLEANING AND LAUNDRY	937	972	3.7	7	40	47	0	0	0	47
3090	MISCELLANEOUS REPAIR	1350	1430	5.9	16	31	47	0.	0	0	47
1720	LICENSED PRACTICAL NURSING	2552	2802	9.8	50	109	159	115	0	115	44
5030	MISC. PROTECTIVE SERVICES	492	537	9.2	9	35	44	0	0	0	4.4
8035	WRITING, BROADCASTING, & PUB. REL.	1124	1209	7.6	17	33	50	0:	6	6	4
6030	MINING & HEAVY EQUIP OPERATION	764	870	13.9	21	21	42	0	0	0	4.
0780	LIBRARY ASSISTING	748	828	10.7	16	22	38	0	0	0	3
0130	CONSERVATION	2171	2221	2.2	10	37	37	0	01	0	3
0860	TRAVEL SERVICES MARKETING	734	864	17.7	26	27	53	16	0	16	3
8025	COMMERCIAL PHOTOGRAPHY	664	714	7.5	10	27	37	0	0	0	3
5040	SECURITY SERVICES	1015	1115	9.9	20	65	85	50	0	50	3
8070	MACHINE TOOL/MACHINE SHOP	1334	1444	8.3	22	58	80	26	21	47	3
4030	CHEMICAL MANUFACTURING PRODUCTION	999	1045	4.6	9	26	35	3	0	3	31
6080	MATERIAL HANDLING	2800	2667	-4.8	-27	46	31	0	0	0	3
1795	MEDICAL RECORDS TECHNOLOGY	281	341	30.7	16	13	29	0	0	0	2
8075	OTHER PRECISION METAL	724	784	8.3	12	17	29	0	0	0	2'
0820	HOTEL - MOTEL MANAGEMENT	1112	1157	4.1	9	31	40	9	7	16	2
8040	UPHOLSTERING	425	450	5.9	5	12	17	4	0	4	2
0120	AGRICULTURAL MECHANICS	960	955	-0.5	-1	34	33	13	0	13	2
1796	ANIMAL TECHNOLOGY	527.	557	5.7	6	18	24	4	0	4	2
2070	PRIVATE HOUSEHOLDS	322	342	6.2	4	15	19	0	0	3	:
4070	INSPECTORS AND RELATED	377	420	11.4	9	12	21	4	0	4	
4099	POWER GENERATION	412	434	5.3	4	13	17	0	0	0	
0770	LEGAL ASSISTING	497	552	11.1	11	6	17	1	0	1	1
3140	CONCRETE PLACING & FINISHING	548	593	8.2	9	10	19	4	0	4	1!
3050	SMALL ENGINE REPAIR	570	595	4.4	5	39	44	23	7	30	1
3150	ROOFING	587	632	7.7	9	5	14	0	0	0	ī

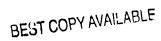


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CLUSTER NUMBER	CLUSTER TITLE	EMPLOY MENT 1991	EMPLOY MENT 1996	PERCENT CHANGE	GROWTH	PEPLACE MENTS	TOTAL ANNUAL OPENINGS	POST SECOND- ARY COM- PLETERS 1-90 TO 6-91	SECOND- ARY COM- PLETERS 7-89 TO 6-90	TOTAL COM- PLETERS	TOTAL OPEN MINUS TOTAL COM- PLETERS
5010	FIRE PROTECTION SERVICES	743	783	5.4	8	6	14	0	0	0	14
3070	MAJOR APPLIANCE REPAIR	578	608	5.2	6	13	19	6	0	8	13
8030	GRAPHIC & PRINTING COMMUNICATIONS	1431	1541	7.7	22	22	44	15	16	31	13
1760	MEDICAL LABORATORY TECHNOLOGY	209	234	12.0	5	7	. 12	0	0	0	12
3130	BRICK, STONE MASONRY & TILE SETTING	521	561	7.7	8	9	17	6	0	6	11
5020	LAW ENFORCEMENT SERVICES	2445	2590	5.9	29	63	92	84	0	84	8
1712	DENTAL LABORATORY TECHNOLOGY	190	215	13.2	5	8	13	8	0	6	7
3170	LINEWORKER	540	570	5.6	6	<u> </u>	22	16	0	16	6
3065	HEATING, AIR. COND. & REFRIGERATION	735	800	8.8	13	26		34	0	34	5
4040	ELECTRONIC TELECOMMUNICATION TECHNO	1272	1329	4.5	11	14	25	20	0	20	5
1725	EMERGENCY MEDICAL TECHNOLOGY	280	310	10.7	6	5	11	7	0	7	4
4020	WATER AND WASTEWATER TECHNOLOGY	277	292	5.4	3	11	14	10	0	10	4
8050	FLOOR COVERING & INSTALLATION	101	106	5.0	1	3	4	0	0	0	4
4090	CIVIL TECHNOLOGY	509	539	5.9	6	6	12	9	0	9	<u> </u>
2060	CLOTHING AND APPAREL PRODUCTION SER	823	883	7.3	12	90	102	18	86		
1745	REHABILITATION SERVICES	177	212	19.8	<u> </u>	1 .	14		↓		ļ
1730	PHARMACY ASSISTING	142	157	10.6	- 3	3 5	5 8	↓			
3060	MARINE MAINTENANCE	0	0	0	() (↓			↓
4050	INDUSTRIALIMECHANICAL TECHNOLOGY	372	422	13.4	10		11	17	<u> </u>		
1735	OPTOMETRIC ASSISTING	304	294	3.3	-	2 !	— —	10		10	↓
3040	DIESEL AND HEAVY EQUIPMENT MECHANIC	2436	2646	8.6	4:	2 5:	2 94				
3075	ELECTRONICS SERVICE TECHNOLOGY	1228	1360	10.8	21						<u> </u>
4015	LASER ELECTRO-OPTIC TECHNOLOGY			0		0	0				8
1750	SURGICAL TECHNOLOGY	7	: 86	21.1				4 1		1:	
7040	COSMETOLOGY INSTRUCTOR TRAINING		J (0		0	0				9
2040	INTERIOR DESIGN	7	2 7	7 6.9		→		3 1	-	0 1	+
1775	RADIOLOGIC TECHNOLOGY	47	6 53	12.6	1	2	3 1	5 2	6	0 2	6 .1
					86 S ()					



					ANNL	JAL					••
CLUSTER NUMBER	CLUSTER TITLE	EMPLOY MENT 1991	EMPLOY MENT 1996	PERCENT CHANGE	GROWTK	REPLACE MENTS	TOTAL Annual Openings	POST SECOND- ARY COM- PLETERS 1-90 TO 6-91	SECOND- ARY COM- PLETERS 7-89 TO 6-90	TOTAL COM- PLETERS	TOTAL OPEN MINUS TOTAL COM- PLETERS
1740	RESPIRATORY THERAPY TECHNOLOGY	169	199	17.8	6	1	7	19	0	19	-12
0815	FLORISTRY	111	119	7.2	2			ĻI		19	
1790	MEDICAL ASSISTING	371	431	16.2	12	13	25	40			
3010	AIRCRAFT MECHANICS	324	354	9.3	8	2	8	32	0	32	
4080	NUCLEAR TECHNOLOGY	272	307	12.9	7	7	- 14	41	0	41	
1711	DENTAL ASSISTING	829	954	15.1	25	5	30	56		1	——————————————————————————————————————
1770	HEALTH AND HUMAN SERVICES	527	575	9.1	10	13	23				.45
8060	WELDING	1755	1920	9.4	33	39	72	75	44		
4010	ELECTRICAL & ELECTRONIC TECHNOLOGY	2917	3086	5.8	34	46	86				
3020	AUTOMOTIVE BODY REPAIR	1089	1164	6.9	15	16	31	50			
8010	DRAFTING, GENERAL	949	1054	11.1	21	16	37	104	27	7 131	.94
0730	BUSINESS DATA PROCESSING	2685	2820	5.0	27	16	54	154	9	163	1
3030	AUTOMOTIVE REPAIR	4739	4889	3.2	30	119	149	91	190	281	1
7010	BARBERING/COSMETOLOGY	4639	4879	5.2	48	139	187	407	<u> </u>		
0840	REAL ESTATE SERVICES MARKETING	2397	2677	11.7	56	118	174	665	0	665	
0110	AGRIBUSINESS AND AGRICULTURAL PRODUCTION	3406	3654	7.3	50	137	187	140	668	808	
0740	SECRETARIAL · STENOGRAPHIC	10938	11808	8.0	174	229	9 404	523	846	1	ļ
1721	NURSING ASSISTING	4373	4712	7.8	73	3 160	0 233	3 1603	<u> </u>	0 1603	
0830	INSURANCE MARKETING	2613	3 2928	12.1	63	3 124	4 187	7 2400	<u>.</u>	0 2400	
	TOTAL	254074	314197	7 8.2	4028	9298	8 13348	7892	2 3026	6 10918	8 2428

^{**}Negative (-) numbers indicate a trained labor supply greater than the projected demand for openings; Positive (+) numbers indicate that the number of projected openings is greater than trained individuals to fill those jobs. However, these data should not be interpreted to mean that training completers are necessarily awaiting employment in the occupational cluster in which they were trained.



1. Ability of vocational curriculum, equipment and instructional materials to meet the demands of the workforce

Measures and Standards - Secondary

The physical capacity of vocational programs in the state is a key measure of the ability of the system to meet the demands of the workforce. One measure was directed at determining that capacity in each school district. Districts had to have one full-time vocational teacher for every 300 students to meet the standard. The percentage of districts meeting this standard was 85.2. Overall the ratio of students to full-time vocational teacher was 221 to 1. It is significant to note that the districts that do not meet the standard are the largest in Idaho, representing approximately 32.8% of the students.

Perkins On-Site Reviews

There was a need in some districts to expand the capacity of vocational offerings.

Evaluations and Technical Visits

The greatest administrative needs were related to budgeting and planning of vocational programs. In about one-tenth of the programs the teacher was not involved in budget decisions, and up to one-half of the teacher in the programs assessed were not involved sufficiently in the schools' vocational planning.

Three facility and equipment needs had an important effect on student achievement. First, a majority of the programs assessed in five-year and ten-year evaluations showed the school must address the fact that facilities and equipment in the classroom and laboratories were not adequately clean and safe for student use. A second need grew from the fact that equipment was not systematically updated, maintained, and inventoried in over half of the programs evaluated. Program weakness accredited to outdated or unavailable equipment and old or unimproved facilities may indicate low vocational skill attainment. Third, about one third of the evaluation recommendation indicated a lack of adequate storage space. This lack would curtail effective use of existing equipment as well as program expansion and updating needs. The field visitation reports of state supervisors collaborated the evaluation recommendations with one exception. The visitation reports also indicated a need in up to 20% of the programs for appropriate personal protective equipment for students.

Of all recommendations made and categorized on five & ten-year evaluations and field visitation reports, 33% dealt with curriculum, 23% dealt with equipment/facilities, and 9% dealt with instructional materials. Many programs received commendations which indicated a wide range of adaption and change going on in the state. The most common curriculum recommendations were:



- 1. to improve leadership development or implement it into the vocational program.
- 2. to provide more business and industry input into curricula decisions.
- 3. to offer a sequence of courses including integration of academic and vocational skills.

The most common equipment/facility recommendations were:

- 1. to update and maintain equipment.
- 2. to provide more storage space.
- 3. to provide cleaner and safer classrooms/laboratories.
- 4. to provide additional tools, laboratory supplied, facilities, or equipment to support curriculum.

The most common instructional recommendations were:

- 1. to use a range of instructional, audio/visual, and reference materials.
- 2. to provide realistic work experience through laboratory and/or industry-related activity.
- 3. to provide appropriate safety instruction.
- 4. to encourage instructors to participate in professional development planning and activities.

A random selection of visitations and five and ten-year evaluations indicated that the most common commendations for curriculum, equipment/facility, and instruction were:

- 1. active student youth organizations in curriculum.
- 2. active advisory committees involved in curriculum.
- 3. use of current state-approved competency-based curriculum.
- 4. a wide range of instructional strategies being used.
- 5. laboratory facilities and equipment support curriculum.

Idaho Vocational-Technical Education Foundation Report

During the fiscal year of 1992 the Idaho Vocational-Technical Education Foundation received over \$110,536 in equipment donations from over 11 different companies. This equipment and furniture was placed statewide at secondary and postsecondary vocational-technical education programs.

In fiscal year 1993, the Idaho Vocational-Technical Education Foundation was instrumental in providing over \$78,900 in equipment and furniture donations from 9 companies statewide. Vocational-Technical Education programs at the secondary and postsecondary levels were recipients of these generous donations in support of their programs.

Postsecondary Vocational-Technical School and Beyond

When participants were asked if they were satisfied with their institution and program,



90% were satisfied to very satisfied with their choice of institution and 85% were satisfied to very satisfied with their choice of program.

Idaho State Council on Vocational Education Public Meeting

The law enforcement program was cited for its excellence in preparing law enforcement employees. The diesel program was also cited for its excellence and relevance.

Several others testified about the benefits of the child development program and the need for additional child care training.

Other people pointed out that the technology and training for computers was simply not up-to-date in the high schools. They pointed out the need for better equipment and better teacher training.

Curriculum assessment

The primary method for addressing basic and higher order competencies in the Idaho delivery system is through the validation of competencies by technical committees. An additional activity, as an attempt to introduce higher order competencies into the programs in the state of Idaho, is the participation in national consortiums to develop basic applied instruction skills such as in the mathematics, communication, chemistry and biology and technology series. A need exists to continue to define more explicit higher learning skills to be provided through vocational education programs. A study or series of projects devoted to analyzing the on-the-job skills in the area of higher level competencies or higher order thinking, would be one activity that could strengthen this area.

Competency testing was the responsibility of each individual school district. V-TECS materials were purchased to be used to help establish a standard for the state to assist in the development of statewide measures. The Test Item Banks were designed to be used in any existing test generation software, therefore, all school that used these type of programs could adapt the V-TECS material immediately.

V-TECS had developed a computerized management system for the curriculum guides called V-TECS Direct. This software had been used with Technical Committees in Idaho with great success but on a limited basis. It was to be the primary tool to be used in the curriculum development process and was to serve as the basis for task lists when working with Technical Committees.

Idaho dealt with the demands of the workforce by providing upgrade training to incumbent workers and also through short term training programs for unemployed personnel or people who had been laid off from the immediate occupational field for which they were trained. At the secondary level, instructional programs were equipped in a moderate fashion through a reimbursement formula. The majority of school districts operating vocational programs spent approximately one-third of their funds for equipment purchase and upgrade to attempt to meet the technology needs of occupational programs. Both secondary and



postsecondary vocational programs utilized a statewide curriculum guide as the basis for determining content to be taught. The statewide guides were updated periodically through the use of technical committees.

Biennial Carl D. Perkins Job Training Partnership Act Evaluation Report

State appropriations fully support the system of postsecondary institutions and provide supplemental resources for the vocational programs in secondary schools and for additional training and retraining programs for adults. This basic vocational-technical infrastructure extends use of federal support funding by providing qualified administration and faculty capable to respond rapidly to industry expansion as well as to economic hardship periods brought about by plant closure and worker layoff. Using this critical investment as a base, federal funds available through the Carl D. Perkins Act, Job Training Partnership Act, and other sources are maximized to provide a broad array of vocational training opportunities for special populations that would otherwise not be served.

The climate for providing quality vocational training for adults in need of training or retraining has been positive. Postsecondary school administrators have supported the establishment and operation of programs for adults by doing the following:

- Establishing a variety of short-term classes and offering those classes at convenient times and locations.
- Offering related instruction for apprentices by virtue of equipment donated by companies
- Providing self-employment and small business management to individuals who would otherwise be without training.

There was also awareness of the need for training adults by postsecondary coordinators. This awareness brought about interest in strategies and programs to meet the training needs of this population. Also there were efforts to use other agencies and organizations to identify and/or develop funds to expand facilities and furnish equipment for adult training programs.



Appendix A

Research Studies, Data Sources and Descriptions for 1993 Assessment

(Note: The source of the report or data is listed after each description. Availability of the actual report may be limited. Reports are listed in alphabetical order.)

Biennial Carl D. Perkins Job Training Partnership Act Evaluation Report (July 1, 1990 - June 30, 1992)

This report was done by the State Council on Vocational Education and evaluated the effectiveness of the Carl Perkins legislation and the JTPA legislation. The level of cooperation between the two funding sources was also analyzed. Data were obtained from the administering agencies and providers through reports, interviews, group conferences, and pertinent records. (Idaho State Council on Vocational Education, 106 North Sixth Street, Suite #205, Boise, Idaho 83702)

Business, Labor and Industry Data (Fall, 1993)

Data were collected directly from business, industry and labor. Some of the data were responses to structured interviews; much of the data were taken directly from studies conducted by the businesses themselves. The interviews were designed to update and verify information on needs of business and industry collected during the first assessment and to identify additional data having a bearing on workplace needs. Businesses, industry representatives and labor groups contacted in addition to those included in the Business roundtable discussions include: Boise Cascade, Publishing and Packaging Paper Division; National Electric Service Dealers Association; Micron Technology; Simplot; Seal Company (Construction); Red Lion Inns (Human Resource Officer); Hewlett Packard; Telco Electronics; FMC Corporation; Weight Watchers (Ore Ida); Pillsbury; Idaho Association of Commerce and Industry; Dept. of Commerce; Idaho Restaurant and Bar Association; Idaho PeterBilt; Cal's Service Parts; health care industry representatives; administrators of home services to Hispanic and Native American populations. (Director of Short-Term Training, State Division of Vocational Education, 650 W. State, Boise, Idaho 83720-3650)

Boise Business Barometer: 1993 Summary and 1994 Outlook

This publication of the Boise Area Chamber of Commerce quoted widely from presentations given by economic experts at the Economic Outlook Forum, 1993. Data were also taken from the Department of Employment, Intermountain Gas, Idaho Power, Boise Water Corp., US West, Idaho Department of Transportation, State Tax Commission, Idaho Registration Services, The Idaho Statesman, Boise Convention and Visitors Bureau, First Security Bank -Idaho Construction Report, and the Ada County Association of Realtors. (Director of Research, State Division of Vocational Education, 650 W. State, Boise, Idaho 83720-3650)



Census, Employment and Other Statistical Data

Data were taken from the 1990 census, Department of Employment statistics and projections made by organizations and businesses involved in collecting and analyzing data. (SOICC, State Division of Vocational Education, 650 W. State, Boise, Idaho 83720-3650)

Certification Data (October, 1993)

Data were taken from the applications for counselor and teacher certification. (Certification Coordinator, State Division of Vocational Education, 650 W. State, Boise, Idaho 83720-3650)

Civil Rights Compliance Annual Report (1992)

The 1992 audit of subrecipients for compliance with the Civil Rights Guidelines was conducted according to procedures identified in the Idaho State Division of Vocational Education Methods of Administration of the Office of Civil Rights Guidelines. Twenty-four subrecipients were included in the desk-level audit conducted during January, 1992. Six secondary school districts and one postsecondary vocational-technical school were selected for on-site review based on findings in the desk-level review. (OCR Coordinator, State Division of Vocational Education, 650 W. State, Boise, Idaho 83720-3650)

Comprehensive Guidance Model Assessment (July, 1993)

The State of Idaho has developed model guides (K-12 and adult) for comprehensive guidance and counseling programs patterned after the NOICC National Career Development Guidelines. Implementation projects across the state included a needs assessment component. Twenty-four Idaho school districts participated in the Idaho Comprehensive Guidance Project during FY92-FY93. This project was designed and initiated in 1989. At the present time, a total of forty-eight school districts (43% of all Idaho districts) have been involved in the project. This year's twenty-four school districts were asked to conduct an assessment of their students' needs in the area of guidance and counseling. Specifically, each school district identified their desirable program for guidance and counseling and compared it to their current program. Using this information, school districts identified their top three priorities for guidance program development. Each school district produced their own instructional units and implementation plans to address these priorities.

School districts utilized the following methodology to assess needs and identify priorities:

<u>District-wide Guidance Advisory Committees</u>: Each of the twenty-four school districts initiated working advisory committees with membership consisting of business and industry representatives, parents, school personnel, and other community members.

<u>Surveys</u>: Written survey instruments were developed and distributed to students, business and industry, teachers, school administrators, parents and community.

Time and Task Analysis: Logs were maintained for a period of one school



year by guidance and counseling personnel.

<u>Self-Studies</u>: School district personnel "in positions to know" described current practices and existing needs. Data were collected from students, parents, teachers, and businesses. (Guidance Supervisor, State Division of Vocational Education, 650 W. State, Boise, Idaho 83720-3650)

Curriculum Assessment

These data were obtained through an analysis and description of the curriculum development process used by the State Division of Vocational Education. (Program Services supervisor, State Division of Vocational Education, 650 W. State St., Boise, ID 83720-3650)

Determinants of Idaho Hispanic Female Participation in Adult Education Programs (April, 1992)

The purpose of this study was to identify the determinants of Idaho Hispanic female participation in adult education programs. A descriptive, correlational research design provided the framework. A purposeful sample totally 63 Hispanic female adults in Idaho was drawn, including 32 who were participating in an adult education program and 31 who were not. A researcher-designed questionnaire covering barriers to participation, attitude toward women, degree of acculturation, and socioeconomic and demographic characteristics was administered in either English or Spanish using small group interviews. (Equity Coordinator, State Division of Vocational Education, 650 W. State, Boise, Idaho 83720-3650)

Division Statistics: Enrollment, Special Populations, Program and Follow-up (Fall, 1993)

These data included enrollment statistics, one-year follow-up data, numbers of disadvantaged, students with disabilities, and minorities, and gender percentages. Data on the number and type of programs are also included. (Director of Research, State Division of Vocational Education, 650 W. State, Boise, Idaho 83720-3650)

Evaluations and Technical Visits

Program information gathered during technical support visits and regular program evaluations. The program evaluations were done on a five-year basis and involved local advisory committee members as well as representatives from the State Division. The technical visits were conducted by State Division program specialists. (Professional Development, State Division of Vocational Education, 650 W. State, Boise, Idaho 83720-3650)

Goals and Recommendations for Improving American Indian Education (February, 1993)

This report was a product of the <u>Idaho Committee on Indian Education</u> created by the Indian Tribes in the State of Idaho. The findings presented in this assessment take the form of the recommendations presented in the report. The recommendations were produced and published as a cooperative effort of The Alliance of Idaho Tribes, The State Board of Education, The State Department of Education and the State Division of Vocational Education. (Special Populations Coordinator, State Division of Vocational Education, 650 W. State, Boise, Idaho



83720-36501

Hispanic Youth: Dropout Prevention (July, 1990 - confirmed, Fall, 1993)

This was the report of the <u>Task Force on the Participation of Hispanic Students in Vocational Education Programs</u>. Data were collected through a series of community meetings held throughout the state. Although these data were used in the last assessment, the Committee of Practitioners and others confirmed that the data were still relevant to this assessment. (Associate Administrator, State Division of Vocational Education, 650 W. State, Boise, Idaho 83720-3650)

Healthcare Needs Assessment (February, 1993)

The needs assessment was conducted between July 1992 and February 1993 by the Institute of Rural Health Studies, College of Health Related Professions at Idaho State University. The objectives of the project were to assess the current and future need for vocational-technical health care providers in Idaho. Job vacancy rates were estimated for 31 vocational-technical health care provider positions. The scope of the needs assessment was statewide with 143 key informants being interviewed (95% response rate). Key informants were administrators and/or providers at health facilities and agencies statewide. (Health Supervisor, Division of Vocational Education, 650 W. State, Boise, Idaho 83720-3650)

Idaho CPT Assessment

Two studies were conducted simultaneously during the 1992-93 school year to help the State of Idaho ascertain information regarding the Computerized Placement Test. The CPT's is an assessment program based on computer adaptive testing techniques. (Director of Research, State Division of Vocational Education, 650 W. State, Boise, Idaho 83720-3650)

Idaho School Profiles (Fall, 1993)

These school profiles are published by the State Department of Education based on data submitted to the Department. They detail dropout rates by grade level, enrollments, test scores, personnel statistics and financial information. (Director of Research, State Division of Vocational Education, 650 W. State, Boise, Idaho 83720-3650)

Idaho State Council on Vocational Education Public Meeting (April, 1993)

The purpose of the public meeting held in April of 1993 was to provide an opportunity for representatives from business and labor in the Twin Falls area to comment on the extent to which the vocational education delivery system in Idaho was meeting their needs. (Executive Director, State Council on Vocational Education, 650 W. State, Boise, Idaho 83720-3650)

Idaho Vocational-Technical Education Foundation Report (Fall, 1993)

The Foundation was established in 1983 as a non-profit corporation for the purpose of stimulating and promoting the best interests of vocational-technical education in Idaho. The Foundation receives and disseminates instructional equipment and



furniture donations from industries to secondary and postsecondary schools, seeks out resources to help provide technical upgrading opportunities for instructors, and generally promotes the support of business and industry for vocational-technical education. (Director of Short-term Training, State Division of Vocational Education, 650 W. State, Boise, Idaho 83720-3650)

Indicators of High School Dropouts in North Idaho (December, 1991)

This study of students of a North Idaho alternative school was completed in 1991. It used a survey of the students combined with analysis of student demographic characteristics to determine the most significant factors contributing to student dropouts. (Director of Research, State Division of Vocational Education, 650 W. State, Boise, Idaho 83720-3650)

Learning Outcome Priorities Survey Results (October, 1992)

This study was conducted in the Sugar-Salem school district during October of 1992. Data were collected from students, parents, teachers, college people, and employers. The data consisted of ratings of eight learner outcome priorities which were: risk takers; workers; consumers; well-rounded students; masters of core subjects; rule followers; communicators; and employees. (Director of Research, State Division of Vocational Education, 650 W. State, Boise, Idaho 83720-3650)

Measures and Standards - Secondary (Fall, 1993)

Measures and standards were implemented in the fall of 1992. At the time of this assessment, only one year's data were available. The measures were applied by the State Board for Vocational Education to all secondary vocational programs in the state. They focused on: 1) occupational skill attainment; 2) academic skill attainment; and 3) equity and access. Existing measures were used whenever possible. The academic measures were those adopted by the Department of Education. Several of those measures had to be applied to 11th grade students since that was the year in which the academic test was taken. For those measures, students who completed 3 or more semesters in a single vocational sequence were used to compute the data.

Sixty six percent of the 126 high schools in the state, representing approximately 73% of the students, sent measures data to the State Division. Of those, only 34.9% reported data on every measure. An additional 20.5 percent completed the necessary forms to allow the Division to calculate neasures from the Tests of Achievement and Proficiency and/or placement. Some measures were collected on 86.5 percent of the schools. (Director of Research, State Division of Vocational Education, 650 W. State, Boise, Idaho 83720-3650)

Measures and Standards - Postsecondary (Fall, 1993)

Measures and standards were implemented in the fall of 1992. At the time of this assessment, only one year's data were available. The measures were applied by the State Board for Vocational Education to all postsecondary vocational programs in the state. They focused on: 1) basic and advanced academic skills; 2)



occupational skill attainment/enhancement; 3) labor market indicators; and 4) accessibility and access. Measures were applied to AAS/Certificate programs as well as short-term programs. Short-term measures, however, only focused on completion rates.

All of the postsecondary institutions submitted data for measures and standards. Two institutions submitted data for 100% of the measures, one institution submitted data for all but one of the measures and two institutions submitted data for all but two of the measures. (Director of Research, State Division of Vocational Education, 650 W. State, Boise, Idaho 83720-3650)

Perkins On-Site Reviews (Fall, 1993)

Teams from the State Division conducted on-site reviews of Perkins funded projects. Twenty percent of the schools were involved. (Coordinator of Federal Programs, State Division of Vocational Education, 650 W. State, Boise ID 83720-3650.)

Postsecondary Vocational-Technical School and Beyond (November, 1992)

This study was a profile of education and beyond experiences of 1987-1988 Idaho postsecondary vocational-technical education program participants. The study was completed in November of 1992. While the students in the study completed their program before the Perkins legislation, the value of the long-term follow-up information was useful in providing direction for the postsecondary vocational system. The study involved a transcript analysis of 2275 students and questionnaires sent to 1641 students. Employers for 322 of the students were also contacted. The response rate for the students was 48.4% and for the employers was 71.7%. (Director of Research, State Division of Vocational Education, 650 W. State, Boise, Idaho 83720-3650)

Tech Prep Regional Reports (July, 1993)

The first two years for Tech Prep activities in Idaho were targeted for the development of Tech Prep programs. These data were provided through the annual performance reports submitted by each of the Tech Prep regions. (Tech Prep Coordinator, State Division of Vocational Education, 650 W. State, Boise, Idaho 83720-3650)

Technical Committee Data (1991-1993)

Data from technical committee reports and were also used in the study. These reports were developed by business and industry representatives. (Program Services, State Division of Vocational Education, 650 W. State, Boise, Idaho 83720-3650)

Wilder Project

The project at Wilder high school involved collaboration and cooperation with the Wilder Jr/Sr High School, the State Division of Vocational Education and with the



Southwest Idaho Private Industry Council. It developed over the past four years and produced a state and nationally recognized Wilder-PIC Valued Youth Tutoring Program, a successful school-to-work Mentoring Program, a before and after school study center, the Think Tank and a very successful PIC-Wilder Summer Learning Laboratories. (Special Populations Coordinator, State Division of Vocational Education, 650 W. State, Boise, Idaho 83720-3650)

Women at Work: Following Postsecondary Female Vocational Students in Programs Nontraditional to Their Gender (July, 1991)

This study followed a group of women who were enrolled in or a graduate of a vocational-technical program nontraditional to their gender. Follow-up questions focused on their current educational and occupational status, level of satisfaction with training and job factors related to this satisfaction, experiences in finding work, and perceptions of equity. A population of 76 women were sampled, all of whom had been recipients of a vocational equity scholarship to pursue a nontraditional job. Data were collected via a mail survey which resulted in a 72% return rate. (Equity Coordinator, State Division of Vocational Education, 650 W. State, Boise, Idaho 83720-3650)



Appendix B

Occupational Employment Statistics Projections for 1987 - 2000 By County and Planning Area

A user of these data must keep in mind the following:

Occupational Employment Statistics Program (OES) data reflect the number of jobs in any occupation, not the number of people, since no attempt is made to correct for multiple job holders. No differentiation is made between full and part-time workers. The data presented are valid at the statewide level only. However, the sub-state estimates represent the best available data at this time.

The information presented here reflects projected future demand. The employment projections should be viewed as indices of direction (i.e. growth or decline) and the relative amount of projected change, not exact employment/opening figures.

Data Collection Design

This information represents occupational employment by county and state planning areas for the State of Idaho for base year 1987 and projected occupational employment to the year 2000. It is a product of the Idaho Department of Employment's, Bureau of Research and Analysis, Occupational Employment Statistics Program (OES).

Statewide estimates are developed for each occupation by industry (two-digit Standard Industrial Classification (SIC)) as part of the OES program. This information is used to establish projected occupational employment using the Utah Micro-Matrix System (see Occupational Employment 1987-2000 for a complete explanation of this methodology).

Distributions of employment by industry for each county were developed for the base year 1987 using percent of statewide employment by two-digit SIC occurring within a county. The county numbers were derived from Department of Employment industry records for 1987.

The Employment by industry distributions were then applied to the statewide occupational estimates by industry to derive county occupational employment by industry.

The occupational estimates were pooled at each county level (sum across industries for each occupation) resulting in summary occupational information for the 44 Idaho counties.

Finally, the occupational estimates by county were 'rolled up' to the planning area level.



Assumptions

In order to project occupational employment overall and to break it down to the county level the following assumptions were made:

- 1. The Idaho economy and population will continue to grow, reflecting past trends without major external factors impacting them (i.e. natural disaster, war, energy crisis, etc.).
- 2. The national change factors and separation rates applied to the data are valid for Idaho.
- 3. No dramatic increase or decrease in any specific industry will occur over the projected time frame.
- 4. The distribution of occupational employment by industry is the same at the county and area level as it is at the state level.



IDAHO EMPLOYMENT by OCCUPATION FOR OIS REGION I

CES OCCUPATIONAL CODE TITLE 49011 SALESPERSCHS, RETAIL 97101 TRUCK DRIVERS 32502 REGISTERED HURSES 19005 GENERAL MANAGERS AND TAMBLE SENDERS 65008 WAITERS AND WAITRESSES 55199 GENERAL SECRETARIES 779014 GARDENERS AND GROUNDSY 68038 CHILD CARE WORKERS 31305 TEACHERS, ELEMENTARY 31308 TEACHERS, ELECTRON 67005 JANITORS AND CLEANERS, 22126 ELECTRICAL & ELECTRON 65041 COMB. FOOD PREPARATION 66008 NURSING AIDES AND ORD 65041 COMB. FOOD PREPARATION 65041 COMB. FOOD PREPARATION 65041 COMB. FOOD PREPARATION 65041 COMB. FOOD PREPARATION 65014 COMB. FOOD PREPARATION 65015 ELECTRICAL & ELECTRON 65016 ELECTRICAL & ELECTRON 65017 LICENSED PRACTICAL NU 68005 HAIRDRESSERS AND COSM 65038 FOOD PREPARATION WORK 65005 BARTENDERS 22135 MECHANICAL ENGINEERS 57002 ELECTRICIANS 67002 MAIDS AND HOUSEKEEPIN 65005 BARTENDERS 22135 MECHANICAL ENGINEERS 57002 FIRST LINE SUPERVISOR 87909 ALL OTHER HAND MATERI 93999 ALL OTHER HAND MATERI 93999 ALL OTHER HAND MATERI 93999 ALL OTHER HAND WORKER 65014 DINING ROOM & BARTEND 65032 COOKS, SPECIALTY FAS: 87002 CARPENTERS 81008 FIRST LINE SUPERVISOR 87902 CARPENTERS 81008 FIRST LINE SUPERVISOR 65032 COOKS, SPECIALTY FAS: 93914 WELDERS AND CUTTERS		1987 STATE EMP	2000 STATE EMP	1987 REGION EMP	2000 REGION EMP	CHANGE
49011 SALESPERSONS, RETAIL		13603	17229	1354.6	1727.1	372.5 302.1
9/101 TRUCK DRIVERS		11908	7156	505.8	789.7	283.9
19005 GENERAL MANAGERS AND T	CP EXEC.	11032	13382	1125.3	1369.3	244.0
49023 CASHIERS		8617	10702	993.4	1233.7	240.3
65008 WAITERS AND WAITRESSES	;	6727	8520	843.7	1060.5	410.8
55199 GENERAL SECRETARIES 7001/ CAODENEDS AND COCUMOS	resess.	8333 3830	5438	400.7	579.3	178.6
68038 CHILD CARE WORKERS	LLFLAJ	5308	6623	697.5	868.5	171.0
31305 TEACHERS, ELEMENTARY		5203	6680	537.3	689.7	152.4
31308 TEACHERS, SECONDARY SO	CHOOL	4687 2413	6146 7104	483.6 5/1.1	634.2 685.5	120.6
22126 ELECTOICAL & FLECTEON	, EXC.MAIDS IC FUCINFFD	1114	2127	140.0	271.6	131.6
93956 ALL OTHER ASSEMBLERS.	FABRICATOR	2890	3644	474.6	600.4	125.8
85132 MAINTENANCE REPAIRERS	, GEN.UTIL.	3884	4823	471.7	594.7	123.0
55347 GENERAL OFFICE CLERKS	20.0	7083	8239	755.1	6/3.4 478 n	140.1
TIOUN GRASSING ALLES AND OPIN	SK2	3380 3697	4586	449.5	559.9	110.4
65041 COMB. FOOD PREPARATION	N. SERVICE	3686	4583	414.6	514.9	100.3
22505 ELECTRICAL & ELECTRON	IC TECHNS.	1026	1838	121.7	218.1	96.4
65026 COOKS, RESTAURANT		2389	3111	311.5	404.7 318.7	95.1 87.7
43008 SALES AGENTS, REAL ES	TATE MANACEMENT	1/24	2215	210.3	293.2	82.9
73002 FALLERS AND BUCKERS	PONNOCHENI	2059	2608	417.7	496.5	78.8
32505 LICENSED PRACTICAL NU	RSES	2352	3003	270.1	348.3	78.2
68005 HAIRDRESSERS AND COSM	ETOLOGISTS	4206	4778	534.5	608.1	/3.0 66.0
65038 FOOD PREPARATION WORK	ERS MULES	2336 3175	2593 3588	439.5	504.2	64.7
43002 INSURANCE SALES WORKE	RS	1949	2572	203.2	267.6	64.4
49021 STOCK CLERKS, SALES F	LOCR	3921	4526	392.5	456.0	63.5
87202 ELECTRICIANS		1645	2092	220.7	283.5	62.8
67002 MAIDS AND HOUSEKEEPIN	G CLEANERS	2222 1867	2073 2336	246.7	307.1	60.4
22135 MECHANICAL ENGINEERS		850	1385	79.4	138.2	58.8
51002 FIRST LINE SUPERVISOR	S, CLERICAL	3142	3729	311.2	369.3	58.1
87902 EARTH DRILLERS, EX. C	IL A GAS	299	430	110.7	165.6	57.9 57./
87402 PAINTERS AND PAPERHAN	IGERS	1449	1000 2578	203.8	350.0	56.2
93799 ALL OTHER HAND MATERI	S AC ACTERS	1601	1976	241.1	296.5	55.4
65014 DINING ROOM & BARTENO	ER HELPERS	1436	1898	173.9	233.3	54.9
87502 PLUMBER, PIPEFITTER,	STEAMFITTER	1424	1855	167.3	218.5	51.0
87102 CARPENTERS	DOCULET LON	1730	2103	207.4	257.5	50.1
93914 UFI DERS AND CUTTERS	ROUGHTON	1329	1650	160.2	209.3	49.1
92308 SAWING MACHING CPERA	TOR/TENDER	864	994	318.3	367.2	48.4
65032 COOKS, SPECIALTY FAS	T F000	1776	2213	194.5	242.7	40.2 47.8
55305 RECEPTIONISTS, INFORM	NIION CLERKS	1637	2098	169.0	216.6	47.6
65017 COUNTER ATTENDANTS	NOI COOLOMNE	1576	1965	183.2	229.5	46.3
25102 COMPUTER SYSTEMS ANA	LYSTS, EDP	667	1028	79.7	.125.7	46.0
66002 DENTAL ASSISTANTS		729	1058	97.5 166.3	141.5 210.4	44.1 43.6
85311 BUS, TRUCK, DIESEL E	NG. MECHANIC	1593 2070	1993 2474	222.3	265.3	43.0
65028 COOKS, INSTITUTION O	K CAPETERIA	2024	2398	222.3	265.7	42.9
81002 FIRST LINE SUPERV.: M	ECH.& REPAIR	1672	1951	191.9	234.6	42.7
15026 FOOD SERVICE & LOOGI	NG MANAGERS	2893	3206	389.3	430.	41.1 40.9
97111 BUS DRIVERS, SCHOOL	1 16 251 HCDC	1743 1164	2153 1517	171.4 134.5	212.3 174.3	40.3
13011 MARKETING, ADV., PUB 97956 OPERATING ENGINEERS	LIG RELIMINA	1100	1391	137.5	177.9	40.3
83005 PRODUCTION INSPECTOR	S, GRADERS	950	1305	137.4	176.5	39.1
43021 TRAVEL AGENTS	·	358	627	50.3	87.9	37.5
98502 MACHINE FEEDERS AND		1460 2084	1574 2465	417.7 192.9	454.1 228.7	36.4 35.8
41002 FIRST LINE SUPERVISO 31317 INSTRUCTORS, HONVOCA	KS, SALES ITICNAL EDUC.	677	945	87.2	122.2	35.0
15005 EDUCATION ADMINISTRA	ITCRS	1073	1385	116.7	151.1	34.4
65099 ALL OTHER FOOD SERVI	CE WCRKERS	990	1245	119.0		
58014 AMUSEMENT & RECREATI		749 462				
73008 LOG HANDLING EQUIPME	HI UPERAIURS	404	273			

	OCCUPATIONAL TITLE	1987	2000	1987	2000	
0ES	OCCUPATIONAL	STATE	STATE	REGION	REGION	
CODE	TITLE	EMP	EMP	EMP	EMP	CHANGE
E # 10E	MEDICAL SECRETARIES LOGGING TRACTOR OPERATORS ALL OTHER SALES & RELATED OCC. TYPISTS ALL OTHER MANAGERS & ADMINIST. BLASTERS AND EXPLOSIVES WORKERS MILLWRIGHTS DENTAL HYGIENISTS SALES REPS.EXC.SCIENTIF & RETAIL FIRST LINE SUPERV.:CONST.EXTRAC. ALL OTHER SERVICE SUPERVISORS HOSTS & HOSTESSES: REST., LOUNGE COCKS, SHORT ORDER ALL OTHER TEACHERS, INSTRUCTORS EXCAVATION LOADING MACHINE OPER. MACHINISTS SERVICE STATION ATTENDANTS MOBILE HEAVY EQUIPMENT MECHANICS SPSYCHOLOGISTS GEOLOGIST, GEOPHYSICIST, OCEANOG TEACHERS, PRESCHOOL & KINDERGARTN PERSONNEL, TRAIN., LABOR REL. SPEC LEGAL SECRETARIES ANTISTS AND RELATED WORKERS CRUSHING & MIXING MACHINE OPER. ALL OTHER POST SECONDARY TEACHER ALL OTHER POST SECONDARY TEACHER ALL OTHER POST SECONDARY TEACHER ALL OTHER ENGINEERS AUTOMOTIVE MECHANICS SPYSICAL THERAPISTS TRAFFIC, SHIPPING, & REC. CLERKS ALTOMOTIVE MECHANICS TRAFFIC, SHIPPING, & REC. CLERKS ALL OTHER MACHINERY MECHANICS TRAFFIC, SHIPPING, & REC. CLERKS ALL OTHER MACHINERY MECHANICS TOMPUTER OPERATORS, EXC. PERIPH. MEDICAL RECORDS TECHN.& TECHNOL. POSTAL MAIL CARRIERS POLICE PATROL OFFICERS I COMPUTER OPERATORS, EXC. PERIPH. MEDICAL RECORDS TECHN.& TECHNOL. POSTAL MAIL CARRIERS POLICE PATROL OFFICERS I TEACHERS, SPECIAL EDUCATION FENGINEER., MATH., NAT. SCI. MGR. DENTISTS CHAND PACKERS AND PACKAGERS AUTOMOTIVE BOOY, RELATED REPAIRER COUNTER AND RENTAL CLERKS ALL OTHER MANAGEMENT SUPPORT OCC TEACHERS, VOCATIONAL EDUCATION CHECK, WACHING AND PASTRY TEACHER AND RENTAL CLERKS ALL OTHER MANAGEMENT SUPPORT OCC TEACHERS, VOCATIONAL EDUCATION CHECK, PRESCHOLOGISTS BAKERS, BREAD AND PASTRY THEACHER AND RENTAL CLERKS ALL OTHER MANAGEMENT SUPPORT OCC TEACHERS, VOCATIONAL EDUCATION CHECK, WOCATIONAL EDUCATION CHECK, PRICHERS TEACHER AND PACKAGERS AUTOMOTIVE BOOY, RELATED REPAIRER COUNTER AND RENTAL CLERKS THE COUNTER AND PACKAGERS AUTOMOTIVE BOOY, RELATED REPAIRER THE COUNTER AND RENTAL CLERKS THE COUNTER AND PACKAGERS TH	422	877	an a	113.1	32 5
77011	LOCAL SECRETARIES	473	584	143.5	175.7	32.2
40000	ALL OTHER SALES & RELATED OCC.	1313	1619	142.5	173.9	31.4
55308	TYPISTS	1407	1704	150.4	181.7	31.3
19999	ALL OTHER MANAGERS & ADMINIST.	1619	1925	159.3	190.3	31.0
87905	BLASTERS AND EXPLOSIVES WORKERS	118	177	56.8	87.0	30.2
85123	MILLYRIGHTS	405	540	78.3	106.7	28.4
32908	DENTAL HYGIENISTS	416	627	55./	84.U	∠8.5 2€.2
49008	SALES REPS.EXC.SCIENTIF & RETAIL	2693	3002	644.3 05.2	230.3 123.3	28.4 28.1
61000	FIRST LINE SUPERVICE CUDEDVICEDS	1020	1270	121.7	149.4	27.7
65002	HOSTS & HOSTESSES: REST. LOUNGE	1074	1306	144.1	171.7	27.6
65035	COOKS, SHORT ORDER	1009	1243	120.1	147.4	27.3
31399	ALL OTHER TEACHERS, INSTRUCTORS	906	1162	94.7	121.6	26.9
97923	EXCAVATION LOADING MACHINE OPER.	501	669	66.7	93.1	26.4
89108	MACHINISTS	728	886	96.9	123.0	20.1
97805	SERVICE STATION ATTENDANTS	1231	1423	140.7 05.4	121 4	27.0 25.8
85514	, MOBILE HEAVY EQUIPMENT MECHANICS	600	732	73.0 83.7	100 4	25.7
2/111	PSTURULUGISTS DECENDATED DECENDATED CONTRACTOR	337	461	52.6	78.2	25.6
31302	TEACHERS PRESCHOOL & KINDERGARTH	795	1037	84.6	110.0	25.4
21511	PERSONNEL TRAIN. LABOR REL. SPEC	935	1193	93.7	118.9	25.2
55102	LEGAL SECRETARIES	729	968	77.5	102.7	25.2
34 039	ARTISTS AND RELATED WORKERS	660	857	80.9	105.1	24.2
92965	CRUSHING & MIXING MACHINE OPER.	421	511	76.2	100.3	24.1
31299	P ALL OTHER POST SECONDARY TEACHER	825	1059	85.0	109.1	24.1
22199	ALL OTHER ENGINEERS	740	1045	62.7	50.7 50/ 7	24.0
8530	2 AUTOMOTIVE MECHANICS	4009	4340	30.0	54.7	27.7
50030	B TRACETE CUIDDING & DEC CLEDVO	1623	1840	146.0	160.1	23.1
85110	O ALL OTHER MACHINERY MECHANICS	878	1018	77.1	99.6	22.5
2251	4 DRAFTERS	865	1140	70.8	93.2	22.4
5601	1 COMPUTER OPERATORS, EXC. PERIPH.	665	891	62.7	84.7	22.0
3291	1 MEDICAL RECORDS TECHN.4 TECHNOL.	197	401	21.3	43.2	21.9
5730	5 POSTAL MAIL CARRIERS	872	1080	91.4	113.2	21.8
6301	4 POLICE PATROL OFFICERS	983	1140	130.3	152.1	21.5
1501	4 INDUSTRIAL PRODUCTION MANAGERS	933	757	74 8	111.7	21.8
1301	T DEACHERS, SPECIAL EDUCATION T DUCTUEED MATE DAT SCI MCD	725	800	76.6	98.3	21.7
7210	f chaireek., main., mai. 361. non. 5 newtists	1197	1356	159.9	181.2	21.3
8590	2 HEATING, A/C. REFRIG. MECHANICS	683	857	78.9	100.1	21.2
6600	5 MEDICAL ASSISTANTS	323	485	41.0	61.6	20.6
9890	2 HAND PACKERS AND PACKAGERS	2094	2350	142.3	162.5	20.2
8530	5 AUTOMOTIVE BODY, RELATED REPAIRER	967	1150	111.8	132.0	20.2
4901	7 COUNTER AND RENTAL CLERKS	615	830	62.7	82.8	20.1
2199	9 ALL OTHER MANAGEMENT SUPPORT OCC	1006	1229	101.7	121.7 #7 0	10.0
3131	4 TEACHERS, VOCATIONAL EDUCATION	47S	040 A4A	57.5	73.3	19.8
3290 6502	1 RAYEDS ROFAN ANN DASTRY	479	634	62.1	81.3	19.2
5300	5 TEACHER AIDES & EDUC. ASSISTANTS	518	802	64.6	83.8	19.2
4301	4 SECURITIES, FINANCIAL SERV. SALES	538	735	50.5	69.6	19.1
9890	5 VEHICLE, EQUIPMENT CLEANERS	766	968	82.1	100.8	18.7
9271	7 SEWING MACH. OPERATOR, GARHENT	245	316	70.9	89.5	18.6
	4 VETERINARIANS, VET. INSPECTORS	372	526	36.2	54.5	18.3
	3 BUTCHERS AND MEAT CUTTERS	676	833	77.0	95.3	18.3 18.3
2110	S LOAN OFFICERS AND COUNSELORS	859 699	1056 855	76.4 94.8	94.7 112.9	18.1
	DS HOUSEKEEPERS, INSTITUTIONAL	577	703	78.8	96.4	17.6
	IT INSTRUCTORS AND COACHES, SPORTS IT ELECTRONICS REPAIRERS,COMM.&IND.	254	429	26.5	44.0	17.5
	22 PHYSICIANS AND SURGEONS	1555	1684	205.4	222.7	17.3
	14 ADMINISTRATIVE SERVICES MANAGER	806	978	89.5	106.5	17.0
	19 HELPERS, ALL OTHER CONSTRUCTION	93	127	37.1	53.8	16.7
2130	08 PURCHASING AGENT EX.WHO/RET/FARM	645	782	74.3	90.9	16.6
	D8 PRODUCTION, EXPEDITING CLERKS	333	490	35.5	51.9	16.4
	32 SHEET METAL WORKERS	525	651 547	60.2 50.7		16.1 16.0
	17 CORRECTION OFFICERS AND JAILERS	434	567 515	50.4 37.5	66.4 53.5	16.0
	99 ALL OTHER HEALTH SERVICE WORKERS	359 346	394	107.0		
942	11 CABINETMAKERS & BENCH CARPENTERS	240	274	,01.0	٠٠٠ س	10.0



IDAHO EMPLOYMENT by OCCUPATION FOR OIS REGION I

OES CODE	COMPUTER PROGRAMMERS GUARDS AND WATCH GUARDS ALL OTHER MACHINE OPERATORS ALL OTHER CLERICAL & ADM. SUPPORT TYPISTS, WORD PROCESSING EQUIP. HELPERS, CARPENTERS FIRE FIGHTERS PERSONNEL, TRAINING, LABOR REL.MGR PHARMACISTS ALL OTHER HEALTH PROF., PARA, TECH FARM MANAGERS FOREST AND CONSERVATION WORKERS COMMUNICATION, TRANSP., UTIL.MGRS CHEMICAL TECHNICIANS, EXC. HEALTH LAWOODWORKING MACHINE OPERATORS PALL OTHER AGRIC., FOREST, FISH. SAMALL ENGINE SPECIALISTS PALL OTHER PLANT AND SYSTEM OCC. A SALESPERSONS, PARTS ALL OTHER PLANT AND SYSTEM OCC. A SALESPERSONS, PARTS ALL OTHER PRECISION WORKERS MINING ENGINEERS, ING. SAFETY CONCRETE AND TRIMMERS, HAND CONCRETE AND TRIMMERS, HAND CONCRETE AND TRIMMERS, HAND CONTROL TOWN CONTROL CONTROL TOWN CONTROL TOWN CONTROL CONTROL TOWN CONTROL C	1987 STATE ENP	2000 STATE EMP	1987 REGION EMP	DECICA	CHANGE
25 105	COMPUTER PROGRAMMERS	814	1032	60.5	76.4	15.9
63047	GUARDS AND WATCH GUARDS	777	925	74.3 74.8	90.2	15.4
50000	ALL OTHER CLERICAL & ADM.SUPPORT	938	1102	95.8	111.1	15.3
55311	TYPISTS, WORD PROCESSING EQUIP.	644	820	61.5	76.8	15.3
98312	HELPERS, CARPENTERS	602	763 707	56.5	106.1	15.1
63008	FIRE FIGHTERS -	408	526	50.6	65.4	14.8
32517	PHARMACISTS	687	827	78.9	93.6	14.7
32999	ALL OTHER HEALTH PROF., PARA, TECH	567	704	57.9	72.6	14.7
71005	FARM MANAGERS	610 2070	10/8	19.1 256.8	271.3	14.5
15023	CORREST AND CONSERVATION WORKERS COMMUNICATION TRANSP. STILLMGRS	653	779	74.9	89.1	14.2
73005	CHCKE SETTERS	244	281	91.6	105.6	14.0
87808	ROOFERS	486	596	59.3	73.1	13.8
87711	HIGHWAY MAINTENANCE WORKERS	1196	1306	144.6	45 2	13.5
55337	INTERVIEWING CLERKS, EX. PERSONNEL	250 266	282	90.6	104.1	13.5
22302	2 ARCHITECTS. EXC. LAND. & MARINE	649	768	67.9	81.4	13.5
24509	CHEMICAL TECHNICIANS, EXC. HEALTH	371	485	34.1	47.3	13.2
53902	2 LIBRARY ASSISTANTS & BOOKMCBILE	433	562	46.2	20.0 AA 3	12.5
97938	B GRADER, DOZER, SCRAPER OPERATORS	30 4 519	618	64.6	76.9	12.3
7999	9 ALL OTHER AGRIC. FOREST, FISH.	1718	1914	110.5	122.8	12.3
8532	8 SMALL ENGINE SPECIALISTS	370	438	52.0	64.3	12.3
9509	9 ALL OTHER PLANT AND SYSTEM OCC.	233	288	52.2 164.7	176.8	12.1
49014 ROOO	4 SALESPERSONS, PARTS O ALL OTHER OPECISION WORKERS	339	392	76.7	88.5	12.1
1500	8 MEDICINE AND HEALTH SERV. HGRS	383	492	42.4	54.4	12.0
8731	1 CONCRETE AND TERRAZZO FINISHERS	436	545	47.5	59.5	12.0
2410	5 CHEMISTS, EXCEPT BICCHEMISTS	267	410	19.4	31.3 50.5	11.7
3450	8 EMERGENCY MEDICAL RECHNICIANS	458	568	46.3	58.0	11.7
2210	8 MINING ENGINEERS. INC. SAFETY	52	77	16.2	27.9	11.7
5370	2 COURT CLERKS	340	426	46.5	58.3	11.7
9392	6 CUTTERS AND TRIMMERS, HAND	134	C01	43.7 40.7	52.0	11.3
3800	S DISPATCHERS: EXC. POC., FIRE, AND.	267	363 363	31.5	42.8	11.3
9251	2 OFFSET LITHOGRAPHIC PRESS SETTER	250	360	24.1	35.1	11.0
3405	1 MUSICIANS, INSTRUMENTAL	336	422	42.3	53.3	11.0
3121	6 ENGLISH & FOREIGN LANG. TEACHERS	3/8	485 521	39.U 42.8	53.7	10.9
2190	12 COST ESTIMATORS	197	226	72.5	83.3	10.8
2731	11 RECREATION WORKERS	477	554	65.9	76.7	10.8
1501	17 CONSTRUCTION MANAGERS	538	651	51.3	62.1 50.4	10.5
8599	99 ALL OTHER MECHANICS, INSTALLERS	448	400 554	57.5	68.3	10.8
0202	TO CUSTOM TAILORS AND SCHERS TO SUBMACE KILL OVEN KETTLE OPER.	534	627	54.8	65.5	10.7
5330	2 INSURANCE ADJUSTERS, INVESTIGATOR	412	609	27.1	37.8	10.7
8939	99 ALL OTHER PRECISION WOODWORKERS	184	212	68.7	38.2	10.7
810	17 FIRST LINE SUPERV.:HELP,LABORERS 99 ALL OTHER FIRST LINE SUPERVISORS	243 561	324 695	27.6 50.1	60.7	10.6
8109 7000	99 ALL OTHER PROF., PARAPROF., TECHN.	938	1014	112.3	122.9	10.6
2830	OS PARALEGAL PERSONNEL	125	221			
221	21 CIVIL ENGINEERS, INCL. TRAFFIC	585	694			
340	11 REPORTERS AND CORRESPONDENTS	462 281	561 358			
540	58 ATHLETE, COACH, UMPIRE & RELATED 08 BILL AND ACCOUNT COLLECTORS	397	524			10.2
315	OZ LIBRARIANS, PROFESSIONAL	447	546	49.6		
315	14 VOCATIONAL & EDUC. COUNSELORS	317				
917	05 WELDING MACHINE OPERATORS	166 300	227 381			
951 574	14 ELECTRICAL, ELECTRONIC ASSEMBLER 23 ADJUSTMENT CLERKS	397			2 48.0	9.8
312	10 SOCIAL SCIENCE TEACHERS	339	439	35.0	44.8	9.8
312	18 ART, DRAMA, AND MUSIC TEACHERS	333				
987	OS REFÚSE COLLECTORS DIT PHYSICAL, CORRECT THERAPY ASSIST	447 135				
660 927	726 LAUNDRY, DRYCLEANING MACH. OPER.	659				
741	ED PURITORIA ANTACEMENTA CARGOTT AL PUT	-55.				

IDAHO EMPLOYMENT by OCCUPATION FOR DIS REGION I

OES CODE	OCCUPATIONAL TITLE HOTEL DESK CLERKS REAL ESTATE APPRAISERS CUSTOMER SERVICE REPS, UTILITIES SPEECH PATHOLOGISTS, AUDIOLOGISTS BUS DRIVERS ALL OTHER TRANSP., MAT. MOVING OPR ANMOUNCERS, RADIO AND TV GRADUATE ASSISTANTS, TEACHING MECHANICAL ENGINEERING TECHN. DENTAL LABORATORY TECHNICIANS ELECTRICAL POWERLINE INSTAL/RPR. TOOL GRINDERS, FILERS, SMARPENERS RESPIRATORY THERAPISTS FIRST LINE SUPERV.: TRANSPORT. INDUSTRIAL ENGINEERS, EXC. SAFETY MINING AND RELATED MANAGERS SURGICAL TECHNICIANS MACHINERY MAINTENANCE WORKERS PAVING, SURFACING, TAMPING METALLURGISTS AND REL. ENGINEERS ANIMAL CARETAKERS, EXCEPT FARM SOCIAL WORKER, MED. & PSYCHIATRIC CONVEYOR OPERATORS AND TENDERS ALL OTHER CONSTR. & EXTRACTIVE MECHANIC AND REPAIRER HELPERS ANIMAL CARETAKERS, EXCEPT FARM COUNTY OPERATORS AND TENDERS ALL OTHER CLEAN, BUILDING SERVICE TECHNICAL ASSISTANTS, LIBRARY TELLERS CALL OTHER CLEAN, BUILDING SERVICE TECHNICAL ASSISTANTS, LIBRARY THE SCIENCE TEACHERS DALL OTHER ENGINEERING TECHNICIAN SHERIFFS AND DEPUTY SHERIFFS LIFE SCIENCE TEACHERS POSTMASTERS, MAIL SUPERINTENDENT SHERIFFS AND DEPUTY SHERIFFS LIFE SCIENCE TEACHERS POSTMASTERS, MAIL SUPERINTENDENT SPURCHASING MANAGERS ALL OTHER MOTOR VEHICLE OPERATOR POLICE AND DETECTIVE SUPERVISORS RAIL CAR REPAIRERS SALES REPS, SCIENTIF, PROD. EXC. RET SHOW HEALTH AIDES SHOE AND LEATHER WORKERS ALL OTHER LIFE SCIENTISTS RADIOLOGIC TECHNOLOGISTS TAALOHNERY MECH.: UNDERGROUND MINE LOW PRESSURE BOILER OPERATOR FOOD SERVERS, OUTSIDE SEMING MACHINCAL HADES SEGIGNERS, EXC. INTERIOR DESIGN. SOCIAL WORKERS, EXC. MED. PSYCH.	1987 STATE EMP	STATE	1987 REGION EMP	REGION	CHANGE
53808	HOTEL DESK CLERKS	353	394	80.5	90.0	9.5
43011	REAL ESTATE APPRAISERS	299 386	369 456	39.0 50 3	59.6	9.4
32314	SPEECH PATHOLOGISTS AUDIOLOGISTS	210	292	23.8	33.1	9.3
97108	BUS DRIVERS	329	428	32.2	41.5	9.3
97989	ALL OTHER TRANSP., MAT. HOVING OPR	452	511	53.2	62.4	9.2
34017	ANNOUNCERS, RADIO AND IV	300 310	421 308	31.9	41.0	9.1
22511	MECHANICAL ENGINEERING TECHN.	324	449	20.5	29.6	9.1
89921	DENTAL LABORATORY TECHNICIANS	170	237	22.5	31.4	8.9
85723	ELECTRICAL POWERLINE INSTAL/RPR.	498	57 9	52.7	61.4	8.7
32302	RESPIRATORY THERAPISTS	145	223	15.4	23.9	8.5
81011	FIRST LINE SUPERV.: TRANSPORT.	292	338	31.2	39.7	8.5
22128	INDUSTRIAL ENGINEERS, EXC. SAFETY	197	298	14.5	23.0	8.5
15021	MINING AND RELATED MANAGERS	47 50	71 0 6	14.4	22.9	8.5
32920 85128	NACHINERY HAINTENANCE WORKERS	154	189	29.8	38.2	8.4
87708	PAVING, SURFACING, TAMPING	399	488	38.7	47.1	8.4
22105	METALLURGISTS AND REL. ENGINEERS	69	109	10.4	18.7	8.3
87999	ALL OTHER CONSTR. & EXTRACTIVE	201	252	38.4	46.6	8.2
98102	MECHANIC AND REPAIRER HELPERS	446 507	524	48.2 /5.8	30.3 53 a	8.1
27302	P SOCIAL CORETAKERS, EXCEPT PARM	251	324	27.7	35.7	8.0
97951	CONVEYOR OPERATORS AND TENDERS	398	445	35.9	43.7	7.8
67099	ALL OTHER CLEAN, BUILDING SERVICE	471	538	50.9	58.7	7.8
31505	TECHNICAL ASSISTANTS, LIBRARY	251	323	27.0	34.7	7.7
53102	2 TELLERS E DECENYATION & TRANS TICYET AGENT	1729	1/98	30.4	38.0	7.6
5800	O RESERVATION & TRANSTITURET AGENT	465	520	63.0	70.5	7.5
24302	FORESTER, CONSERVATION SCIENTIST	775	794	113.4	120.8	7.4
4302	SALES AGENTS, ADVERTISING	335	417	35.7	43.0	7.3
2259	ALL OTHER ENGINEERING TECHNICIAN	580	645	63.7	71.0	7.3
63037	2 SHERIFFS AND DEPUTY SHERIFFS	4/9 230	331 307	26.7	73.3 31.8	7.1
1500	2 POSTMASTERS. MAIL SUPERINTENDENT	288	357	30.2	37.3	7.1
1300	8 PURCHASING MANAGERS	1007	1077	104.4	111.4	7.0
9719	9 ALL OTHER MOTOR VEHICLE OPERATOR	92	121	17.3	24.1	6.8
6100	5 POLICE AND DETECTIVE SUPERVISORS	259	308	34.2	20.9	6.7
4900	/ KAIL LAK KEPAIKEKS S CAICO DEDS SCIENTIF DEMO FYC.RFT	641	731	44.3	51.0	6.7
6601	1 HOME HEALTH AIDES	217	272	23.3	30.0	6.7
8951	1 SHOE AND LEATHER WORKERS	123	182	12.8	19.5	6.7
2439	9 ALL OTHER LIFE SCIENTISTS	260	323	25.0	31.6	6.6
3291	7 MACHINERY MECH HINDERCROWN MINE	101 21	77	11.4	18.0	6.6
9292	A LOW PRESSURE BOILER OPERATOR	176	204	35.3	41.8	6.5
6501	1 FOOD SERVERS, OUTSIDE	191	244	28.0	34.5	6.5
9272	1 SEWING MACH. OPER., NON-GARMENT	262	315	36.9	43.3	6.4
3290	5 MED./CLINICAL LAB. TECHNICIANS	189 315	250 377	20.4 30.3	26.8 36.7	6.4
2730	8 DESIGNERS, EXC. INTERIOR DESIGN. 5 SOCIAL WORKERS, EX. MED.& PSYCH.	545	606	55.1	61.5	6.4
9770	2 AIRCRAFT PILOTS, FLIGHT ENGINEERS	229	294	22.5	28.8	6.3
1900	2 PUBLIC ADMIN., LEG., GEN. ADMIN.	378	423	52.1	58.3	6.2
	2 SWITCHBOARD OPERATORS	619	708	56.3	62.5	6.2
	1 HOIST AND WINCH OPERATORS	76 114	91 135	28.2 26.4	34.4 32.5	6.2 6.1
	7 WEIGHERS, MEASURERS, CHECKERS 12 CAPTAINS, WATER VESSEL	38	55	13.4	19.5	6.1
	ALL OTHER FINANCIAL SPECIALISTS	267	312	33.1	39.1	6.0
8595	3 TIRE REPAIRERS AND CHANGERS	573	640	67.2	73.2	6.0
	23 AIRCRAFT MECHANICS	236	297	23.0	28.9	5.9 5.8
)2 OPERATIONS AND SYSTEMS ANALYSTS 08 WOOD MACHINISTS	89 147	136 164	11.0 41.9	16.8 47.7	5.8
5730	DE POSTAL SERVICE CLERKS	288	343	30.2	35.9	5.7
9500	DE WATER & WASTE TREAT. PLANT OPER.	265	307		41.2	5.7
	S PRIVATE DETECTIVE & INVESTIGATOR	261	362		21.1	5.7
	DB SOCIAL SERVICE TECHNICIANS	213 193	267 248		28.1 25.6	5.7 5.7
314	24 MATHEMATICAL SCIENCE TEACHERS	173	240	17.7		•••



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GES OCCUPATIONAL CODE TITLE 34002 WRITERS AND EDITORS 32521 DIETITIANS AND NUTRITIONISTS 32305 OCCUPATIONAL THERAPISTS 34008 PUBLIC RELATIONS SPECIALISTS 68035 SOCIAL WELFARE SERVICE AIDES 43005 BROKERS, REAL ESTATE 24508 NUCLEAR TECHNICIAN, TECHNOLOGIST 85705 DATA PROCESSING EQUIP. REPAIRERS 24508 AGRICULTURAL AND FOOD SCIFFTISTS 92953 CCATING, PAINTING MACH. G. '. 32511 PHYSICIAN ASSISTANTS 43017 SALES AGENTS, BUSINESS SERVICES 97935 SHUTTLE CAR OPERATORS 25108 COMPUTER PROGRAMMER AIDES 53121 LOAN AND CREDIT CLERKS 91702 WELDING MACHINE SETTER/OPERATOR 68002 BARBERS 92305 HEAD SALYERS 24308 BIOLOGICAL SCIENTISTS 21911 COMPLIANCE & ENFORCE. INSPECTORS 79008 LOG GRADERS AND SCALERS 83002 PRECISION INSPEC., TESTERS, &GRADE 87989 ALL OTHER EXTRACTIVE OCC., EX.HEL 66026 PHARMACY ASSISTANTS 92728 PRESSING MACH.OPERATOR, TEXTILES 92302 SAWING MACHINE SETTER/OPERATOR 87949 ALL OTHER MACHINE SETTERS/OPER. 31114 NURSING INSTRUCTORS 87302 BRICK MASONS 92974 ALL OTHER MACHINE SETTERS/OPER. 31114 NURSING INSTRUCTORS 87302 BRICK MASONS 92974 PACKAGING & FILLING MACHINE OPER 79005 NURSERY WORKERS 69999 ALL OTHER SERVICE WORKERS 22502 CIVIL ENGINEERING TECHNICIANS 53708 LICENSE CLERKS 91321 MACHINE FORMING OPERATORS, M/P 21914 TAX EXAMINER, COLLECTOR, REV.AGENT 87802 INSULATION WORKERS 22521 SURVEYING AND MAPPING TECHNICIAN 57311 MESSENCERS 27117 BUOGET ANALYSTS 56014 PERIPHERAL EOP EQUIP. OPERATORS 57118 MESSENCERS 27117 BUOGET ANALYSTS 56014 PERIPHERAL EOP EQUIP. OPERATORS 57118 CENTRULOR & FORMING OPERATOR 57311 PRESSENCERS 57108 CENTRAL OFFICE MACH. OPERATOR 57314 PERIPHERAL EOP EQUIP. OPERATOR 57317 EXTRUDING & FORMING OPERATOR 57310 CENTRAL OFFICE OPERATOR 57310 CENTRAL OFFICE OPERATOR 57310 MANAGEMENT ANALYSTS 5708 CENTRAL OFFICE OPERATOR 57310 MANAGEMENT ANALYSTS 5708 CENTRAL OFFICE OPERATOR 57310 MANAGEMENT ANALYSTS 5708 CENTRAL OFFICE OPERATOR 57310 MANAGEMENT ANALYSTS 57108 CENTRAL OFFICE OPERATOR 573108 CENTRAL OFFICE OPERATOR 573108 CENTRAL OFFICE OPERATOR 573108 CENTRAL OFFICE OPERATOR	1987 STATE EMP	2000 STATE EMP			CHANGE
34002 WRITERS AND EDITORS	283	344	27.8	33.4	5.6
32521 DIETITIANS AND NUTRITIONISTS	154	201	15.9	22.3	5.4
32305 OCCUPATIONAL THERAPISTS	69	115	13 /	13.0	5.3
34008 PUBLIC RELATIONS SPECIALISTS	118	107	15.4	20.8	3.3
ASOSS SOCIAL WELFARE SERVICE AIDES	120	158	16.6	21.8	5.2
24508 NUCLEAR TECHNICIAN, TECHNOLOGIST	- 244	335	14.0	19.1	5.1
85705 DATA PROCESSING EQUIP. REPAIRERS	216	288	16.7	21.8	5.1
24305 AGRICULTURAL AND FOOD SCIFMTISTS	308	359	32.2	37.2	5.0
92953 CCATING, PAINTING MACH. G. '.	139	174	23.9	28.9 27.0	5.0
32511 PHYSICIAN ASSISTANTS	1/5	217	21.0	26.8	5.0
GROVE CHITTLE CAN COPPATIONS	16	25	8.8	13.7	4.9
25108 COMPUTER PROGRAMMER AIDES	260	328	21.1	26.0	4.9
53121 LOAN AND CREDIT CLERKS	512	567	41.8	46.5	4. <u>8</u>
91702 WELDING MACHINE SETTER/OPERATOR	66	92	11.6	16.3	4.7
68002 BARBERS	177	212	23.1	27.8	4.7
92305 HEAD SAWYERS	200	7/2	20.4	36.4	4.5
24308 RIGHOGICAL SCIENTISTS	528	561	55.6	60.1	4.5
70008 LOG GRADERS AND SCALERS	80	92	30.0	34.5	4.5
83002 PRECISION INSPEC. TESTERS &GRADE	129	185	10.0	14.5	4.5
87989 ALL OTHER EXTRACTIVE OCC., EX.HEL	32	40	10.1	14.6	4.5
66026 PHARMACY ASSISTANTS	130	168	13.4	17.5	4.4
92728 PRESSING MACH OPERATOR, TEXTILES	164	181	23.0	27.3	4.3 4.3
92302 SAMING MACHINE SELLEN/UPERATOR	10	20	7.3	11.5	4.3
92997 ALL OTHER MACHINE SETTERS/CPER.	296	335	26.4	30.7	4.3
31114 NURSING INSTRUCTORS	129	167	13.3	17.5	4.2
87302 BRICK MASONS	206	245	21.8	26.0	4.2
92974 PACKAGING & FILLING MACHINE OPER	1015	1133	28.3	32.4	4.1
79005 NURSERY WORKERS	192	2/5 330	25.9	20 2	4.0
9999 CIVIL ENGINEEDING TECHNICIANS	308	354	27.1	31.0	3.9
STOR LICENSE CLERKS	323	351	41.2	45.1	3.9
91321 MACHINE FORMING OPERATORS, M/P	166	225	10.4	14.2	3.8
21914 TAX EXAMINER, COLLECTOR, REV. AGENT	237	271	26.3	30.1	3.8
87802 INSULATION WORKERS	142	1/5	15.4	17.0	3.5 7 R
87814 STRUCTURAL METAL WORKERS	177	100	20.3	24.1	3.8
2221 PECCENCEDS	246	232	26.5	30.3	3.7
21117 BUNGET ANALYSIS	168	213	14.7	18.4	3.7
56014 PERIPHERAL EDP EQUIP. OPERATORS	98	142	8.5	12.2	3.6
56099 ALL OTHER OFFICE MACH. OPERATORS	141	181	17.9	21.5	3.6
55314 PERSONNEL CLERKS, EXCEPT PAYROLL	341	377	34.6	36.2	3.0
66014 PSYCHIATRIC ALUES	176	150	22.0	25.5	3.5
92971 FYTRITING & FORMING OPERATOR	207	245	17.2	20.5	3.4
21905 MANAGEMENT ANALYSTS	299	329	37.7	41.1	3.4
93947 PAINTING AND COATING, HAND	90	113	11.6	15.0	3.4
63099 ALL OTHER PROTECTIVE SERVICE	202	229	24.5	28.0	3.4
8244 COIN & AFNOING WYCHING SEKAICERS	200	JET	22.5 9.4	26.9 12. 3	3.4 3.4
89708 PRECISION LITHOGRAPHERS & PHOTO.	106 714	140 793	24.3	28.1	3.3
79011 GRADERS & SCRIERS, AGRIC.PRODUCT 53105 NEW ACCOUNTS CLERKS	266	299		28.4	3.3
31212 HEALTH SPECIALTIES TEACHERS	104	134			3.3
53502 WELFARE ELIGIBILITY WORKERS	283	313	29.2	32.4	3.2
32317 RECREATION THERAPISTS	62	87			3.1
61002 FIRE FIGHTING & PREV. SUPERVISORS	133	154 70			3.0 3.0
91508 COMBINATION > CHITOOL OPER, M/P	52 153	184			
49026 VENCORS,SCLL TORS,DOCR-TO-000R 87308 HARD TILE SETTERS	82	103			3.0
97114 TAXI DRIVERS AND CHAUFFEURS	55	76	6.5	9.3	2.8
22114 CHEMICAL ENGINEERS	252	392			2.3
91905 LATHE, TURNING MACH. SETTER/OP, M/P	159	192			
34005 TECHNICAL WRITERS	90 118				
83099 ALL OTHER INSPECTORS, TESTERS	161	181			
89123 JEWELERS AND SILVERSMITHS					



## 87314 REINFORCING METAL WORKERS 76 90 7.3 8.7 1.87508 PIPELAYERS 120 137 13.4 14.8 1.89135 BOILERMAKERS 69 86 5.9 7.3 1.56002 BILL., POST, CALCULATING MACH.OP 237 249 21.6 22.9 1.91914 FOUNDRY MOLD ASSEMBLY/SHAKEGUT 13 16 5.7 7.0 1.92914 PAPER GOODS MACHINE SETTER/OPER. 100 124 5.2 6.5 1.97899 ALL OTHER TRANSPORTATION WORKERS 120 137 7.1 8.4 1.57302 MAIL CLERKS, EXC. MAIL MACHINE 333 346 31.5 32.8 1.57302 MAIL CLERKS, EXC. MAIL MACHINE 333 346 31.5 32.8 1.57302 MAIL CLERKS, EXC. MAIL MACHINE 333 346 31.5 32.8 1.57302 MAIL CLERKS, EXC. MAIL MACHINE 333 346 31.5 32.8 1.57302 MAIL CLERKS, EXC. MAIL MACHINE 333 346 31.5 32.8 1.57302 MAIL CLERKS, EXC. MAIL MACHINE 333 346 31.5 32.8 1.57302 MAIL CLERKS, EXC. MAIL MACHINE 333 346 31.5 32.8 1.57302 MAIL CLERKS, EXC. MAIL MACHINE 333 346 31.5 32.8 1.57302 MAIL CLERKS, EXC. MAIL MACHINE 333 346 31.5 32.8 1.57302 MAIL CLERKS, EXC. MAIL MACHINE 333 346 31.5 32.8 1.57302 MAIL CLERKS, EXC. MAIL MACHINE 333 346 31.5 32.8 1.57302 MAIL CLERKS, EXC. MAIL MACHINE 333 346 31.5 32.8 1.57302 MAIL CLERKS, EXC. MAIL MACHINE 333 346 31.5 32.8 1.57302 MAIL CLERKS, EXC. MAIL MACHINE 333 346 31.5 32.8 1.57302 MAIL CLERKS, EXC. MAIL MACHINE 333 346 31.5 32.8 1.57302 MAIL CLERKS, EXC. MAIL MACHINE 333 346 31.5 32.8 1.57302 MAIL CLERKS, EXC. MAIL MACHINE 333 346 31.5 32.8 1.57302 MAIL CLERKS, EXC. MAIL MACHINE 333 346 31.5 32.8 1.57302 MAIL CLERKS, EXC. MAIL MACHINE 333 346 31.5 32.8 1.57302 MAIL CLERKS, EXC. MAIL MACHINE 340 MACHINE 3	OES CODE	OCCUPATIONAL TITLE	1987 STATE EMP	STATE	1987 REGION EMP	REGION	CHANGE
85928 MECHANICAL CONTROL INSTALL& REPR 100 111 10.7 11.9 1. 87105 CEILING TILE INSTALLERS 55 66 6.7 7.9 1. 58099 ALL OTHER MATERIAL WORKERS 71 82 8.6 9.7 1.	8750 8913 5600 919 929 978 573 917 560 219 283 283 859	ALL OTHER PHYSICAL SCIENTISTS HELPERS, MASONS & TILE SETTERS CENTRAL OFFICE & PBX INSTAL/RPR. FOUNDRY MOLD AND CORE MAKERS ASSESSORS ALL OTHER PRINTING PRESS SET/OP. CEMENTING & GLUING MACHINE OPER. ADVERTISING CLERKS SURVEYING AND MAPPING SCIENTISTS ALL OTHER CONSTRUCTION WORKERS POLICE DETECTIVES SALES ENGINEERS CHEMISTRY TEACHERS ENGINEERING TEACHERS ENGINEERING TEACHERS ENHITING PRESS MACHINE OPERATOR BIOLOGICAL, AGRIC., FOOD TECHN. ENHOUSTERERS ALL OTHER PHYS. SCIENCE TEACHERS STATEMENT CLERKS ATTEMENT CLERKS ATTEMENT ENGINE SPECIALISTS GRINDING AND POLISHING, HAND FARMERS AND POLISHING, HAND FARMERS CHELPERS, PLUMBERS, PIPEFITTERS COMPUTER SCIENCE TEACHERS COMPUTER SCIENCE TEACHERS CHELPERS, PLUMBERS, PIPEFITTERS COMPUTER SCIENCE TEACHERS CHACHINE TOOL CUTTING OPER., M/P ALL OTHER MET.&PLAS.MACH.SET/OPS AMBULANCE DRIVERS & ATTENDANTS CREDIT ANALYSTS USHERS, LOBBY ATT., TICKET TAKER PAINTERS, TRANSPORTATION EQUIP. CANNERY WORKERS AMBULANCE DRIVERS & ATTENDANTS CREDIT ANALYSTS USHERS, LOBBY ATT., TICKET TAKER PHOTOGRAPHIC PROCESS WORKERS BINDERY MACHINE SETTER/OPERATOR BILLE HOME INSTALLER & REPAIRER BOANCERS AND CHOREOGRAPHERS BULLE HOME INSTALLER & REPAIRER BOANCERS AND CHOREOGRAPHERS BULLE HOME TRANSPORTATION WORKERS BULL HACHINE OPERATORS BULLE HOME TRANSPORTATION WORKERS BULL HACHINE OPERATORS CONSTRUCTION, BULL HILD IN BILLERS	149 145 239 17 181 80 53 719 184 179 81 162 17 184 179 184 179 184 179 184 179 184 179 184 187 187 187 187 187 187 187 187 187 187	137 86 249 16 124 137 346 126 70 81 161 82 122 111	5.4 5.7 5.7 5.2 7.1 31.5 6.1 7.6 8.4 6.7 6.7	7.3 22.9 7.0 6.5 8.4 32.8 7.3 6.2 6.6 18.8 9.6 71.9 7.9	1.4 1.3 1.3 1.3 1.3 1.2 1.2 1.2 1.2 1.2 1.2

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32399 ALL OTHER THERAPISTS 124 132 13.0 14.1 1.95021 POWER GENERATING PLANT OPERATOR 87 98 9.6 10.7 1.27102 ECCHOMISTS, MARKET ANALYSTS 118 123 14.6 15.7 1.27105 URBAN AND REGIONAL PLANNERS 70 79 8.5 9.6 1.27111 TAX PREPARERS 111 129 8.4 9.5 1.27111 TAX PREPARERS 111 129 8.4 9.5 1.27111 TAX PREPARERS 111 123 10.6 11.7 1.2710 1.27	, 1
27102 ECCNOMISTS, MARKET ANALYSTS 118 123 14.6 15.7 1. 27105 URBAN AND REGIONAL PLANNERS 70 79 8.5 9.6 1. 21111 TAX PREPARERS 111 129 8.4 9.5 1. 85118 MACHINERY MECHANICS: PLANT 111 123 10.6 11.7 1. 58021 MARKING CLERKS 99 115 7.6 8.7 1. 85599 ALL OTHER COMMUN.EQUIP.MECHANICS 46 53 7.3 8.4 1. 85711 ELECTR. HOME APPL. & POWER TOOL 146 163 10.3 11.4 1. 85714 ELECTRIC MOTOR REPAIRERS 123 145 7.7 8.8 1. 21305 PURCHASING AGENTS & BUYERS, FARM 198 219 9.7 10.8 1. 92951 COATING, PAINTING SETTER/OPER. 30 35 5.0 6.1 1. 92955 BAKERS, MANUFACTURING 76 91 6.0 7.1 1. 92705 TEXTILE MACHINE OPERATORS 22 24 10.7 11.7 1. 87817 FENCE ERECTORS 63 72 6.7 7.7 1. 28399 ALL OTHER LEGAL ASSISTANTS 173 191 15.7 16.7 1. 31111 LECTURERS 101 110 11.2 12.2 1. 87108 DRYWALL INSTALLERS 59 68 6.5 7.5 1. 98316 HELPERS, ROOFERS 65 75 7.1 8.1 1. 53311 INSURANCE CLAIMS CLERKS 144 158 10.6 11.5 0. 39011 FUNERAL DIRECTORS AND MORTICIANS 82 90 9.1 10.0 0. 85721 POWERHOUSE & RELAY ELECTRICIANS 68 76 7.2 8.0 0.	, 1 . 1
27105 URBAN AND REGIONAL PLANNERS 70 79 8.5 9.6 1. 21111 TAX PREPARERS 111 129 8.4 9.5 1. 85118 MACHINERY MECHANICS: PLANT 111 123 10.6 11.7 1. 58021 MARKING CLERKS 99 115 7.6 8.7 1. 85599 ALL OTHER COMMUN.EQUIP.MECHANICS 46 53 7.3 8.4 1. 85711 ELECTR. HOME APPL. & POWER TOOL 146 163 10.3 11.4 1. 85714 ELECTRIC MOTOR REPAIRERS 123 145 7.7 8.8 1. 21305 PURCHASING AGENTS & BUYERS, FARM 198 219 9.7 10.8 1. 89805 BAKERS, MANUFACTURING 76 91 6.0 7.1 1. 89805 BAKERS, MANUFACTURING 76 91 6.0 7.1 1. 92705 TEXTILE MACHINE OPERATORS 22 24 10.7 11.7 1. 87817 FENCE ERECTORS 63 72 6.7 7.7 1. 28399 ALL OTHER LEGAL ASSISTANTS 173 191 15.7 16.7 1. 31111 LECTURERS 101 110 11.2 12.2 1. 87108 DRYWALL INSTALLERS 59 68 6.5 7.5 1. 98316 HELPERS, ROOFERS 65 75 7.1 8.1 1. 53311 INSURANCE CLAIMS CLERKS 144 158 10.6 11.5 0. 85721 POWERHOUSE & RELAY ELECTRICIANS 82 90 9.1 10.0 0. 85721 POWERHOUSE & RELAY ELECTRICIANS 68 76 7.2 8.0 0.	. 1
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21305 PURCHASING AGENTS & BUYERS, FARM 198 219 9.7 10.8 1. 92951 COATING, PAINTING SETTER/OPER. 30 35 5.0 6.1 1. 89805 BAKERS, MANUFACTURING 76 91 6.0 7.1 1. 92705 TEXTILE MACHINE OPERATORS 22 24 10.7 11.7 1. 87817 FENCE ERECTORS 63 72 6.7 7.7 1. 28399 ALL OTHER LEGAL ASSISTANTS 173 191 15.7 16.7 1. 31111 LECTURERS 101 110 11.2 12.2 1. 87108 DRYWALL INSTALLERS 59 68 6.5 7.5 1. 98316 HELPERS, ROOFERS 65 75 7.1 8.1 1. 53311 INSURANCE CLAIMS CLERKS 144 158 10.6 11.5 0. 39011 FUNERAL DIRECTORS AND MORTICIANS 82 90 9.1 10.0 0. 85721 POMERHOUSE & RELAY ELECTRICIANS 61 69 6.5 7.4 0. 58026 CROER FILLERS, SALES 490 506 39.8 40.6 0. 32523 DIETETIC TECHNICIANS 68 76 7.2 8.0 0	.1
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32523 DIETETIC TECHNICIANS 68 76 7.2 8.0 0.	.9
	.8
98313 HELPERS, ELECTRICIANS 71 81 7.6 8.4 0.	.3
73099 ALL OTHER TIMBER CUTTING WORKERS 47 51 13.9 14.7 U. 27109 ALL OTHER SOCIAL SCIENTISTS 66 73 6.8 7.6 U.	.8
32111 PODIATRISTS 43 49 5.7 6.5 0	.8
87811 GLAZIERS 312 318 36.8 37.6 0	1.8
85911 ELECTRIC METER INSTALLERS/REPAIR 51 58 5.6 6.3 0	7.7
21302 WHOLESALE, RETAIL BUYERS, EX. FARM 776 779 80.1 80.8 0	1.7
89802 SLAUGHTERERS AND BUTCHERS 658 704 7.1 7.7 V	1.6
34028 BROADCAST TECHNICIANS 60 64 9.8 10.4 0	1.6
53802 TRAVEL CLERKS 32 35 6.0 6.6 0	1.6
25319 ALL OTHER MATHEMATICAL SCIENTIST 98 112 8.1 8.6 0).5
72000 SUPERVISORS, FARM, FOREST, AG. REL 1851 1881 237.0 237.5 0).5
24311 MEDICAL SCIENTISTS 74 77 7.2 7.7 U).5 1 4
85951 BICYCLE REPAIRERS 103 106 13.3 13.7 0	5.4
28102 JUDGES AND MAGISTRATES 50 53 6.0 6.3 0	3.3
85914 CAMERA & PHOTOGRAPHIC REPAIRERS 45 30 6.2 6.3 9 6 8.9 9.1 0	3.2
97302 RAILROAD CONDUCTORS, YARDMASTERS 135 138 5.4 5.6	2.0
63002 FIRE INSPECTORS 2/ 28 3.6 3.8 4	J. Z
67008 PEST CONTROLLERS AND ASSISTANTS 115 119 10.1 10.3	0.2
24102 PHYSICISTS AND ASTRONOMERS 78 77 5.7 5.7	0.0
97305 LOCOMOTIVE ENGINEERS 155 157 6.2 6.2 9 55344 BILLING. COST AND RATE CLERKS 700 722 68.3 68.3	0.0
22117 NUCLEAR ENGINEERS 492 495 29.1 29.0 -0	0.1
	0.3
	0.4
85308 MOTORCYCLE REPAIRERS 180 174 22.9 22.2	0.7
	J.9 J.9
55321 FILE CLERKS 880 889 86.1 84.8	1.3
85726 TELEPH, STATION INSTALL & REPAIR 129 121 20.2 18.3	1.4
58014 METER READERS, UTILITIES 174 150 20.1 17.8	2.3
32514 GPTICIANS, DISPENSING & MEASUR. 312 286 44.7 41.8	2.9
89702 PRECISION COMPOSITOR, TYPESETTER 168 136 17.3 13.8 158023 STOCK CLERKS:STOCKROOM OR WAREH. 1711 1676 146.4 142.3	3.5
53314 INSURANCE POLICY PROCESS. CLERKS 508 479 31.2 27.0	4.2



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OES CODE	OCCUPATIONAL TITLE	1987 STATE EMP	2000 STATE EMP	1987 REGION ENP	2000 REGION EMP	CHANGE
32108	OPTOMETRISTS	187	154	24.9	20.6	-4.3
	TELEPHONE & CABLE TV INSTAL/RPR.	558	538	84.2	79.8	-4.4
	STATISTICAL CLERKS	140	94	14.2	9.2	-5.0
	FARM EQUIPMENT MECHANICS	884	877	71.3	65.4	•5.9
	PAYROLL AND TIMEKEEPING CLERKS	402	332	42.7	36.1	-6.6
	STENOGRAPHERS	218	131	22.2	13.5	-8.7
	ELECTRONIC SEMICONDUCTOR	819	635	66.7	51.8	-14.9
92902	FLECIKORIC SERICORDUCION	556	403	50.2	35.2	-15.0
93905	ELECTRICAL, ELECTRONIC ASSEMBLER	740	548	68.3	49.3	-19.0
	DATA ENTRY KEYERS, EX. COMPOSING	9250	8872	1065.6	1005.2	-60.4
	BOOKKEEPING & ACCOUNTING CLERKS	1989	1515	239.2	170.5	-68.7
	' INDUSTRIAL TRUCK & TRACTOR OPER.		8528	687.0	493.6	-193.4
74.002	FARM WORKERS	9543	0320	001.0	7/3.0	.,,,,,

OES OCCUPATIONAL CODE TITLE	1987 STATE EMP	2000 STATE EKP	1987 REGION EMP	2000 REGION EMP	CHANGE
CODE TITLE 49011 SALESPERSONS, RETAIL 97101 TRUCK DRIVERS 32502 REGISTERED NURSES 31305 TEACHERS, ELEMENTARY 31308 TEACHERS, SECONDARY SCHOOL 19005 GENERAL MANAGERS AND TOP EXEC. 49023 CASHIERS 65008 WAITERS AND WAITRESSES 55199 GENERAL SECRETARIES 67005 JANITORS AND CLEANERS, EXC.MAIDS 68038 CHILD CARE WORKERS 93999 ALL OTHER HAND WORKERS 79014 GARDENERS AND GROUNDSKEEPERS 66008 NURSING AIDES AND CROERLIES 55347 GENERAL OFFICE CLERKS 65041 COMB. FOOD PREPARATION, SERVICE 85132 MAINTENANCE REPAIRERS, GEN.UTIL. 21114 ACCOUNTANTS AND AUDITORS 31521 TEACHERS AIDES, PARAPROFESSIGNAL 32505 LICENSED PRACTICAL NURSES 65026 COCKS, RESTAURANT 65038 FOOD PREPARATION WORKERS 49021 STOCK CLERKS, SALES FLOOR 65028 COCKS, INSTITUTION OR CAFETERIA 98999 ALL OTHER WELPER, LABCRER, MOVER 97111 BUS DRIVERS, SCHOOL 43002 INSURANCE SALES WORKERS 55305 RECEPTIONISTS, INFORMATION CLERKS 65014 DINING ROOM & BARTENDER HELPERS 51002 FIRST LINE SUPERVISORS, CLERICAL 65005 BARTENDERS 68005 HAIRDRESSERS AND COSMETCLOGISTS 43008 SALES AGENTS, REAL ESTATE 15011 PROPERTY, REAL ESTATE MANAGEMENT 73002 FALLERS AND BUCKERS 65032 COCKS, SPECIALTY FAST FOOD 15005 EDUCATION ADMINISTRATORE 93956 ALL OTHER ASSEMBLERS, FABRICATOR 87102 CARPENTERS 65012 COCKS, SPECIALTY FAST FOOD 15005 EDUCATION ADMINISTRATORE 93956 ALL OTHER RAND MATERIAL MOVERS 87102 CARPENTERS 65017 COUNTER ATTENDANTS 31399 ALL OTHER HAND MATERIAL MOVERS 87202 ELECTRICIANS 67002 MAIDS AND HOUSEKEEPING CLEANERS 31299 ALL OTHER POST SECONDARY TEACHER 8008 FIRST LINE SUPERV.: PRODUCTION 31302 TEACHERS, PRESCHOOL & KINDERGARTN 87502 PLUMBER, PIPEFITTER, STEAMFITTER 81002 FIRST LINE SUPERV.: PRODUCTION 31301 TEACHERS, SPECIAL EDUCATION 87502 PLUMBER, PIPEFITTER, STEAMFITTER 81002 FIRST LINE SUPERV.: PRODUCTION 31311 TEACHERS, SPECIAL EDUCATION	13603	17229	1333.1	1693.8	360.7
97101 TRUCK DRIVERS	11908	15031	962.4	1217.6	255.2
32502 REGISTERED NURSES	4595	7156	438.3	1057 0	243.8
31305 TEACHERS, ELEMENTARY	3203 4687	6146	741.5	972.4	230.9
19005 GENERAL MANAGERS AND TOP EXEC.	11032	13382	980.4	1185.5	205.1
49023 CASHIERS	8617	10702	803.5	1000.8	197.3
65008 WAITERS AND WAITRESSES	6727	8520 10100	693.6 775.2	935.1	150.9
55199 GENERAL SECRETARIES	5612	· 7194	539.2	678.6	139.4
68038 CHILD CARE WORKERS	5308	6623	453.2	569.9	116.7
93999 ALL OTHER HAND WORKERS	1601	1976	559.8	6/4.5 740.0	114.7
79014 GARDENERS AND GROUNDSKEEPERS	3637	2430 4586	428.1	537.8	109.7
2237 CEREDAL DEFICE CLEDKS	7083	8239	629.2	730.0	100.8
65041 COMB. FOOD PREPARATION, SERVICE	3686	4583	383.3	476.3	93.0
85132 MAINTENANCE REPAIRERS, GEN.UTIL.	3884	4823	341.0	445.7 342.0	84.7
21114 ACCOUNTANTS AND AUDITORS	3380 1637	2098	258.7	331.5	72.5
32505 LICENSED PRACTICAL NURSES	2352	3003	237.8	307.3	69.5
65026 COCKS, RESTAURANT	2389	3111	234.1	303.6	69.5
65038 FOOD PREPARATION WORKERS	2356	2893	274.0	336.0 77.7.3	64.0
49021 STOCK CLERKS, SALES FLOOR	3921 2070	4345 2474	295.5	354.1	58.6
OROGO ALL OTHER HELDER LARCRER, MOVER	3175	3588	400.9	458.5	57.6
97111 BUS DRIVERS, SCHOOL	1743	2153	223.6	279.7	56.1
43002 INSURANCE SALES WORKERS	1949	2572	159.7	210.8 312.4	51.1 50.0
55305 RECEPTIONISTS, INFORMATION CLERKS	2809 14 3 4	1898	153.2	202.6	49.4
SIGNO FIRST LINE SUPERVISORS CLERICAL	3142	3729	265.7	314.8	49.1
65005 BARTENDERS	1867	2336	188.6	236.1	47.5
68005 HAIRDRESSERS AND COSMETCLOGISTS	4206	4778	351.2	398.4	41.2 47.1
43008 SALES AGENTS, REAL ESTATE	1/54	2215	118 5	165.1	46.6
77000 EALLEDE AND BUCKEDS	2059	2608	251.1	297.2	46.1
65032 COCKS, SPECIALTY FAST FOOD	1776	2213	185.5	231.2	45.7
15005 EDUCATION ADMINISTRATORS	1073	1385	155.0	199.9	44.9
93956 ALL OTHER ASSEMBLERS, FABRICATOR	2890 1730	2163	177.9	222.0	44.1
871UZ CARPENTERS	1576	1965	171.5	214.4	42.9
31399 ALL OTHER TEACHERS, INSTRUCTORS	906	1162	140.0	179.4	39.4
66002 DENTAL ASSISTANTS	729	1058	85.4	123.3	38.4 38.2
98799 ALL OTHER HAND MATERIAL MOVERS	2186 1645	2002	151.3	189.7	37.9
87202 ELECTRICIANS A7002 MAIOS AND HOWISEKEEPING CLEANERS	2222	2673	199.7	237.0	37.3
31299 ALL OTHER POST SECONDARY TEACHER	825	1059	130.4	167.3	36.9
81008 FIRST LINE SUPERV .: PRODUCTION	1708	2130	205.6	154 4	36.2
31302 TEACHERS, PRESCHOOL & KINDERGARIN	1424	1855	124.7	160.3	35.5
87402 PAINTERS AND PAPERHANGERS	1449	1888	114.7	148.7	34.0
41002 FIRST LINE SUPERVISORS, SALES	2084	2465	177.1	210.4	33.3
31311 TEACHERS, SPECIAL EDUCATION	744	955 3206	117.8	151.1 285.6	33.3 33.2
15026 FOOD SERVICE & LODGING MANAGERS	2893 1593	1993	252.4 129.0	161.6	32.5
85311 BUS, TRUCK, DIESEL ENG. MECHANIC 13002 FINANCIAL MANAGERS	2024	2398	182.1	213.0	30.9
25102 COMPUTER SYSTEMS ANALYSTS, EDP	667	1025			30.4
85302 AUTOMOTIVE MECHANICS	4009	4340		358.8 225.8	30.2 29.9
92308 SAWING MACHING OPERATOR/TENDER	864 645	994 840			29.9
31314 TEACHERS, VOCATIONAL EDUCATION 49008 SALES REPS.EXC.SCIENTIF & RETAIL	2693	3002			29.3
53905 TEACHER AIDES & EDUC. ASSISTANTS	618	802	94.6	122.8	28.2
13011 HARKETING, ADV., PUBLIC RELINGRS	1164	1517			25.1 25.1
55105 MEDICAL SECRETARIES	622 1020	872 1270			
61099 ALL OTHER SERVICE SUPERVISORS 49999 ALL OTHER SALES & RELATED OCC.	1313	1619		148.1	27.3
92998 ALL OTHER MACHINE OPERATORS	777	925	138.4	166.1	
85123 HILLWRIGHTS	405	540			
55308 TYPISTS	1407	1704	141.6	100.5	40.7



OES OCCLIPATIONAL CODE TITLE 65099 ALL OTHER FOOD SERVICE WORKERS 31317 INSTRUCTORS, NONVOCATIONAL EDUC. 32908 DENTAL HYGIENISTS 22126 ELECTRICAL & ELECTRONIC ENGINEER 65002 HOSTS & HOSTESSES: REST., LOUNGE 65035 COOKS, SHORT ORDER 98902 MACHINE FEEDERS AND OFFBEARERS 98902 MACHINE FEEDERS AND OFFBEARERS 98902 MAMD PACKERS AND PACKAGERS 59999 ALL OTHER CLERICAL & ADM.SUPPORT 19999 ALL OTHER MANAGERS & ADMINIST. 32102 PHYSICIANS AND SURGEONS 27108 PSTCHOLOGISTS 97956 OPERATING ENGINEERS 57305 POSTAL MAIL CARRIERS 73008 LOG HANDLING EQUIPMENT OPERATORS 73011 LOGGING TRACTOR OPERATORS 33902 LIBRARY ASSISTANTS & BOOKHOBILE 81002 FIRST LINE SUPERV.:MECH.& REPAIR 32911 MEDICAL RECORDS TECHN.& TECHNOL. 32308 PHYSICAL THERAPISTS 22135 MECHANICAL ENGINEERS 43021 TRAVEL AGENTS 22505 ELECTRICAL & ELECTRONIC TECHNS. 58028 TRAFFIC, SHIPPING, & REC. CLERKS 97805 SERVICE STATION ATTENDANTS 66005 MEDICAL ASSISTANTS 32105 DENTISTS 98905 VENICLE, EQUIPMENT CLEANERS 53302 INSURANCE ADJUSTERS, INVESTIGATOR 31216 ENGLISN & FOREIGN LANG, TEACHERS 32902 MED./CLINICAL LAB. TECHNOLOGISTS 63014 POLICE PATROL OFFICERS 65021 BAKERS, BREAD AND PASTRY 13014 ADMINISTRATIVE SERVICES MANAGER 56011 COMPUTER OPERATORS, EXC. PERIPH. 32517 PHARMACISTS 31210 SOCIAL SCIENCE TEACHERS 98312 HELPERS, CARPENTERS 83005 PRODUCTION INSPECTORS, GRADERS 835105 AUTOMOTIVE BODY, RELATED REPAIRER 33012 HELPERS, CARPENTERS 83013 SHEET METAL WORKERS 55102 LEGAL SECRETARIES 315102 LIBRARIANS, PROFESSIONAL 31321 INSTRUCTORS AND COACHES, SPORTS 65023 BUTCHERS AND MEAT CUTTERS 85119 ALL OTHER MACHINERY #=5MAMICS 21108 LOAN OFFICERS AND COACHES, SPORTS 65023 BUTCHERS AND MEAT CUTTERS 85119 ALL OTHER MACHINERY #=5MAMICS 21108 LOAN OFFICERS AND COACHES, SPORTS 65023 BUTCHERS AND MEAT CUTTERS 85119 ALL OTHER MACHINERY #=5MAMICS 21108 LOAN OFFICERS AND COACHES, SPORTS 65020 BUTCHERS AND MEAT CUTTERS 85119 ALL OTHER MACHINERY #=5MAMICS 21108 LOAN OFFICERS AND COACHES, SPORTS 65003 BUTCHERS, INSTITUTIONAL	1987 STATE ENP	STATE	1987 REGION EMP	REGION	CHANGE
65099 ALL OTHER FOOD SERVICE WORKERS	990	1245	101.0	127.8	26.8
31317 INSTRUCTORS, HONVOCATIONAL EDUC.	677 / 14	945 427	64.0 48.4	89.1 73.2	25.1 24.8
22126 ELECTRICAL & ELECTRONIC ENGINEER	1114	2127	37.6	62.3	24.7
65002 HOSTS & HOSTESSES: REST., LOUNGE	1074	1306	109.3	133.6	24.3
65035 COOKS, SHORT ORDER	1009	1243 1574	102.1 265.0	145.7 288.5	23.6
98502 MACHINE FEEDERS AND OFFBEAKERS	2094	2350	152.1	173.5	21.4
59999 ALL OTHER CLERICAL & ADM. SUPPORT	938	1102	113.5	134.3	20.8
19999 ALL OTHER MANAGERS & ADMINIST.	1619	1925	152.0	177.4	20.6 20.4
27108 PSYCHOLOGISTS	661	858	64.8	85.0	20.2
97956 OPERATING ENGINEERS -	1100	1391	85.4	105.4	20.0
57305 POSTAL MAIL CARRIERS	872	1080	85.1 78.3	103.0 98.1	19.9
73008 LOG HANDLING EQUIPMENT OPERATORS	404 473	584	87.9	107.5	19.6
53902 LIBRARY ASSISTANTS & BOOKHOBILE	433	562	62.2	81.6	19.4
81002 FIRST LINE SUPERV.: HECH. & REPAIR	1672	1951	128.1	37.4	19.5 18.8
32911 MEDICAL RECORDS TECHNIA TECHNOL.	197 255	445	24.9	43.4	18.5
22135 MECHANICAL ENGINEERS	850	1385	34.5	53.0	18.5
43021 TRAVEL AGENTS	358	627	25.7 /5.3	64.1 63.7	18.4 18.4
22505 ELECTRICAL & ELECTRONIC TECHNS.	1623	1849	144.4	162.7	18.3
97805 SERVICE STATION ATTENDANTS	1231	1425	106.5	124.7	18.2
66005 MEDICAL ASSISTANTS	323	485	35.5	53.6 12/-2	18.1 17.0
32105 DENTISTS	1197	1650	99.9	117.7	17.8
98905 VEHICLE, EQUIPMENT CLEANERS	766	968	63.6	81.2	17.6
53302 INSURANCE ADJUSTERS, INVESTIGATOR	412	609	36.3	53.4 76.7	17.1
31216 ENGLISH & FOREIGN LANG. TEACHERS	378 475	646	46.7	63.4	16.7
63014 POLICE PATROL OFFICERS	983	1140	95.8	111.7	15.9
65021 BAKERS, BREAD AND PASTRY	479	634	46.9	62.6	15.7
13014 ADMINISTRATIVE SERVICES MANAGER	806 665	891	47.5	63.0	15.5
32517 PHARMACISTS	687	827	71.3	86.7	15.4
31210 SOCIAL SCIENCE TEACHERS	339	435	53.6	68.9	15.3
98312 HELPERS, CARPENTERS	602 950	1305	91.3	106.2	15.2
85305 AUTOMOTIVE BODY, RELATED REPAIRER	967	1150	80.3	96.0	15.2
31218 ART, DRAMA, AND MUSIC TEACHERS	333	428	52.6	67.8	15.2
89132 SHEET METAL WORKERS	525 779	968	64.7	59.7	15.0
31502 LEGAL SECRETARIES 31502 LIRRARIANS, PROFESSIONAL	447	546	62.1	77.0	14.9
31321 INSTRUCTORS AND COACHES, SPORTS	577	703	69.2	84.0	14.8
65023 BUTCHERS AND MEAT CUITERS	676 878	1018	81.7	96.4	14.7
21108 LOAN OFFICERS AND COUNSELORS	859	1056	66.3	80.9	14.6
43014 SECURITIES, FINANCIAL SERV. SALES	538	735	39.6	54.1	14.5
21511 PERSONNEL, TRAIN., LABOR REL. SPEC	935 699	1193 855	69.9 63.3	84.3 77.7	14.4 14.4
61008 HOUSEKEEPERS, INSTITUTIONAL 68014 AMUSEMENT & RECREATION ATTENDANT	749	947	59.4	73.7	14.3
34035 ARTISTS AND RELATED WORKERS	660	857		62.8	14.3
21999 ALL OTHER MANAGEMENT SUPPORT OCC	1006	1220 515		90.2 47.8	14.2
66099 ALL OTHER HEALTH SERVICE WORKERS 79999 ALL OTHER AGRIC., FOREST, FISH.	359 1718	1914			14.1
49017 COUNTER AND RENTAL CLERKS	615	830	43.4	57.5	14.1
31117 GRADUATE ASSISTANTS, TEACHING	310	398 410		63.0 60.0	14.0 13.9
31514 VOCATIONAL & EDUC. COUNSELORS 32999 ALL OTHER HEALTH PROF., PARA, TECH	317 567	704			13.6
79002 FOREST AND CONSERVATION WORKERS	2039	2164	235.0	248.2	13.2
85902 HEATING, A/C, REFRIG. MECHANICS	683	857		64.3	
55311 TYPISTS, WORD PROCESSING EQUIP.	644 814	820 1032			
25105 COMPUTER PROGRAMMERS 92543 PRINTING PRESS MACHINE OPERATOR	162	202	54.6	66.6	12.0
63017 CORRECTION OFFICERS AND JAILERS	434	567			
97923 EXCAVATION LOADING MACHINE OPER.	501	669	34.3	45.9	11.0

OCCUPATIONAL CODE TITLE 81005 FIRST LINE SUPER: 15023 COMMUNICATION, TR. 85314 MOBILE HEAVY EQU 13005 PERSONNEL, TRAINI 31505 TECHNICAL ASSIST 92997 ALL OTHER MACHIN 32114 VETERINARIANS, V 63008 FIRE FIGHTERS 31202 LIFE SCIENCE TEA 15008 MEDICINE AND HEA 15014 INDUSTRIAL PRODU 27311 RECREATION WORK 49014 SALESPERSONS, PA 87711 HIGHWAY MAINTENA 55332 INTERVIEWING CLE 58008 PRODUCTION, EXPE 58008 PRODUCTION, EXPE 58017 CONSTRUCTION MAN 32314 SPEECH PATHOLOGI 24399 ALL OTHER PROF., 15017 CONSTRUCTION MAN 32314 SPEECH PATHOLOGI 24399 ALL OTHER PROF., 15017 CONSTRUCTION MAN 32314 SPEECH PATHOLOGI 24399 ALL OTHER FIRST 53123 AD JUSTMENT CLERN 32508 EMERGENCY MEDIC 22514 ORAFTERS 21902 COST ESTIMATORS 27302 SOCIAL WORKER, 27302 SOCIAL WORKER, 27302 COURT CLERKS 66017 PHYSICAL, CORRE 92314 WOOWORKING MAC 98705 REFUSE COLLECTO 22199 ALL OTHER PRECI 73005 CHOKE SETTERS 31224 MATHEMATICAL SC 33702 COURT CLERKS 66017 PHYSICAL, CORRE 92314 WOOWORKING MAC 98705 REFUSE COLLECTO 22199 ALL OTHER ENGIN 34011 REPORTERS AND C 87808 ROOFERS 34051 MUSICIANS, INST 22302 ARCHITECTS, EXC 34058 ATHLETE, COACH, 87311 CONCRETE AND TE 58005 DISPATCHERS: EX 24111 GEOLOGIST, GEOP 24599 ALL OTHER SCIEN 92726 LAUNORY, ORYCLE 68035 SOCIAL WORKERS, 92726 LAUNORY, ORYCLE 68035 SOCIAL WORKERS 92726 LAUNORY, ORYCLE 68035 SOCIAL WORKERS 92726 LAUNORY, ORYCLE 68035 SOCIAL WORKERS 927308 SOCIAL WORKERS 927308 SOCIAL WORKERS		1987 STATE EMP	STATE	1987 REGION EMP	REGION	CHANGE
81005 FIRST LINE SUPER	V.:CONST.EXTRAC.	721 453	879 770	53.6 59.1	6 5. 2 70.7	11.6 11.6
85314 MORTLE HEAVY FOLL	IPMENT MECHANICS	608	732	59.4	70,9	11.5
13005 PERSCHNEL, TRAINI	NG, LASOR REL.MGR	408	526	41.4	52.8	11.4
31505 TECHNICAL ASSIST	ANTS, LIBRARY	251	323	37.1	48.4 71.0	11.3
92997 ALL OTHER MACHIN	E SETTERS/OPER.	296 377	333 526	27.7	34.1	10.9
AZOUR FIRE FIGHTERS	EI. INSPECIONS	684	794	69.4	80.3	10.9
31202 LIFE SCIENCE TEA	CHERS	239	307	37.8	48.5	10.8
15008 MEDICINE AND HEA	LTH SERV. MGRS	383	492	37.1	47.5	10.4
15014 INDUSTRIAL PRODU	CTION MANAGERS	633 477	787 554	55.5	65.8	10.3
49014 SALESPERSONS PA	.RTS	1616	1740	126.5	136.8	10.3
87711 HIGHWAY MAINTENA	INCE WORKERS	1196	1306	108.6	118.7	10.1
55332 INTERVIEWING CLE	RKS, EX. PERSONNEL	230	327	25.7	35.7 44.0	10.0
58008 PRODUCTION, EXPE	DITING CLERKS	333 347	490 343	34.9 27.4	37.4	10.0
32921 RADIOLOGIC TECHA	PARAPORE TECHNI	938	1014	117.7	127.7	10.0
15017 CONSTRUCTION MAN	AGERS	538	651	43.4	53.2	9.8
32314 SPEECH PATHOLOGI	ISTS, AUDIOLOGISTS	210	292	25.8	35.4	9.6
24399 ALL OTHER LIFE S	CIENTISTS	260	323	\$/.3 6/.0	73.4	9.5
89311 CABINETMAKERS &	BENCH CARPENIERS	340 250	394 360	21.3	30.8	9.5
R109 ALL OTHER FIRST	LINE SUPERVISORS	561	695	40.9	50.4	9.5
53123 ADJUSTHENT CLERY	(S	397	503	34.6	44.1	9.5
32508 EMERGENCY MEDICA	AL TECHNICIANS	222	283	30.0	39.3	9.3
22514 DRAFTERS		865 (10	1140	45.U 35.Q	45.1	9.2
27702 COST ESTIMATORS	MED & PSYCHIATRIC	251	324	28.5	37.5	9.0
89999 ALL OTHER PRECIS	SION WORKERS	339	392	55.1	63.9	8.8
73005 CHOKE SETTERS		244	281	56.5	65.2	8.7
31224 HATHEHATICAL SC	LENCE TEACHERS	193	248 424	30.0	39.3 42.4	8.6
53702 COURT CLERKS	CT THEDADY ASSIST	135	215	14.0	22.5	8.5
92314 HOODHORKING MAC	HINE OPERATORS	246	282	55.5	63.8	8.3
98705 REFUSE COLLECTO	RS	447	547	37.9	46.2	8.3
22199 ALL OTHER ENGIN	EERS	740	1045	33.7 38.5	46.0	8.2
34011 REPORTERS AND C	CRRESPONDENTS	402 486	596	35.9	44.1	8.2
34051 MUSICIANS, INST	RUMENTAL	336	422	32.0	40.1	8.1
22302 ARCHITECTS, EXC	. LAND. & MARINE	649	768	42,1	50.2	8.1
34058 ATHLETE, COACH,	UMPIRE & RELATED	281	358	28.7	30.5 40.2	7.9
87311 CONCRETE AND TE	RRAZZO FINISHEKS	430 449	543 548	30.5	38.2	7.7
2/111 CEOLOGIST GEOR	HYSICIST OCEANOG	337	461	25.3	32.6	7.6
24599 ALL OTHER SCIEN	ICE TECHNICIANS	458	568	43.6	51.2	7.6
92914 PAPER GOODS HAD	HINE SETTER/OPER.	100	124	35.2	42.7	7.5
34023 PHOTOGRAPHERS	TANTUS MACH COSS	519 650	010 737	40.9 61.8	69.2	7.4
68035 SOCIAL WELFARE	SERVICE AIDES	147	198	19.5	26.9	7.3
27305 SOCIAL WORKERS,	EX. MED.& PSYCH.	545	606	51.7	59.0	7.3
27308 SOCIAL SERVICE	TECHNICIANS	213	267	24.5	31.8	7.3
53508 BILL AND ACCOUN	(T COLLECTORS	397	524	25.3 13.2		7.3 7.2
32302 RESPIRATORY THE		145 59	223 95			7.2
32928 SURGICAL TECHNI 13017 ENGINEER., MATI	H. NAT. SCI. MGR.	725	399		50.4	7.2
89505 CUSTOM TAILORS	AND SEWERS	469	554			7.2
93926 CUTTERS AND TR	IMMERS, HAND	134	165 • 446			7.1 7.0
97938 GRADER, DOZER, 97899 ALL OTHER TRANS	SCHAPER CHERATURS	364 120	137		42.4	7.3
85328 SMALL ENGINE S	PECIALISTS	370	438		38.5	7.0
22121 CIVIL ENGINEER	S, INCL. TRAFFIC	585	694	44.3		6.9
89108 MACHINISTS		725	886			
92311 WOODWORKING MA	CHINE SETTER/OPER.	197 254	226 429			
85717 ELECTRONICS RE 15002 POSTMASTERS, M	raixeko, COPM. alnu. Ali Superintendent	288	357			
92965 CRUSHING & MIX	ING MACHINE OPER.	421	511	37.2	43.8	6.6
89399 ALL OTHER PREC	ISION WOODWORKERS	184	212	42.4	49.0	6.6





OES OCCUPATIONAL CODE TITLE 89921 DENTAL LABORATORY TECHNICIANS 67099 ALL OTHER CLEAN, BUILDING SERVICE 87708 PAVING, SURFACING, TAMPING 63047 GUARDS AND WATCH GUARDS 97108 BUS DRIVERS 97989 ALL OTHER TRANSP., MAT.MOVING OPR 28305 PARALEGAL PERSONNEL 66011 HOME HEALTH A 10ES 21308 PURCHASING AGENT EX.WHO/RET/FARM 98102 MECHANIC AND REPAIRER HELPERS 85953 TIRE REPAIRERS AND CHANGERS 21102 UNDERWRITERS 55335 CUSTOMER SERVICE REPS, UTILITIES 92974 PACKAGING & FILLING MACHINE OPER 32917 RADIOLOGIC TECHNOLOGISTS 34002 WRITERS AND EDITORS 91714 STRUCTURAL METAL FABRICATORS 32905 MED./CLINICAL LAB. TECHNICIANS 71005 FARM MANAGERS 31114 NURSING INSTRUCTORS 58002 DISPATCHER:POLICE, FIRE, AMBULANCE 34017 ANNOUNCERS, RADIO AND TV 77017 ANIMAL CARETAKERS, EXCEPT FARM 63032 SHERIFFS AND DEPUTY SHERIFFS 43011 REAL ESTATE APPRAISERS 43012 TELLERS 89111 TOOL GRINDERS, FILLERS, SHARPENERS 57308 POSTAL SERVICE CLERKS 34038 DESIGNERS, EXC. INTERIOR DESIGN. 49005 SALES REPS, SCIENTIF.PROD.EXC.RET 87999 ALL OTHER CONSTR. & EXTRACTIVE 32521 DIETITIANS AND NUTRITIONISTS 34008 PUBLIC RELATIONS SPECIALISTS 85**C3 ELECTRICAL POMERLINE INSTAL/RPR. 13CC8 PURCHASING MANAGERS 24308 BIOLOGICAL SCIENTISTS 61005 POLICE AND DETECTIVE SUPERVISORS 65011 FOOD SERVERS, CUISIDE 31212 HEALTH SPECIALTIES TEACHERS 19002 PUBLIC ADMIN., LEG., GEN. ADMIN. 92926 LOW PRESSURE BOILER OPERATOR 92923 FURNACE, KILN, OVEN, KETTLE OPER. 560099 ALL OTHER FINANCIAL SPECIALISTS 57102 SWITCHBOARD OPERATORS 57103 ALL OTHER METALSPLANCH.SET/OPS 57104 ALL OTHER METALSPLANCH.	1987 STATE EMP	2000 STATE EMP	1987 REGION EMP	2000 REGION EMP	CHANGE
89921 DENTAL LABORATORY TECHNICIANS	170	237	17.6	24.2	6.6
67099 ALL OTHER CLEAN, BUILDING SERVICE	471 700	538	38.1	44.6	6.5
87708 PAVING, SURFACING, TAMPING	377 035	1190	61.2	67.6	6.4
97108 RUS DRIVERS	329	428	19.9	26.2	6.3
97989 ALL OTHER TRANSP., MAT. MOVING OPR	452	511	35. <u>9</u>	42.2	6.3
28305 PARALEGAL PERSONNEL	125	221	8.7	15.0	6.3
66011 HOME HEALTH AIDES	217 64 5	212 782	20 . / 50 . 6	20.0 56.6	6.0
98102 MECHANIC AND REPAIRER HELPERS	446	524	36.1	42.0	5.9
85953 TIRE REPAIRERS AND CHANGERS	573	640	49.9	55.8	5.9
21102 UNDERWRITERS	116	180	10.4	16.2 37.0	5.8
0007/ DACYACING & EILLING MACHINE OPER	360 1015	1133	40.4	46.1	5.7
32917 RADIOLOGIC TECHNOLOGISTS	161	221	15.1	20.8	5.7
34002 WRITERS AND EDITORS	283	344	27.0	32.7	5.7
91714 STRUCTURAL METAL FABRICATORS	104	126	26.8	32.4 22.7	2.6
32905 MED./CLINICAL LAB. TECHNICIANS	189 610	25U 1078	75	13 1	5.6
71003 FARM MANAGERS	129	167	18.9	24.4	5.5
58002 DISPATCHER: POLICE, FIRE, AMBULANCE	465	520	45.9	51.3	5.4
34017 ANHOUNCERS, RADIO AND TV	366	421	37.0	42.4	5.4
79017 ANIMAL CARETAKERS, EXCEPT FARM	503	577	31.8	37.2 57.2	2.4
63032 SHERIFFS AND DEPUTY SHERIFFS	200	166	23.8	29.1	5.3
43011 REAL ESTRIC APPRAISERS	335	417	26.3	31.6	5.3
53102 TELLERS	1729	1798	129.0	134.3	5.3
89111 TOOL GRINDERS, FILERS, SHARPENERS	169	198	33.4	38.7	5.3
57308 POSTAL SERVICE CLERKS	288	343	26.0	32.0	5.2
34038 DESIGNERS, EXC. INTERIOR DESIGN.	312 641	377 731	47.2	52.4	5.2
87999 ALL OTHER CONSTR. & EXTRACTIVE	201	252	29.8	35.0	5.2
32521 DIETITIANS AND NUTRITIONISTS	154	201	15.7	20.7	5.0
34008 PUBLIC RELATIONS SPECIALISTS	118	167	10.2	15.2	5.0
85 T3 ELECTRICAL POWERLINE INSTAL/RPR.	1007	1077	33.4 92.8	30.4 97.8	5.0
13CUS PURCHASING MANAGERS 2/308 RIDIOGICAL SCIENTISTS	299	342	30.8	35.6	4.8
61005 POLICE AND DETECTIVE SUPERVISORS	259	308	25.5	30.3	4.8
65011 FOOD SERVERS, OUTSIDE	191	244	17.5	22.3	4.8
31212 HEALTH SPECIALTIES TEACHERS	104	134	10.4 37 #	42.4	4.0
19002 PUBLIC ADMIN., LEG., GEN. ADMIN.	176	204	23.2	27.8	4.6
92923 FIRMACE KILN OVEN KETTLE OPER.	\$34	627	29.5	34.1	4.5
56099 ALL OTHER OFFICE MACH. OPERATORS	141	181	15.5	20.0	4.5
57102 SWITCHBOARD OPERATORS	619	708	39.9	44.4	4.5
32511 PHYSICIAN ASSISTANTS	1/5	117	27.1	27.5	4.5
92100 ALL GIMER RELIGIES WORKERS	123	182	9.0	13.3	4.3
21199 ALL OTHER FINANCIAL SPECIALISTS	267	312	23.2	27.4	4.2
53805 RESERVATION & TRANS.TICKET AGENT	272	342	16.9	21.1	4.2
85999 ALL OTHER MECHANICS, INSTALLERS	428	486	34.1 27.5	38.2 31.5	4.1 4.0
24305 AGRICULTURAL AND FOOD SCIENTISTS	308 236	359 297	17.9	21.9	4.0
85323 AIRCRAFT MECHANICS 53121 LOAN AND CREDIT CLERKS	512	567	38.4	42.4	4.3
- 95002 WATER & WASTE TREAT. PLANT OPER.	265	307	25.5	29.5	4.0
97951 CONVEYOR OPERATORS AND TENDERS	398	445	23.3	27.2	3.9
32305 OCCUPATIONAL THERAPISTS	69	115	6.1 33.8	10.0 37.7	3.9 3.9
53808 HOTEL DESK CLERKS 92953 COATING, PAINTING MACH. OPER.	353 139	394 174	26.5	30.3	3.8
97702 AIRCRAFT PILOTS, FLIGHT ENGINEERS	229	294	14.0	17.8	3.8
22128 INDUSTRIAL ENGINEERS, EXC. SAFETY	197	298	7.5	11.2	3.7
79011 GRADERS & SORTERS, AGRIC.PRODUCT	714	793	28.9		3.6 3.6
81011 FIRST LINE SUPERV.: TRANSPORT.	292 79	338 101	21.3 12.4	24.9 16.0	3.6 3.6
31204 CHEMISTRY TEACHERS 31222 ENGINEERING TEACHERS	81	104	12.8		3.6
89308 WOOD MACHINISTS	147	164	24.9	28.5	3.6
24302 FORESTER, CONSERVATION SCIENTIST	775	794	98.8		3.5
95099 ALL OTHER PLANT AND SYSTEM OCC.	233	288	17.5	21.0	3.5

	OCCUPATIONAL TITLE	1987	2000	1987	2000	
ŒS	OCCUPATIONAL	1987 STATE	CTATE	PECION	REGION	_
COOE	TITLE TAX EXAMINER, COLLECTOR, REV. AGENT SEWING MACH. OPER., NON-GARMENT CAPTAINS, WATER VESSEL PHARMACY ASSISTANTS CUITING AND SLICING SETTER/OPER. SALES AGENTS, BUSINESS SERVICES EARTH DRILLERS, EX. OIL & GAS ALL OTHER ENGINEERING TECHNICIAN ALL OTHER PHYS. SCIENCE TEACHERS PRIVATE DETECTIVE & INVESTIGATOR ALL OTHER SERVICE WORKERS BRICK MASONS COMPUTER SCIENCE TEACHERS COMPUTER SCIENCE TEACHERS COMPUTER PROGRAMMER AIDES BUDGET ANALYSTS VENDORS, SOLICITORS, DOOR-TO-DOOR STRUCTURAL METAL WORKERS PRECISION LITHOGRAPHERS & PHOTO. MESSENGERS PSYCHIATRIC AIDES BRCKERS, REAL ESTATE HEAD SAWYERS LOG GRADERS AND SCALERS DATA PROCESSING EQUIP. REPAIRERS LICENSE CLERKS PERIPHERAL EDP EQUIP. OPERATORS LINSTRUCTIONAL COROLNATORS PHYSICS TEACHERS WELFARE ELIGIBILITY WORKERS BILLING, COST AND RATE CLERKS BILLING, COST AND RATE CLERKS BHASERS RESSING MACH.OPERATOR, TEXTILES HANAGEMENT ANALYSTS FIRST LINE SUPERV.:HELP, LABORERS HOIST AND WINCH OPERATORS CHEMICAL ENGINEERS CHEMICAL ENGINEERS CHEMICAL ENGINEERS LOGIST AND SEALERS CHEMICAL ENGINEERS CHEMICAL ENGINEER AND ABSTRACTORS PAINTING AND COATING, HAND NUCLEAR TECHNICIAN, TECHNOLOGIST TITLE EXAMINERS AND ABSTRACTORS MECHANICACH. JOOL SETTER/OP., M/P MACHINE FORMING OPERATORS, M/P	EMP	EMP	EMP	EXP	CHANGE
			•=•	•. •		7.6
21914	TAX EXAMINER, COLLECTOR, REV. AGENT	257	2/1	24.2	4/./	3.5
92721	SEWING MACH. OPER., NCH-GARMENT	262	2]2	11.4	14.5	3.4
97502	CAPTAINS, WATER VESSEL	38	22	17.4	10.5	3.4
66025	PHARMACY ASSISTANTS	130	100	13.0	20.7	3.4
92941	CUTTING AND SLICING SETTER/OPER.	38	44	17.3	17 /	3.4
43017	SALES AGENTS, BUSINESS SERVICES	216	272	14.1	17.4	3.3
87902	EARTH DRILLERS, EX. OIL & GAS	299	430	10.4	57.0	٦٠٦
22599	ALL OTHER ENGINEERING TECHNICIAN	380	045	33.7	15 1	3.3
31209	ALL OTHER PHYS. SCIENCE TEACHERS	(3	7/0	11.9	13.1	3.4
63035	PRIVATE DETECTIVE & INVESTIGATOR	261	304	9.3	10.0	3.1
69999	ALL OTHER SERVICE WORKERS	294	339	15.3	19.4	3.1
87302	BRICK MASONS	200	243	- 13.3	16.7	7.1
31226	COMPUTER SCIENCE TEACHERS	(1	71	11.3	10.0	7.0
25108	COMPUTER PROGRAMMER AIDES	260	320	10.9	15.7	3.0
21117	BUDGET ANALYSTS	168	213	12.0	10.0	3.0
49026	VENDORS, SOLICITORS, DOOR-TO-DOOR	153	184	10.2	17.4	3.0
87814	STRUCTURAL METAL WORKERS	175	211	14.0	17.0	3.0
89708	PRECISION LITHOGRAPHERS & PHOTO.	106	140	9.2	12.2	3.0
57311	MESSENGERS	246	282	18.5	21.4	2.9
66014	PSYCHIATRIC AIDES	141	156	28.5	31.3	2.9
430c5	BRCKERS, REAL ESTATE	120	158	8.5	11.4	2.9
92305	HEAD SAWYERS	76	88	17.5	20.3	2.8
79008	LOG GRADERS AND SCALERS	80	92	18.5	21.3	2.3
85705	DATA PROCESSING EQUIP. REPAIRERS	216	288	11.3	14.6	2.8
53708	I LICENSE CLERKS	323	351	30.4	33.2	2.5
56014	PERIPHERAL EDP EQUIP. OPERATORS	98	142	6.8	9.5	2.1
31517	INSTRUCTIONAL COORDINATORS	97	116	13.0	15.7	4.7
92728	B PRESSING MACH.OPERATOR, TEXTILES	162	181	17.8	20.3	4.1
31206	5 PHYSICS TEACHERS	58	74	9.1	11.5	2.7
53502	2 WELFARE ELIGIBILITY WORKERS	283	313	24.1	20.8	2.7
55344	BILLING, COST AND RATE CLERKS	700	722	68.5	(1.1	2.0
68002	2 BARBERS	177	212	14.3	10.9	2.0
32317	7 RECREATION THERAPISTS	62	87	5.6	8.4	4.5
2190	5 MANAGEMENT ANALYSTS	299	328	24.0	20.5	2.5
81017	7 FIRST LINE SUPERV.:HELP, LABORERS	243	324	16.6	19.1	4.5
9794	1 HOIST AND WINCH OPERATORS	76	91	15.1	17.5	2.5
9230	2 SAWING MACHINE SETTER/OPERATOR	75	86	16.7	19.2	2.5
5801	7 WEIGHERS, MEASURERS, CHECKERS	114	135	13.5	15.9	2.4
2211	4 CHEMICAL ENGINEERS	282	392	5.7	8.1	2.4
5310	5 NEW ACCOUNTS CLERKS	266	299	19.9	22.3	2.4
6309	9 ALL OTHER PROTECTIVE SERVICE	202	229	17.5	20.0	2.4
5390	8 ADVERTISING CLERKS	72	100	6.4	8.8	2.4
9150	5 COMBINATION MACH.TOOL SET/OP,M/P	57	70	12.5	13.1	4.3
5710	8 CENTRAL OFFICE OPERATORS	136	159	13.9	10.4	2.3
9271	7 SEWING MACH. OPERATOR, GARMENT	245	316	2.9	8.2	2.3
2191	1 COMPLIANCE & ENFORCE, INSPECTORS	528	561	49.7	52.0	2.3
9394	7 PAINTING AND COATING, HAND	90	113	9.1	11.9	2.3
2450	& NUCLEAR TECHNICIAN, TECHNOLOGIST	244	222	7.0	10 /	2.3
2831	1 TITLE EXAMINERS AND ABSTRACTORS	- 96	122	3.1	10.4	2.3
2251	1 MECHANICAL ENGINEERING TECHN.	324	449	11.2	13.3	2.3
9110	2 SAWING MACH. JOOL SETTER/OP., M/P	53	62	15.4	17.7	2.3
9132	1 MACHINE FORMING OPERATORS, M/P	166	225	9.1	11.3	2.2
	6 CEMENTING & SLUING MACHINE OPER.	53	61	12.7	14.9	2.2
8512	B MACHINERY MAINTENANCE WORKERS	154	189		15.5	2.2
8780	2 INSULATION WORKERS	142	175	10.0	12.2	2.2
6802	1 USHERS, LOBBY ATT., TICKET TIKER	90	108		12.1	2.1
2250	2 LIVIL ENGINEERING TECHNICIANS	308	354		21.4	2.1
9294	A DITTING & SLICING MACHINE OPER.	83	96			2.0
6100	12 FIRE FIGHTING & PREVISUPERVISORS	133	154		15.2	2.3
9719	9 ALL STHER MOTOR VEHICLE OPERATOR	92	121			2.0
8571	IT ELECTR. HOME APPL. & POWER TOOL	146	163			2.3
8571	14 ELECTRIC MOTOR REPAIRERS	123	145			2.0
	7 COIN & VENDING MACHINE SERVICERS	285	329			2.3
7900	IS NURSERY WORKERS	192	275			1.9
553	14 PERSONNEL CLERKS, EXCEPT PAYROLL	341	377			1.9
2419	99 ALL OTHER PHYSICAL SCIENTISTS	149	177			1.3
	21 MARKING ILERKS	99	115			1.3
	11 POLICE DETECTIVES	179	196	17.0	18.5	1.5



### 83099 ALL OTHER INSPECTORS, TESTERS	OES CODE	OCCUPATIONAL TITLE	1987 STATE EMP	2000 STATE EMP	1987 REGION EMP	REGION	CHANGE
32523 DIETETIC TECHNICIANS & 76 6.1 6.0	539 939 891 859 271 221 859 311 340 939 580 950 390	14 REAL ESTATE CLERKS 11 GLAZIER, MANUFACTURING 17 PRECISION LAYOUT WORKERS, METAL 28 MECHANICAL CONTROL INSTAL.& REPR 99 ALL OTHER SOCIAL SCIENTISTS 32 SAFETY ENGINEERS, EXCEPT MINING 05 PRECISION INSTRUMENT REPAIRERS 11 LECTURERS 41 INTERIOR DESIGNERS 53 GRINDING AND POLISHING, MAND 126 ORDER FILLERS, SALES 121 POWER GENERATING PLANT OPERATOR 102 AIR TRAFFIC CONTROLLERS 103 ECONOMISTS, MARKET ANALYSTS	89 21 22 100 66 133 92 101 68 37 490 87 95	102 24 26 111 73 171 108 110 75 45 506 98 101 123	9.0 6.6 6.0 7.1 7.4 5.3 6.7 9.8 8.6 38.5 5.8 11.5 5.3	10.0 7.5 6.9 8.0 8.3 6.2 7.6 9.5 6.1 39.2 6.5 12.2 16.0	1.0 0.9 0.9 0.9 0.9 0.9 0.9 0.7 0.7

OES CODE	OCCUPATIONAL TITLE	1987 STATE EMP	STATE	REGION	REGION	CHANGE
	SURVEYING AND MAPPING SCIENTISTS FUNERAL DIRECTORS AND MORTICIANS ALL OTHER TIMBER CUTTING WORKERS FILE CLERKS ALL OTHER MATHEMATICAL SCIENTIST BROADCAST TECHNICIANS SLAUGHTERERS AND BUTCHERS FARM & HOME MANAGEMENT ADVISORS MEDICAL SCIENTISTS GLAZIERS BAGGAGE PORTERS AND BELLHOPS MACHINERY MECHANICS: PLANT TRANSPORTATION INSPECTORS CRIMINAL INVESTIGATORS, FEDERAL FISH AND GAME WARDENS RAILROAD BRAKE, SIGNAL, SWITCH PEST CONTROLLERS AND ASSISTANTS HOME ENTERTAINMENT EQ. REPAIRERS PROCUREMENT CLERKS LOCOMOTIVE ENGINEERS UCCOMOTIVE ENGINEERS WHOLESALE, RETAIL BUYERS, EX.FARM MOTORCYCLE REPAIRERS TYPESETTING MACH. OPERATOR/TEND. NUCLEAR ENGINEERS LETTERPRESS SETTER/OPERATOR TELEPH. STATION INSTALL.& REPAIR METER READERS, UTILITIES ORDER CLERKS: MATERIALS, SERVICE OPTICIANS, DISPENSING & MEASUR. OPTOMETRISTS INSURANCE POLICY PROCESS. CLERKS TELEPHONE & CABLE TV INSTAL/RPR. PRECISION COMPOSITOR, TYPESETTER FARM EQUIPMENT MECHANICS STOCK CLERKS: STOCKROOM OR WAREH. STATISTICAL CLERKS PAYROLL AND TIMEKEEPING CLERKS TOATA ENTRY KEYERS, EX. COMPOSING BOCKKEEPING & ACCOUNTING CLERKS TINDUSTRIAL TRUCK & TRACTOR OPER. FARM WORKERS	119 82 47 880 98 60 658 208 74 312 79 111 126 42 92 374 115 287 129 155 103 1016 776 180 161 492				CHANGE 0.7 0.6 0.6 0.5 0.5 0.5 0.7 0.4 0.3 0.3 0.3 0.2 0.2 0.1 0.1 0.1 0.1 0.5 -0.5
92515 85726 58014 553214 32108 53314 85702 85321 55326 5534 5530 5601 55333 9794 7400	LETTERPRESS SETTER/OPERATOR TELEPH. STATION INSTALL. REPAIR METER READERS, UTILITIES ORDER CLERKS: MATERIALS, SERVICE OPTICIANS, DISPENSING & MEASUR. OPTOMETRISTS INSURANCE POLICY PROCESS. CLERKS TELEPHONE & CABLE TV INSTAL/RPR. PRECISION COMPOSITOR, TYPESETTER FARM EQUIPMENT MECHANICS STOCK CLERKS:STOCKROOM OR WAREH. STATISTICAL CLERKS PAYROLL AND TIMEKEEPING CLERKS STATISTICAL TIMEKEEPING CLERKS STATISTICAL TIMEKEEPING CLERKS STENGGRAPHERS TO DATA ENTRY KEYERS, EX. COMPOSING BOCKKEEPING & ACCOUNTING CLERKS INDUSTRIAL TRUCK & TRACTOR OPER.	225 129 174 548 312 187 508 558 168 884 1711 140 402 218 740 9250 1989 9543	215 121 150 548 286 154 479 538 136 877 1676 94 332 131 548 8872 1515	19.7 12.8 12.9 41.3 33.1 16.4 43.8 53.9 150.2 11.5 34.6 190.7 270.8 368.0	18.9 11.9 11.5 39.5 31.2 41.6 51.5 11.6 53.3 146.2 7.3 27.5 11.5 41.1 770.3 196.0 251.3	-0.8 -0.9 -1.8 -1.9 -2.2 -2.4 -2.4 -2.5 -4.0 -4.2 -7.1 -8.3 -74.3 -74.3

		1987	2000	1987	2000	
OE S	OCCUPATIONAL	STATE	STATE	REGION	REGION	
CCOE	OCCUPATIONAL TITLE	EMP	EMP	1987 REGION EMP	EMP	CHANGE
49011	SALESPERSONS, RETAIL	13603	17229	5202.3	6582.3	1380.0
97101	TRUCK DRIVERS	11908	15031	5053.7	6411.4	1357.7
19005	GENERAL MANAGERS AND TOP EXEC.	11032	13382	4588.7	5573.1	984.4
32502	REGISTERED NURSES	4595	7156	1798.4	2776.0	977.6
40023	CASHIERS	8617	10702	3349.2	4173.5	824 3
45008	UA!TERS AND UAITDECCEC	6777	8520	2423 7	3334 5	710 8
55100	CENEDAL CECOETABLEC	#777	10100	7780 2	4092 7	703.5
2001	CARREAL SECKETARIES	7970	5/79	3309.2	2071 0	(103.3
(7005	MAKUENERS AND UKOUNUSKEEPERS	2027	3434	1419.3	2031.7	012.0
0/003	JANTIORS AND CLEANERS, EXC.MAIDS	3614	7194	2010.3	2393.0	3//.1
22126	ELECTRICAL & ELECTRONIC ENGINEER	1114	2127	5/4.3	1135.9	561.6
68038	CHILD CARE WORKERS	5308	6623	21/1.9	2/08.5	536.6
31305	TEACHERS, ELEMENTARY	5203	6680	1684.5	2163.2	4/8.4
31308	TEACHERS, SECONDARY SCHOOL	4687	6146	1517.7	1990.0	472.3
22505	ELECTRICAL & ELECTRONIC TECHNS.	1026	1838	526.2	991.2	465.0
55347	GENERAL OFFICE CLERKS	7083	8239	2876.9	3337.2	460.3
21114	ACCOUNTANTS AND AUDITORS	3380	4523	1372.2	1830.1	457.9
93956	ALL OTHER ASSEMBLERS, FABRICATOR	2890	3644	1585.0	2034.6	449.6
65041	COMB FOOD PREPARATION SERVICE	3484	4583	1484.3	1846.3	362.0
85132	MAINTENANCE DEDAIDEDS CEN HTTI	3887	4823	1442 5	1790 8	3/8 3
44008	WIDCING AIDES AND CODED ICE	3407	/584	1/27 2	1767 7	3/0.5
/ 7003	THE HOADER CALES TWO CAREFFEE	3077	4700	022 5	121/ 0	202 /
43004	COOKE DESTAURANT	1747	23/2	922.3	1214.7	296.4
05020	COOKS, RESTAURANT	2389	3111	931.3	1213.0	284.3
15011	PROPERTY, REAL ESTATE MANAGEMENT	1590	2215	668.8	930.5	261.7
43008	SALES AGENTS, REAL ESTATE	1754	2378	730.0	989.6	259.6
32505	LICENSED PRACTICAL NURSES	2352	3003	909.7	1162.8	253.1
51002	FIRST LINE SUPERVISORS, CLERICAL	3142	3729	1287.4	1531.2	243.8
71005	FARM MANAGERS	610	1078	307.1	550.6	243.5
22135	MECHANICAL ENGINEERS	850	1385	347.7	587.7	240.0
68005	HAIRDRESSERS AND COSMETOLOGISTS	4206	4778	1737.0	1973.1	236.1
49021	STOCK CLERKS SALES FLOOR	3921	4526	1518.6	1753.0	234.4
73002	CALLEDS AND BUCKEDS	2050	2608	802.2	1026.4	224 2
81008	E FIRST I INC CURENT . DOCUMETION	1708	2130	425.5	820 8	204 3
45075	FIRST CIRC SCHERY.; PRODUCTION	2754	2907	944 7	1045 3	100.0
02020	POOU PREPARATION WORKERS	2330	2093	11/7.0	174/ 3	197.0
22202	RECEPTIONISTS, INFORMATION CLERKS	2009	3290	707.0	1304.2	197.6
83005	PRODUCTION INSPECTORS, GRADERS	950	1305	386.5	279.3	192.0
87402	PAINTERS AND PAPERHANGERS	1449	1888	596.4	779.3	182.9
65005	BARTENDERS	1867	2336	724.8	907.6	182.8
65014	DINING ROOM & BARTENDER HELPERS	1436	1898	553.1	734.9	181.8
87202	2 ELECTRICIANS	1645	2092	635.2	816.9	181.7
8750	PLUMBER, PIPEFITTER, STEAMFITTER	1424	1855	577.7	<i>7</i> 58.1	180.4
65032	2 COOKS, SPECIALTY FAST FOOD	1776	2213	720.7	897.9	177.2
6501	CONTER ATTENDANTS	1576	1965	649.0	812.3	163.3
1300	PETHANCIAL MANAGERS	2024	2398	870.8	1032.1	161.3
08700	ALL OTHER HAND MATERIAL MOVEDS	2184	2578	811.7	972.6	160.9
6700	NATION AND MONICEPEEDING CLEANEDS	2222	2673	662.0	815 5	153 5
/100	2 MAIDS AND NOOSEKEEPING CLEANERS	208/	2/45	810 4	071.3	151.7
6740	2 FIRST LINE SUPERATSORS, SALES	4770	2403	417.0	7/1.3	151.7
0710	CARPENIERS	1730	2103	1475 1	1706 6	151.6
2230	SALESPERSONS, RETAIL TRUCK DRIVERS GENERAL MANAGERS AND TOP EXEC. REGISTERED NURSES CASHIERS WAITERS AND WAITRESSES GENERAL SECRETARIES GARDENERS AND GROUNDSKEEPERS JANITORS AND CLEAMERS, EXC.MAIDS ELECTRICAL & ELECTRONIC ENGINEER CHILD CARE WORKERS TEACHERS, ELEMENTARY TEACHERS, SECOMDARY SCHOOL ELECTRICAL & ELECTRONIC TECHNS. GENERAL OFFICE CLERKS ACCOUNTANTS AND AUDITORS ALL OTHER ASSEMBLERS, FABRICATOR COMB. FOOD PREPARATION, SERVICE MAINTENANCE REPAIRERS, GEN.UTIL. HURSING AIDES AND ORDERLIES INSURANCE SALES WORKERS COOKS, RESTAURANT PROPERTY, REAL ESTATE MANAGEMENT SALES AGENTS, REAL ESTATE LICENSED PRACTICAL NURSES FIRST LINE SUPERVISORS, CLERICAL FARM MANAGERS HAIRDRESSERS AND COSMETOLOGISTS STOCK CLERKS, SALES FLOOR FALLERS AND BUCKERS FIRST LINE SUPERVISORS, GRADERS FALLERS AND BUCKERS FRECEPTIONISTS, INFORMATION CLERKS PRODUCTION INSPECTORS, GRADERS PAINTERS AND PAPERHANGERS BECEPTIONISTS, INFORMATION CLERKS PRODUCTION INSPECTORS, GRADERS PAINTERS AND PAPERHANGERS BARTENDERS OINING ROOM & BARTENDER HELPERS ELECTRICIANS PLUMBER, PIPEFITTER, STEAMFITTER COOKS, SPECIALTY FAST FOOD COUNTER ATTENOANTS FINANCIAL MANAGERS ALL OTHER HAND MATERIAL MOVERS ALL OTHER HAND MATERIAL MOVERS ALL OTHER HAND MATERIAL MOVERS CHAIN CALL MANAGERS ALL OTHER HAND MATERIAL MOVERS ALL OTHER HAND MATERIAL MOVERS CHAIN CALL MANAGERS ALL OTHER HAND MATERIAL MOVERS CHAIN CALL MANAGERS ALL OTHER HAND MATERIAL MOVERS CHAINS AND HOUSEKEPING CLEANERS CHERS ALIOS, PARAPROFESSIONAL HARKETING, ADV., PUBLIC REL.MGRS ALL OTHER HELPER, LABORER, MOVER	4009	4340	1033.1	1/03.3	120.4
3152	TEACHERS AIDES, PARAPROFESSIONAL	1037	2098	532.8	002.0	149.2
9711	1 BUS DRIVERS, SCHOOL	1743	2153	650.4	797.9	147.5
1301	1 MARKETING, ADV., PUBLIC REL.MGRS	1164	1517	453.6	597.3	143.7
9899	9 ALL OTHER HELPER, LABORER, MOVER	3175	3588	1125.4	1268.8	143.4
2510	2 COMPUTER SYSTEMS ANALYSTS, EDP	667	1028	278.0	421.1	143.1
8531	1 BUS, TRUCK, DIESEL ENG. MECHANIC	1593	1993	629.9	772.6	142.7
	8 COOKS, INSTITUTION OR CAFETERIA	2070	2474	722.0	862.7	140.7
	4 WELDERS AND CUTTERS	1329	1650	610.5	749.6	139.1
	2 DENTAL ASSISTANTS	729	1058	295.5	428.5	133.0
	9 ALL OTHER ENGINEERS	740	1045	281.9	414.9	133.0
		2693	3002	1119.1	1246.1	127.0
	8 SALES REPS.EXC.SCIENTIF & RETAIL		1925			124.6
	9 ALL OTHER MANAGERS & ADMINIST.	1619		666.9	791.5	
	8 TYPISTS	1407	1704	603.3	726.7	123.4
	2 FIRST LINE SUPERV.: MECH.& REPAIR	1672	1951	681.0	803.4	122.4
	9 ALL OTHER SALES & RELATED OCC.	1313	1619	504.1	625.6	121.5
2251	4 DRAFTERS	865	1140	344.9	465.2	120.3
4302	1 TRAVEL AGENTS	358	627	158.2	278.2	120.0
	6 FOOD SERVICE & LODGING MANAGERS	2893	3206	1148.1	1256.4	118.3
	2 LEGAL SECRETARIES	729	968	360.3	478.6	118.3
	1 PERSONNEL, TRAIN., LABOR REL. SPEC	935	1193	417.3	529.0	111.7
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		1987	2000	1987	2000	
0ES	OCCUPATIONAL	STATE	CTATE	DECION	REGION	CHANCE
CODE	TITLE	EMP	EMP	EMP	EMP	CHANGE
45,000	ALL OTHER FOOD SERVICE WORKERS INSTRUCTORS, NONVOCATIONAL EDUC. EDUCATION ADMINISTRATORS SECURITIES, FINANCIAL SERV.SALES MEDICAL SECRETARIES TRAFFIC, SHIPPING, & REC. CLERKS ALL OTHER HAND WORKERS INSURANCE ADJUSTERS, INVESTIGATOR HAND PACKERS AND PACKAGERS COOKS, SHORT ORDER ALL OTHER SERVICE SUPERVISORS COOKS, SHORT ORDER ALL OTHER SERVICE SUPERVISORS COOKS, SHORT ORDER ALL OTHER SERVICE SUPERVISORS COURS AND WATCH GUARDS CHOSTS & HOSTESSES: REST., LOUNGE ALON OFFICERS AND COUNSELORS CHOSTS & HOSTESSES: REST., LOUNGE COMPUTER OPERATORS, EXC. PERIPH. COMPUTER OPERATORS, EXC. PERIPH. COMPUTER OPERATORS, EXC. PERIPH. COUNTER AND RENTAL CLERKS COMPUTER PROGRAMMERS COMPUTER AND RENTAL CLERKS COMPUTER AND RENTAL CLERKS COMPUTER PROGRAMMERS PSYCHOLOGISTS COUNTER AND RELATED WORKERS ALL OTHER TEACHERS, INSTRUCTORS COMPUTER PROGRAMMERS PRODUCTION, EXPEDITING CLERKS CHEATING, A/C, REFRIG. MECHANICS FRISTS AND RELATED WORKERS ALL OTHER MANAGENETT SUPPORT OCC AMUSEMENT & RECREATION ATTENDANT AUTOMOTIVE BOOY, RELATED REPAIRER HEDICAL RECORDS TECHN.& TECHNOL. CHEMISTS, EXCEPT BIOCHEMISTS COPERATING ENGINEERS INDUSTRIAL PRODUCTION MANAGERS INDUSTRIAL PRODUCTION MANAGERS ALL OTHER POST SECONDARY TEACHER PHYSICAL THERAPISTS CHEMISTS, WORD PROCESSING EQUIP. SERVICE STATION ATTENDANTS THE CHANICAL ENGINEERING TECHN. THE COOK OFT.	000	1245	406.8	516.6	109.8
31317	INSTRUCTORS MONVOCATIONAL EDUC.	677	945	273.3	382.2	108.9
15005	EDUCATION ADMINISTRATORS	1073	1385	371.6	479.3	107.7
43014	SECURITIES, FINANCIAL SERV.SALES	538	73 5	295.4	401.0	105.6
55105	MEDICAL SECRETARIES	622	872	248.6	348.7	100.1
58028	TRAFFIC, SHIPPING, & REC. CLERKS	1623	1849	676.1	(/).0	99.3
93999	ALL OTHER HAND WORKERS	1601	1976	208 0	314.1 306.2	97.7
53302	INSURANCE ADJUSTERS, INVESTIGATOR	2006	2350	741 R	838.1	96.3
98902	HAND PACKERS AND PACKAGERS	1009	1243	404.1	499.3	95.2
61000	ALL OTHER SERVICE SUPERVISORS	1020	1270	372.6	467.0	94.4
43047	CLIARDS AND WATCH GUARDS	935	1190	342.4	434.7	92.3
65002	HOSTS & HOSTESSES: REST., LOUNGE	1074	1306	404.4	496.2	91.8
21108	LOAN OFFICERS AND COUNSELORS	859	1056	405.8	497.2	91.4
85717	F ELECTRONICS REPAIRERS, COMM.&IND.	254	429	121.3	414.4 420.7	91.1
89108	3 MACHINISTS	728	804	330.9	447.J	90.4
56011	COMPUTER OPERATORS, EXC. PERIPH.	900 744	041	314 1	403.2	89.1
9890:	VENICLE, EQUIPMENT CLEANERS	. 706	1037	285.9	373.9	88.0
57306	E DOCTAL MAIL C1001F2C	872	1080	357.5	443.0	85.5
4901	7 COUNTER AND RENTAL CLERKS	615	830	243.5	328.9	85.4
32908	R DENTAL HYGIENISTS	416	627	168.1	253.4	85.3
3139	ALL OTHER TEACHERS, INSTRUCTORS	906	1162	298.7	383.4	84.7
2510	5 COMPUTER PROGRAMMERS	814	1032	323.5	408.2	84.7
2710	8 PSYCHOLOGISTS	661	858	2/8./	360.6	81 7
1301	7 ENGINEER., MATH., NAT. SCI. MGR.	725	927	1/1 2	221 2	80.0
5800	8 PRODUCTION, EXPEDITING CLERKS	CCC 78A	857	290.9	370.4	79.5
8590	Z HEATING, A/C, KEPKIG. MECHANICS	660 660	857	266.0	345.2	79.2
2100	O ALL OTHER MANAGEMENT SUPPORT OCC	1006	1220	398.8	477.9	79.1
6801	4 AMUSEMENT & RECREATION ATTENDANT	749	947	282.8	361.3	78.5
8530	S AUTOMOTIVE BODY, RELATED REPAIRER	967	1150	404.0	482.3	78.3
3291	1 MEDICAL RECORDS TECHN.& TECHNOL.	197	401	75.3	151.9	/0.0 74 7
2410	5 CHEMISTS, EXCEPT BIOCHEMISTS	267	410	103.1	1/9.4	75.0
9795	6 OPERATING ENGINEERS	1100	1371	268.5	324 3	75.8
1501	4 INDUSTRIAL PRODUCTION MANAGERS	825	1059	267.3	342.9	75.6
3149	A VIT OTHER MOST SECONDARY TEACHER	255	445	101.5	176.1	74.6
7000	O ALL OTHER ACRIC FOREST FISH.	1718	1914	673.7	747.4	73.7
5531	1 TYPISTS WORD PROCESSING EQUIP.	644	820	263.2	334.0	70.8
9780	S SERVICE STATION ATTENDANTS	1231	1425	455.6	525.2	69.6
1301	4 ADMINISTRATIVE SERVICES MANAGER	806	978	318.4	387.6	69.2
3131	11 TEACHERS, SPECIAL EDUCATION	744	955	240.9	309.3	60.4 45.0
2130	08 PURCHASING AGENT EX.WHO/RET/FARH	645	782	293.1	250.0	65.5
3290	2 MED./CLINICAL LAB. TECHNOLOGISTS	4/5	640	1/3 5	208.4	65.1
2251	IT MECHANICAL ENGINEERING TECHN.	344 645	840	243.3	308.3	65.0
313	14 TEACHERS, VOCATIONAL EDUCATION	323	485	127.9	192.5	64.5
3210	TS DENTISTS	1197	1356	490.4	554.9	64.5
5390	DE TEACHER AIDES & EDUC. ASSISTANTS	618	802	215.5	280.0	64.5
650	21 BAKERS, BREAD AND PASTRY	479	634	197.5	261.5	64.1
7170	53 EXCHANGE FORDING INCOME.					
650	23 BUTCHERS AND HEAT CUTTERS	676	833	269.4	332.0	62.6 61.5
599	99 ALL OTHER CLERICAL & ADM. SUPPORT	938	1102 526	388.0 142.0	449.5 203.0	61.3
321	14 VETERINARIANS, VET. INSPECTORS	3 <i>7</i> 2 525	651	234.7	295.4	60.7
891	32 SHEET METAL WORKERS	434	567		260.2	60.1
200	17 CORRECTION OFFICERS AND JAILERS 02 FOREST AND CONSERVATION WORKERS	2039	2164	968.8	1028.5	59.3
የኛሁ የአስ	99 ALL OTHER HEALTH SERVICE WORKERS	359	515	137.2	196.0	
150	23 COMMUNICATION, TRANSP., UTIL. MGRS	653	779	291.1	348.5	57.4
931	14 ELECTRICAL, ELECTRONIC ASSEMBLER	300	381			
610	OB HOUSEKEEPERS, INSTITUTIONAL	699	855			
245	OS CHEMICAL TECHNICIANS, EXC. HEALTH	371	485			
983	12 HELPERS, CARPENTERS	508	763 3166			53.3
	OB LAWYERS	3080 1616	3146 1740			
490	114 SALESPERSONS, PARTS	567				
529 810	99 ALL OTHER HEALTH PROF., PARA, TECH 105 FIRST LINE SUPERV.: CONST.EXTRAC.	721				
010	And the standard of the standard truthings	'				

	OCCUPATIONAL .	1987	2000	1987	2000	
oes .	OCCUPATIONAL .	STATE	STATE	REGION	REGION	
CODE	INTERVIEWING CLERKS, EX.PERSONNEL POLICE PATROL OFFICERS PHYSICIANS AND SURGEONS DISPATCHERS: EXC. POL., FIRE, AMB. LOG HANDLING EQUIPMENT OPERATORS ALL OTHER FIRST LINE SUPERVISORS PHARMACISTS BUS DRIVERS BILL AND ACCOUNT COLLECTORS PERSONNEL, TRAINING, LABOR REL.MGR ARCHITECTS, EXC. LAND. & MARINE ADJUSTMENT CLERKS INSTRUCTORS AND COACHES, SPORTS CAMMERY WORKERS HOSBILE HEAVY EQUIPMENT MECHANICS REFUSE COLLECTORS CIVIL ENGINEERS, INCL. TRAFFIC ROOFERS CIVIL ENGINEERS COLLECTION CIVIL ENGINEERS COLLECTORS CONTRUCTION CONTRUCTORS CONTRUCTION CONTRUCTORS CONTRUCTION CONT	EMP	EMP	EMP	EMP	CHANGE

					4774 0	
55332	INTERVIEWING CLERKS, EX. PERSONNEL	230	327	123.6	1/4.0	31.4
63014	POLICE PATROL OFFICERS	983	1140	357.0	400.1	51.1 51.0
32102	PHYSICIANS AND SURGEONS	1555	1684	030.5	237 0	50.4
58005	DISPATCHERS: EXC. POL., FIRE, AMB.	449	568	180.9	210.0	/0.0
73008	LOG HANDLING EQUIPMENT OPERATORS	462	595	107.1	217.0	47.7
81099	ALL OTHER FIRST LINE SUPERVISORS	561	695	240.7	230.3 310.1	49.0
32517	PHARMACISTS	687	027	158 3	206.0	49.5
97108	BUS DRIVERS	329	420 52/	160.3	208.8	48.6
53508	BILL AND ACCOUNT COLLECTORS	397	524	158.8	207.0	48.2
13005	PERSONNEL, TRAINING, LABOR REL.MGR	408	748	241 3	300 3	48.0
22302	ARCHITECTS, EXC. LAND. & MARINE	047 307	503	167 8	215.5	47.7
53123	ADJUSTMENT CLERKS	37 <i>1</i> 577	703	217.8	264.9	47.1
31321	INSTRUCTORS AND COACHES, SPORTS	/173	4312	1406.5	1453.5	47.0
93935	CANNERT WORKERS	4113	732	256.1	303.1	47.0
82314	MORITE HEAVY ENGINEERS HECKANICS	447	547	103 1	239.6	46.5
90/03	NEFUSE CULLECTORS	SRS	694	259.0	305.4	46.4
22121	CIVIL ENGINEERS, INCL. IRAFFIC	486	506	199.6	245.0	45.4
0/000	NOTERS MAINTENANCE INDESES	1106	1306	518.8	563.9	45.1
0200	HILLOTUCO MACUIUS ODEDATODS	777	925	239.1	284.1	45.0
94770	F CINCY I THE CHOCOV - NEID IRODEDS	243	324	107.4	152.4	45.0
20700	FIRST LINE SUPERVITELF, LABORERS	125	221	58.7	103.7	45.0
26303	PARALEGAL PERSUNNEL	405	540	136.4	180.7	44.3
2/11/	O MILLWRIGHTS CENDUACICIST OCEANOG	337	461	136.8	181.0	44.2
02511	O OCCUPATION OF THE CONTRACT O	250	360	100.1	144.0	43.9
92214	COPPSE CITACONAPATO PRESS SETTER	244	994	294.1	337.8	43.7
92300	1 CONCRETE AND TERRATOR FINISHERS	436	545	173.2	216.5	43.3
7000	E MINGERA MUNDALES	192	275	92.1	135.1	43.0
1501	7 CONCERT WORKERS	538	651	212.6	255.4	42.8
1501	R MEDICINE AND HEALTH SERV. MGRS	383	492	159.5	201.6	42.1
5300	2 IRPARY ASSISTANCS & ROOKMOBILE	433	562	141.5	183.3	41.8
5780	S DESERVATION & TRANS TICKET AGENT	272	342	152.9	194.6	41.7
7000	S SALES REPS SCIENTIF, PROD. EXC.RET	641	731	263.3	304.6	41.3
3402	3 PHOTOGRAPHERS	519	618	212.3	252.8	40.5
7301	1 LOGGING TRACTOR OPERATORS	473	584	167.0	207.4	40.4
9170	5 WELDING MACHINE OPERATORS	166	227	109.1	149.3	40.2
9297	4 PACKAGING & FILLING MACHINE OPER	1015	1133	345.2	384.9	39.7
3401	1 REPORTERS AND CORRESPONDENTS	462	561	186.2	225.9	39.7
2190	2 COST ESTIMATORS	419	521	170.3	209.9	39.6
6300	8 FIRE FIGHTERS	684	794	247.1	286.0	38.9
3250	8 EMERGENCY MEDICAL TECHNICIANS	222	283	130.8	169.4	38.6
9850	2 MACHINE FEEDERS AND OFFBEARERS	1460	1574	501.5	540.1	38.6
2459	ALL OTHER SCIENCE TECHNICIANS	458	568	159.4	197.8	38.4
9770	2 AIRCRAFT PILOTS, FLIGHT ENGINEERS	229	294	130.8	168.8	38.0
8532	3 AIRCRAFT MECHANICS	236	297	140.0	1//.3	37.3
2212	28 INDUSTRIAL ENGINEERS, EXC. SAFETY	197	298	69.5	106.7	37.2
3292	21 RADIOLOGIC TECHNICIANS	267	363	105.2	142.2	37.0
8770	08 PAVING, SURFACING, TAMPING	399	488	102.0	250 4	36.6
8572	23 ELECTRICAL POWERLINE INSTAL/RPR.	498	579	223.3	477.7	30.3 75.7
3409	51 MUSICIANS, INSTRUMENTAL	336	422	137.0	172.3	35.3 3/.7
3121	16 ENGLISH & FOREIGN LANG. TEACHERS	378	485	122.4	157.1	34.7 34.4
				189.8	224.2	34.2
6303	35 PRIVATE DETECTIVE & INVESTIGATOR	261	362		123.2	33.3
	19 ALL OTHER MACHINERY MECHANICS	878	1018		259.4	32.9
5710	02 SWITCHBOARD OPERATORS	619	708		258.8 186.7	32.8
3150	02 LIBRARIANS, PROFESSIONAL	447	546			32.0
315	14 VOCATIONAL & EDUC. COUNSELORS	317	410			31.8
245	08 NUCLEAR TECHNICIAN, TECHNOLOGIST	244	335			31.5
979	38 GRADER, DOZER, SCRAPER OPERATORS	364	446			31.4
927	26 LAUNDRY, DRYCLEANING MACH. OPER.	659 446	737 5 24			31.4
981	02 MECHANIC AND REPAIRER HELPERS	135	215			
660	17 PHYSICAL, CORRECT.THERAPY ASSIST	339	435			
	10 SOCIAL SCIENCE TEACHERS	339	417			
430	23 SALES AGENTS, ADVERTISING	210	292			
	14 SPEECH PATHOLOGISTS, AUDIOLOGISTS	116	180			
	OZ UNDERWRITERS	1729				
221	OZ TELLERS	333	428			
3 , 2	18 ART, DRAMA, AND MUSIC TEACHERS	222	761			_

### CHANGE STATE CHANGE CHANGE CHANGE CHANGE	OES OCCUPATIONAL CODE TITLE	1987 STATE EMP	STATE	1987 REGION EMP	2000 REGION EMP	CHANGE
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FCCO SERVERS, CUTSIDE 65011 FCCO SERVERS, CUTSIDE 65011 FCCO SERVERS, CUTSIDE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 GSCO SERVERS, CUTSIDE 6505 DISPATCHER:POLICE, FIRE, AMBULANCE 6506 DISPATCHER:POLICE, FIRE, AMBULANCE 6507 SERVERS, CUTSIDE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6509 DISPATCHER:POLICE, FIRE, AMBULANCE 650 DISPATCHER:POLICE, FIRE,	39999 ALL OTHER PROF., PARAPROF., TECHH.	938 386	1014 456	422.5 165.5	453.0 195.5	30.5 30.0
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FCCO SERVERS, CUTSIDE 65011 FCCO SERVERS, CUTSIDE 65011 FCCO SERVERS, CUTSIDE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 GSCO SERVERS, CUTSIDE 6505 DISPATCHER:POLICE, FIRE, AMBULANCE 6506 DISPATCHER:POLICE, FIRE, AMBULANCE 6507 SERVERS, CUTSIDE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6509 DISPATCHER:POLICE, FIRE, AMBULANCE 650 DISPATCHER:POLICE, FIRE,	32302 RESPIRATORY THERAPISTS	145	223	54.8	84.1	29.3
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FCCO SERVERS, CUTSIDE 65011 FCCO SERVERS, CUTSIDE 65011 FCCO SERVERS, CUTSIDE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 GSCO SERVERS, CUTSIDE 6505 DISPATCHER:POLICE, FIRE, AMBULANCE 6506 DISPATCHER:POLICE, FIRE, AMBULANCE 6507 SERVERS, CUTSIDE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6509 DISPATCHER:POLICE, FIRE, AMBULANCE 650 DISPATCHER:POLICE, FIRE,	27302 SOCIAL WORKER, HED. & PSYCHIATRIC	251 262	324 315	107.4	187.8	29.1
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FOOD SERVERS, OUTSIDE 65011 FOOD SERVERS, OUTSIDE 65012 DISPATCHER:POLICE, FIRE, AMBULANCE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 B1.7 32521 DIETITIANS AND NUTRITIONISTS 154 201 62.4 81.1 18.7 21921 CLAIMS EXAMINERS, INSURANCE 50 89 23.5 8106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 174.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 174.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 175.8 175.8 175.8 175.8 175.8 175.8 175.8	43011 REAL ESTATE APPRAISERS	299	369	122.3	151.3	29.0
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FOOD SERVERS, OUTSIDE 65011 FOOD SERVERS, OUTSIDE 65012 DISPATCHER:POLICE, FIRE, AMBULANCE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 B1.7 32521 DIETITIANS AND NUTRITIONISTS 154 201 62.4 81.1 18.7 21921 CLAIMS EXAMINERS, INSURANCE 50 89 23.5 8106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 174.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 174.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 175.8 175.8 175.8 175.8 175.8 175.8 175.8	85953 TIRE REPAIRERS AND CHANGERS	573	640	222.6	251.6	29.0
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FOOD SERVERS, OUTSIDE 65011 FOOD SERVERS, OUTSIDE 65012 DISPATCHER:POLICE, FIRE, AMBULANCE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 B1.7 32521 DIETITIANS AND NUTRITIONISTS 154 201 62.4 81.1 18.7 21921 CLAIMS EXAMINERS, INSURANCE 50 89 23.5 8106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 174.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 174.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 175.8 175.8 175.8 175.8 175.8 175.8 175.8	13008 PURCHASING MANAGERS	1007	1077	393.7 115 1	422.0 144 N	28.9 28.9
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FOOD SERVERS, OUTSIDE 65011 FOOD SERVERS, OUTSIDE 65012 DISPATCHER:POLICE, FIRE, AMBULANCE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 B1.7 32521 DIETITIANS AND NUTRITIONISTS 154 201 62.4 81.1 18.7 21921 CLAIMS EXAMINERS, INSURANCE 50 89 23.5 8106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 174.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 174.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 175.8 175.8 175.8 175.8 175.8 175.8 175.8	33702 COURT CLERKS RAISS ATHLETE COACH UMPIRE & RELATED	281	358	102.5	131.1	28.6
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FOOD SERVERS, OUTSIDE 65011 FOOD SERVERS, OUTSIDE 65012 DISPATCHER:POLICE, FIRE, AMBULANCE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 B1.7 32521 DIETITIANS AND NUTRITIONISTS 154 201 62.4 81.1 18.7 21921 CLAIMS EXAMINERS, INSURANCE 50 89 23.5 8106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 174.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 174.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 175.8 175.8 175.8 175.8 175.8 175.8 175.8	27311 RECREATION WORKERS	477	554	168.1	196.6	28.5
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FOOD SERVERS, OUTSIDE 65011 FOOD SERVERS, OUTSIDE 65012 DISPATCHER:POLICE, FIRE, AMBULANCE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 B1.7 32521 DIETITIANS AND NUTRITIONISTS 154 201 62.4 81.1 18.7 21921 CLAIMS EXAMINERS, INSURANCE 50 89 23.5 8106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 174.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 174.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 175.8 175.8 175.8 175.8 175.8 175.8 175.8	31117 GRADUATE ASSISTANTS, TEACHING	310	398 757	100.4	146.5	20.3 28.4
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FOOD SERVERS, OUTSIDE 65011 FOOD SERVERS, OUTSIDE 65012 DISPATCHER:POLICE, FIRE, AMBULANCE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 B1.7 32521 DIETITIANS AND NUTRITIONISTS 154 201 62.4 81.1 18.7 21921 CLAIMS EXAMINERS, INSURANCE 50 89 23.5 8106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 174.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 174.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 175.8 175.8 175.8 175.8 175.8 175.8 175.8	15002 POSTMASTERS, MAIL SUPERINTENDENT	200 245	316	95.1	123.3	28.2
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FOOD SERVERS, OUTSIDE 65011 FOOD SERVERS, OUTSIDE 65012 DISPATCHER:POLICE, FIRE, AMBULANCE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 B1.7 32521 DIETITIANS AND NUTRITIONISTS 154 201 62.4 81.1 18.7 21921 CLAIMS EXAMINERS, INSURANCE 50 89 23.5 8106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 174.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 174.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 175.8 175.8 175.8 175.8 175.8 175.8 175.8	32928 SURGICAL TECHNICIANS	59	95	45.7	73.7	28.0
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FOOD SERVERS, OUTSIDE 65011 FOOD SERVERS, OUTSIDE 65012 DISPATCHER:POLICE, FIRE, AMBULANCE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 B1.7 32521 DIETITIANS AND NUTRITIONISTS 154 201 62.4 81.1 18.7 21921 CLAIMS EXAMINERS, INSURANCE 50 89 23.5 8106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 174.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 174.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 175.8 175.8 175.8 175.8 175.8 175.8 175.8	79011 GRADERS & SORTERS, AGRIC.PRODUCT	714	793	245.0	272.6	27.6 27.6
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FOOD SERVERS, OUTSIDE 65011 FOOD SERVERS, OUTSIDE 65012 DISPATCHER:POLICE, FIRE, AMBULANCE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 B1.7 32521 DIETITIANS AND NUTRITIONISTS 154 201 62.4 81.1 18.7 21921 CLAIMS EXAMINERS, INSURANCE 50 89 23.5 8106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 174.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 174.7 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 175.8 175.8 175.8 175.8 175.8 175.8 175.8	79017 ANIMAL CARETAKERS, EXCEPT FARM	- 123	182	60.4	87.5	27.4
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FOOD SERVERS, OUTSIDE 65011 FOOD SERVERS, OUTSIDE 65012 DISPATCHER:POLICE, FIRE, AMBULANCE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 BILL 18.7 6505 DISPATCHER:POLICE, FIRE, AMBULANCE 6506 BILL 18.7 6506 BILL 18.7 6507 BILL 18.7 6508 BILL 18.7 6508 BILL 18.7 6509 BILL 18.7	89921 DENTAL LABORATORY TECHNICIANS	170	237	69.3	96.6	27.3
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FOOD SERVERS, OUTSIDE 65011 FOOD SERVERS, OUTSIDE 65012 DISPATCHER:POLICE, FIRE, AMBULANCE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 BILL 18.7 6505 DISPATCHER:POLICE, FIRE, AMBULANCE 6506 BILL 18.7 6506 BILL 18.7 6507 BILL 18.7 6508 BILL 18.7 6508 BILL 18.7 6509 BILL 18.7	27305 SOCIAL WORKERS, EX. HED.& PSYCH.	i45	606	283.1	309.6	26.5
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FOOD SERVERS, OUTSIDE 65011 FOOD SERVERS, OUTSIDE 65012 DISPATCHER:POLICE, FIRE, AMBULANCE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 BILL 18.7 6505 DISPATCHER:POLICE, FIRE, AMBULANCE 6506 BILL 18.7 6506 BILL 18.7 6507 BILL 18.7 6508 BILL 18.7 6508 BILL 18.7 6509 BILL 18.7	53121 LOAN AND CREDIT CLERKS	512 240	567 329	100.2	126.2	26.0
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FOOD SERVERS, OUTSIDE 65011 FOOD SERVERS, OUTSIDE 65012 DISPATCHER:POLICE, FIRE, AMBULANCE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 BILL 18.7 6505 DISPATCHER:POLICE, FIRE, AMBULANCE 6506 BILL 18.7 6506 BILL 18.7 6507 BILL 18.7 6508 BILL 18.7 6508 BILL 18.7 6509 BILL 18.7	A7000 ALL OTHER CLEAN RULLDING SERVICE	471	538	182.1	208.1	26.0
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FOOD SERVERS, OUTSIDE 65011 FOOD SERVERS, OUTSIDE 65012 DISPATCHER:POLICE, FIRE, AMBULANCE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 BILL 18.7 6505 DISPATCHER:POLICE, FIRE, AMBULANCE 6506 BILL 18.7 6506 BILL 18.7 6507 BILL 18.7 6508 BILL 18.7 6508 BILL 18.7 6509 BILL 18.7	85705 DATA PROCESSING EQUIP. REPAIRERS	216	288	89.5	115.5	26.0
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FOOD SERVERS, OUTSIDE 65011 FOOD SERVERS, OUTSIDE 65012 DISPATCHER:POLICE, FIRE, AMBULANCE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 BILL 18.7 6505 DISPATCHER:POLICE, FIRE, AMBULANCE 6506 BILL 18.7 6506 BILL 18.7 6507 BILL 18.7 6508 BILL 18.7 6508 BILL 18.7 6509 BILL 18.7	25302 OPERATIONS AND SYSTEMS ANALYSTS	89	136	48.4	74.2	25.8 25.8
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FOOD SERVERS, OUTSIDE 65011 FOOD SERVERS, OUTSIDE 65012 DISPATCHER:POLICE, FIRE, AMBULANCE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 BILL 18.7 6505 DISPATCHER:POLICE, FIRE, AMBULANCE 6506 BILL 18.7 6506 BILL 18.7 6507 BILL 18.7 6508 BILL 18.7 6508 BILL 18.7 6509 BILL 18.7	83002 PRECISION INSPEC., TESTERS, &GRADE	129	185 283	105.4	130.1	24.7
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FOOD SERVERS, OUTSIDE 65011 FOOD SERVERS, OUTSIDE 65012 DISPATCHER:POLICE, FIRE, AMBULANCE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 BILL 18.7 6505 DISPATCHER:POLICE, FIRE, AMBULANCE 6506 BILL 18.7 6506 BILL 18.7 6507 BILL 18.7 6508 BILL 18.7 6508 BILL 18.7 6509 BILL 18.7	43017 SALES AGENTS, BUSINESS SERVICES	216	272	94.2	118.5	24.3
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FOOD SERVERS, OUTSIDE 65011 FOOD SERVERS, OUTSIDE 65012 DISPATCHER:POLICE, FIRE, AMBULANCE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 BILL 18.7 6505 DISPATCHER:POLICE, FIRE, AMBULANCE 6506 BILL 18.7 6506 BILL 18.7 6507 BILL 18.7 6508 BILL 18.7 6508 BILL 18.7 6509 BILL 18.7	87902 EARTH DRILLERS, EX. OIL & GAS	299	430	67.2	91.1	23.9
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FOOD SERVERS, OUTSIDE 65011 FOOD SERVERS, OUTSIDE 65012 DISPATCHER:POLICE, FIRE, AMBULANCE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 BILL 18.7 6505 DISPATCHER:POLICE, FIRE, AMBULANCE 6506 BILL 18.7 6506 BILL 18.7 6507 BILL 18.7 6508 BILL 18.7 6508 BILL 18.7 6509 BILL 18.7	22599 ALL OTHER ENGINEERING TECHNICIAN	580	645	248.6	2/2.4 107 3	23.0 23.7
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FCCO SERVERS, CUTSIDE 65011 FCCO SERVERS, CUTSIDE 65011 FCCO SERVERS, CUTSIDE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 GSCO SERVERS, CUTSIDE 6505 DISPATCHER:POLICE, FIRE, AMBULANCE 6506 DISPATCHER:POLICE, FIRE, AMBULANCE 6507 SERVERS, CUTSIDE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6509 DISPATCHER:POLICE, FIRE, AMBULANCE 6500 DISPATCHER:POLICE, FIRE, FIRE	31505 TECHNICAL ASSISTANTS, LIBRART	283	344	110.0	133.5	23.5
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FCCO SERVERS, CUTSIDE 65011 FCCO SERVERS, CUTSIDE 65011 FCCO SERVERS, CUTSIDE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 GSCO SERVERS, CUTSIDE 6505 DISPATCHER:POLICE, FIRE, AMBULANCE 6506 DISPATCHER:POLICE, FIRE, AMBULANCE 6507 SERVERS, CUTSIDE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6509 DISPATCHER:POLICE, FIRE, AMBULANCE 6500 DISPATCHER:POLICE, FIRE, FIRE	66011 HOME HEALTH AIDES	217	272	106.0	129.5	23.5
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FCCO SERVERS, CUTSIDE 65011 FCCO SERVERS, CUTSIDE 65011 FCCO SERVERS, CUTSIDE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 GSCO SERVERS, CUTSIDE 6505 DISPATCHER:POLICE, FIRE, AMBULANCE 6506 DISPATCHER:POLICE, FIRE, AMBULANCE 6507 SERVERS, CUTSIDE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6509 DISPATCHER:POLICE, FIRE, AMBULANCE 6500 DISPATCHER:POLICE, FIRE, FIRE	32905 MED./CLINICAL LAB. TECHNICIANS	189	250	75.7	98.7	23.0
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FCCO SERVERS, CUTSIDE 65011 FCCO SERVERS, CUTSIDE 65011 FCCO SERVERS, CUTSIDE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 GSCO SERVERS, CUTSIDE 6505 DISPATCHER:POLICE, FIRE, AMBULANCE 6506 DISPATCHER:POLICE, FIRE, AMBULANCE 6507 SERVERS, CUTSIDE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6509 DISPATCHER:POLICE, FIRE, AMBULANCE 6500 DISPATCHER:POLICE, FIRE, FIRE	34038 DESIGNERS, EXC. INTERIOR DESIGN.	315 370	3// 438	144.2	167.0	22.8
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FCCO SERVERS, CUTSIDE 65011 FCCO SERVERS, CUTSIDE 65011 FCCO SERVERS, CUTSIDE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 GSCO SERVERS, CUTSIDE 6505 DISPATCHER:POLICE, FIRE, AMBULANCE 6506 DISPATCHER:POLICE, FIRE, AMBULANCE 6507 SERVERS, CUTSIDE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6509 DISPATCHER:POLICE, FIRE, AMBULANCE 6500 DISPATCHER:POLICE, FIRE, FIRE	32917 RADIOLOGIC TECHNOLOGISTS	161	221	61.2	83.9	22.7
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FCCO SERVERS, CUTSIDE 65011 FCCO SERVERS, CUTSIDE 65011 FCCO SERVERS, CUTSIDE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 GSCO SERVERS, CUTSIDE 6505 DISPATCHER:POLICE, FIRE, AMBULANCE 6506 DISPATCHER:POLICE, FIRE, AMBULANCE 6507 SERVERS, CUTSIDE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6509 DISPATCHER:POLICE, FIRE, AMBULANCE 6500 DISPATCHER:POLICE, FIRE, FIRE	24308 BIOLOGICAL SCIENTISTS	299	342	152.3	174.9	22.6
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FCCO SERVERS, CUTSIDE 65011 FCCO SERVERS, CUTSIDE 65011 FCCO SERVERS, CUTSIDE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 GSCO SERVERS, CUTSIDE 6505 DISPATCHER:POLICE, FIRE, AMBULANCE 6506 DISPATCHER:POLICE, FIRE, AMBULANCE 6507 SERVERS, CUTSIDE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6509 DISPATCHER:POLICE, FIRE, AMBULANCE 6500 DISPATCHER:POLICE, FIRE, FIRE	34017 ANNOUNCERS, RADIO AND TV	366 213	421 267	149.3 96.8	171.9	22.6
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FCCO SERVERS, CUTSIDE 65011 FCCO SERVERS, CUTSIDE 65011 FCCO SERVERS, CUTSIDE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 GSCO SERVERS, CUTSIDE 6505 DISPATCHER:POLICE, FIRE, AMBULANCE 6506 DISPATCHER:POLICE, FIRE, AMBULANCE 6507 SERVERS, CUTSIDE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6509 DISPATCHER:POLICE, FIRE, AMBULANCE 6500 DISPATCHER:POLICE, FIRE, FIRE	STICK DOCTAL SERVICE LECHNICIANS	288	343	118.1	140.5	22.5
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FCCO SERVERS, CUTSIDE 65011 FCCO SERVERS, CUTSIDE 65011 FCCO SERVERS, CUTSIDE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 GSCO SERVERS, CUTSIDE 6505 DISPATCHER:POLICE, FIRE, AMBULANCE 6506 DISPATCHER:POLICE, FIRE, AMBULANCE 6507 SERVERS, CUTSIDE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6509 DISPATCHER:POLICE, FIRE, AMBULANCE 6500 DISPATCHER:POLICE, FIRE, FIRE	24305 AGRICULTURAL AND FOOD SCIENTISTS	308	359	137.0	159.5	22.5
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FCCO SERVERS, CUTSIDE 65011 FCCO SERVERS, CUTSIDE 65011 FCCO SERVERS, CUTSIDE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 GSCO SERVERS, CUTSIDE 6505 DISPATCHER:POLICE, FIRE, AMBULANCE 6506 DISPATCHER:POLICE, FIRE, AMBULANCE 6507 SERVERS, CUTSIDE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6508 DISPATCHER:POLICE, FIRE, AMBULANCE 6509 DISPATCHER:POLICE, FIRE, AMBULANCE 6500 DISPATCHER:POLICE, FIRE, FIRE	97989 ALL OTHER TRANSP., MAT. MOVING OPR	452	511	168.6	191.1	22.5
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FOOD SERVERS, OUTSIDE 65011 FOOD SERVERS, OUTSIDE 65012 DISPATCHER:POLICE, FIRE, AMBULANCE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 BILL 18.7 32521 DIETITIANS AND NUTRITIONISTS 154 201 62.4 81.1 18.7 21921 CLAIMS EXAMINERS, INSURANCE 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 81011 FIRST LINE SUPERV.: TRANSPORT. 81011 FIRST LINE SUPERV. 81011 FI	31202 LIFE SCIENCE TEACHERS	239 201	252	76.1	97.2	21.1
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FOOD SERVERS, OUTSIDE 65011 FOOD SERVERS, OUTSIDE 65012 DISPATCHER:POLICE, FIRE, AMBULANCE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 BILL 18.7 32521 DIETITIANS AND NUTRITIONISTS 154 201 62.4 81.1 18.7 21921 CLAIMS EXAMINERS, INSURANCE 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 81011 FIRST LINE SUPERV.: TRANSPORT. 81011 FIRST LINE SUPERV. 81011 FI	24300 ALL OTHER LIFE SCIENTISTS	260	323	87.3	167.9	20.6
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FOOD SERVERS, OUTSIDE 65011 FOOD SERVERS, OUTSIDE 65012 DISPATCHER:POLICE, FIRE, AMBULANCE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 BILL 18.7 32521 DIETITIANS AND NUTRITIONISTS 154 201 62.4 81.1 18.7 21921 CLAIMS EXAMINERS, INSURANCE 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 81011 FIRST LINE SUPERV.: TRANSPORT. 81011 FIRST LINE SUPERV. 81011 FI	91321 MACHINE FORMING OPERATORS, M/P	166	225	58.4	78.9	20.5
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FOOD SERVERS, OUTSIDE 65011 FOOD SERVERS, OUTSIDE 65012 DISPATCHER:POLICE, FIRE, AMBULANCE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 BILL 18.7 32521 DIETITIANS AND NUTRITIONISTS 154 201 62.4 81.1 18.7 21921 CLAIMS EXAMINERS, INSURANCE 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 81011 FIRST LINE SUPERV.: TRANSPORT. 81011 FIRST LINE SUPERV. 81011 FI	68035 SOCIAL WELFARE SERVICE AIDES	147	1881	771.9	792.1	20.2
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FOOD SERVERS, OUTSIDE 65011 FOOD SERVERS, OUTSIDE 65012 DISPATCHER:POLICE, FIRE, AMBULANCE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 BILL 18.7 32521 DIETITIANS AND NUTRITIONISTS 154 201 62.4 81.1 18.7 21921 CLAIMS EXAMINERS, INSURANCE 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 81011 FIRST LINE SUPERV.: TRANSPORT. 81011 FIRST LINE SUPERV. 81011 FI	72000 SUPERVISORS, FARM, FOREST, AG. REC 34008 PURLIC RELATIONS SPECIALISTS	118	167	49.0	69.0	20.0
95099 ALL OTHER PLANT AND SYSTEM OCC. 89999 ALL OTHER PRECISION WORKERS 56099 ALL OTHER OFFICE MACH. OPERATORS 21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FOOD SERVERS, OUTSIDE 65011 FOOD SERVERS, OUTSIDE 65012 DISPATCHER:POLICE, FIRE, AMBULANCE 6502 DISPATCHER:POLICE, FIRE, AMBULANCE 6503 DISPATCHER:POLICE, FIRE, AMBULANCE 6504 BILL 18.7 32521 DIETITIANS AND NUTRITIONISTS 154 201 62.4 81.1 18.7 21921 CLAIMS EXAMINERS, INSURANCE 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 81011 FIRST LINE SUPERV.: TRANSPORT. 81011 FIRST LINE SUPERV. 81011 FI	56014 PERIPHERAL EDP EQUIP. OPERATORS	98	142	44.8	54.4	19.6
## 89999 ALL OTHER PERCISION WORKERS 339 392 122.3 141.6 19.3	85999 ALL OTHER MECHANICS, INSTALLERS	428	486 288	159.2 77.6	1/6./ 97.0	19.5
56099 ALL OTHER OFFICE MACH. OPERATORS 141 181 63.4 82.4 19.0 21199 ALL OTHER FINANCIAL SPECIALISTS 267 312 109.4 128.4 19.0 65011 FOOD SERVERS, OUTSIDE 191 244 63.2 82.1 18.9 58002 DISPATCHER: POLICE, FIRE, AMBULANCE 465 520 159.9 178.6 18.7 32521 DIETITIANS AND NUTRITIONISTS 154 201 62.4 81.1 18.7 21921 CLAIMS EXAMINERS, INSURANCE 50 89 23.5 41.9 18.4 81011 FIRST LINE SUPERY.: TRANSPORT. 292 338 106.3 124.7 18.4 22502 CIVIL ENGINEERING TECHNICIANS 308 354 147.4 165.4 18.0 31224 MATHEMATICAL SCIENCE TEACHERS 193 248 62.4 80.3 17.9 92953 CCATING, PAINTING MACH. OPER. 139 174 59.0 76.8 17.3 89311 CABINETMAKERS & BENCH CARPENTERS 346 394 140.3 158.1 17.3 32305 OCCUPATIONAL THERAPISTS 69 115 28.8 46.4 17.5	95099 ALL OTHER PLANT AND STSTEM OCC.			122.3		
21199 ALL OTHER FINANCIAL SPECIALISTS 65011 FCCCO SERVERS, OUTSIDE 191 244 63.2 82.1 18.9 58002 DISPATCHER: POLICE, FIRE, AMBULANCE 465 520 159.9 178.6 18.7 32521 DIETITIANS AND NUTRITIONISTS 154 201 62.4 81.1 18.7 21921 CLAIMS EXAMINERS, INSURANCE 50 89 23.5 41.9 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 22502 CIVIL ENGINEERING TECHNICIANS 308 354 147.4 165.4 18.0 31224 MATHEMATICAL SCIENCE TEACHERS 193 248 62.4 80.3 17.9 92953 CCATING, PAINTING MACH. OPER. 139 174 59.0 76.8 17.3 89311 CABINETMAKERS & BENCH CARPENTERS 346 394 140.3 158.1 17.8 32305 OCCUPATIONAL THERAPISTS 69 115 28.8 46.4 17.5 63032 SMERIFFS AND DEPUTY SHERIFFS 479 531 158.5 175.8 17.3	56099 ALL OTHER OFFICE MACH. OPERATORS	141	181	63.4		
\$8002 DISPATCHER:POLICE, FIRE, AMBULANCE 465 520 159.9 178.6 18.7 32521 DIETITIANS AND NUTRITIONISTS 154 201 62.4 81.1 18.7 21921 CLAIMS EXAMINERS, INSURANCE 50 89 23.5 41.9 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 22502 CIVIL ENGINEERING TECHNICIANS 308 354 147.4 165.4 18.0 31224 MATHEMATICAL SCIENCE TEACHERS 193 248 62.4 80.3 17.9 92953 COATING, PAINTING MACH. OPER. 139 174 59.0 76.8 17.5 89311 CABINETMAKERS & BENCH CARPENTERS 346 394 140.3 158.1 17.8 32305 OCCUPATIONAL THERAPISTS 69 115 28.8 46.4 17.6 63032 SMERIFFS AND DEPUTY SHERIFFS 479 531 158.5 175.8 17.3	21199 ALL OTHER FINANCIAL SPECIALISTS					
154 201 62.4 81.1 18.7 21921 CLAIMS EXAMINERS, INSURANCE 50 89 23.5 41.9 18.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 22502 CIVIL ENGINEERING TECHNICIANS 308 354 147.4 165.4 18.0 31224 MATHEMATICAL SCIENCE TEACHERS 193 248 62.4 80.3 17.9 92953 COATING, PAINTING MACH. OPER. 139 174 59.0 76.8 17.5 89311 CABINETMAKERS & BENCH CARPENTERS 346 394 140.3 158.1 17.8 32305 OCCUPATIONAL THERAPISTS 69 115 28.8 46.4 17.5 63032 SMERIFFS AND DEPUTY SHERIFFS 479 531 158.5 175.8 17.3	65011 FOOD SERVERS, OUTSIDE					
21921 CLAIMS EXAMINERS, INSURANCE 50 89 23.5 41.9 10.4 81011 FIRST LINE SUPERV.: TRANSPORT. 292 338 106.3 124.7 18.4 22502 CIVIL ENGINEERING TECHNICIANS 308 354 147.4 165.4 18.0 31224 MATHEMATICAL SCIENCE TEACHERS 193 248 62.4 80.3 17.9 92953 COATING, PAINTING MACH. OPER. 139 174 59.0 76.8 17.5 89311 CABINETMAKERS & BENCH CARPENTERS 346 394 140.3 158.1 17.8 32305 OCCUPATIONAL THERAPISTS 69 115 28.8 46.4 17.6 63032 SMERIFFS AND DEPUTY SHERIFFS 479 531 158.5 175.8 17.3	32521 DIFTITIANS AND NUTRITIONISTS			62.4	81.1	
22502 CIVIL ENGINEERING TECHNICIANS 308 354 147.4 165.4 18.0 31224 MATHEMATICAL SCIENCE TEACHERS 193 248 62.4 80.3 17.9 92953 COATING, PAINTING MACH. OPER. 139 174 59.0 76.8 17.8 89311 CABINETMAKERS & BENCH CARPENTERS 346 394 140.3 158.1 17.8 32305 OCCUPATIONAL THERAPISTS 69 115 28.8 46.4 17.5 63032 SMERIFFS AND DEPUTY SHERIFFS 479 531 158.5 175.8 17.3	21921 CLAINS EXAMINERS, INSURANCE					
2302 CIVIL ENGINEERING TECHNICIANS 31224 MATHEMATICAL SCIENCE TEACHERS 92953 COATING, PAINTING MACH. OPER. 89311 CABINETHAKERS & BENCH CARPENTERS 3205 OCCUPATIONAL THERAPISTS 69 115 28.8 46.4 17.6 63032 SMERIFFS AND DEPUTY SHERIFFS 479 531 158.5 175.8 17.3	81011 FIRST LINE SUPERV.: TRANSPORT.					
92953 COATING, PAINTING MACH. OPER. 139 174 59.0 76.8 17.8 89311 CABINETMAKERS & BENCH CARPENTERS 346 394 140.3 158.1 17.8 32305 OCCUPATIONAL THERAPISTS 69 115 28.8 46.4 17.6 63032 SHERIFFS AND DEPUTY SHERIFFS 479 531 158.5 175.8 17.3	31224 MATHEMATICAL SCIENCE TEACHERS				80.3	17.9
89311 CABINETMAKERS & BENCH CARPENTERS 346 394 140.3 138.1 17.3 32305 OCCUPATIONAL THERAPISTS 69 115 28.8 46.4 17.5 63032 SHERIFFS AND DEPUTY SHERIFFS 479 531 158.5 175.8 17.3	92953 COATING, PAINTING MACH. OPER.	139	174	59.0		
63032 SHERIFFS AND DEPUTY SHERIFFS 479 531 158.5 175.8 17.3	89311 CABINETMAKERS & BENCH CARPENTERS					
	32305 OCCUPATIONAL THERAPISTS A3032 SHERIFFS AND DEPLITY SHERIFFS					17.3
	61005 POLICE AND DETECTIVE SUPERVISORS				112.0	17.1

OES OCCUPATIONAL CODE TITLE	1987 STATE	2000 STATE	1987 REGION	2000 REGION	
CODE TITLE	EMP	EMP	EMP	EMP	CHANGE
CCCUPATIONAL CODE TITLE 32511 PHYSICIAN ASSISTANTS 91702 WELDING MACHINE SETTER/OPERATOR 57311 MESSENGERS 21117 BUDGET ANALYSTS 43005 BROKERS, REAL ESTATE 21914 TAX EXAMINER, COLLECTOR, REV. AGENT 97951 CONVEYOR OPERATORS AND TENDERS 85947 COIN & VENDING MACHINE SERVICERS 89802 SLAUGHTERERS AND BUTCHERS 69999 ALL OTHER SERVICE WORKERS 19002 PUBLIC ADMIN., LEG., GEN. ADMIN. 53105 NEW ACCOUNTS CLERKS 87302 BRICK MASONS 53502 WATER & WASTE TREAT. PLANT OPER. 68002 BARBERS 92965 CRUSHING & MIXING MACHINE OPER. 34005 TECHNICAL WRITERS 21508 EMPLOYMENT INTERVIEWERS 66026 PHARMACY ASSISTANTS 21911 COMPLIANCE & ENFORCE. INSPECTORS 93917 SOLDERERS AND BRAZERS 87802 INSULATION MORKERS 55314 PERSONNEL CLERKS, EXCEPT PAYROLL 89708 PRECISION LITHOGRAPHERS & PHOTO. 22105 METALLURGISTS AND REL. ENGINEERS 23311 TITLE EXAMINERS AND ABSTRACTORS 87814 STRUCTURAL METAL WORKERS 5114 WURSING INSTRUCTORS 21905 MAHAGEMENT ANALYSTS 73005 CHOKE SETTERS 55344 BILLING, COST AND RATE CLERKS 24502 BIOLOGICAL, AGRIC., FOOD TECHN. 89111 TOOL GRINDERS, FILERS, SHARPENERS 92926 LOW PRESSURE BOILER OPERATOR 22132 SAFETY ENGINEERS, EXCEPT MINING 56021 DATA ENTRY KEYERS, COMPOSING 92314 WOODWORKING MACHINE OPERATOR 92100 ALL OTHER MET.&PLAS.MACH.SET/OPS 85128 MACHINERY MAINTENANCE WORKERS 92728 PRESSING MACH.OPERATOR, TEXTILES 66014 PSYCHIATRIC AIDES 91508 COMBINATION MACH.TOOL OPER. M/P 92971 EXTRUDING & FORMING OPERATOR 92727 EXTRUDING & FORMING OPERATOR 92728 PRESSING MACH.OPERATOR, TEXTILES 66014 PSYCHIATRIC AIDES 91508 COMBINATION MACH.TOOL OPERATOR 92727 EXTRUDING & FORMING OPERATOR 92728 PRESSING MACH.OPERATOR, TEXTILES 66014 PSYCHIATRIC AIDES 91508 COMBINATION MACH.TOOL OPERATOR 92997 ALL OTHER MACHINE SETTERS/OPER. 21505 SPECIAL AGENTS, INSURANCE 92543 PRINTING PRESS MACHINE OPERATOR 53908 ADVERTISING CLERKS 49026 VENDORS, SOLICITORS, DOOR-TO-DOOR 22114 CHEMICAL ENGINEERS 49026 VENDORS, SOLICITORS, DOOR-TO-DOOR 22114 CHEMICAL ENGINEERS 53808 HOTEL DESK CLERKS	175	217	69.5	86.4	16.9
91702 WELDING MACHINE SETTER/OPERATOR	66	92	41.9	58.5	16.6
57311 MESSENGERS	240 168	282 213	107.7 66.8	124.1 82.9	16.4
43005 BROKERS. REAL ESTATE	120	158	50.1	66.2	16.1
21914 TAX EXAMINER, COLLECTOR, REV. AGENT	237	271	113.3	129.0	15.7
97951 CONVEYOR OPERATORS AND TENDERS	398 396	445 720	135.8	151.5	15.7
85947 COIN & VENDING MACHINE SERVICERS	265 658	704	221.8	237.3	15.5
69999 ALL OTHER SERVICE WORKERS	294	339	97.3	112.6	15.3
19002 PUBLIC ADMIN., LEG., GEN. ADMIN.	378	423	125.5	140.5	15.0
53105 NEW ACCOUNTS CLERKS	206 206	249 245	80.6	95.6	15.0
57502 WELFARE FLIGIRILITY WORKERS	283	313	151.4	166.4	15.0
95002 WATER & WASTE TREAT. PLANT OPER.	265	307	91.3	106.1	14.8
68002 BARBERS	177	212	73.5	87.9 110 /	14.4
92965 CRUSHING & MIXING MACHINE OPEK.	90	125	35.5	49.8	14.3
21508 EMPLOYMENT INTERVIEWERS	128	165	59.8	74.0	14.2
66026 PHARMACY ASSISTANTS	130	168	48.9	63.0	14.1
21911 COMPLIANCE & ENFORCE. INSPECTORS	528	761 70	264.1	30.0	13.5
9391/ SULDERERS AND BRAZERS 87802 INSURATION WORKERS	142	175	58.9	72.4	13.5
55314 PERSONNEL CLERKS, EXCEPT PAYROLL	341	377	140.8	154.3	13.5
89708 PRECISION LITHOGRAPHERS & PHOTO.	106	140	42.1	55.5 36.7	13.4
22105 METALLURGISTS AND REL. ENGINEERS	96 97	109	50.2	63.3	13.1
87814 STRUCTURAL HETAL WORKERS	175	211	67.0	80.1	13.1
31114 NURSING INSTRUCTORS	129	167	43.0	55.7	12.7
21905 HAHAGEMENT ANALYSTS	299 244	328 281	131.3 81.6	94.1	12.5
75UDS CHURE SELLERS 55344 RILLING COST AND RATE CLERKS	700	722	280.5	292.9	12.4
24502 BIOLOGICAL, AGRIC., FOOD TECHN.	321	355	148.0	160.4	12.4
89111 TOOL GRINDERS, FILERS, SHARPENERS	169	198	63.1	75.5 70.7	12.4
92926 LOW PRESSURE BOILER OPERATOR	170 133	171	67.4 62.3	54.6	12.3
56021 DATA ENTRY KEYERS, COMPOSING	57	88	22.0	34.0	12.0
92314 WOODWORKING MACHINE OPERATORS	246	282	84.3	96.3	12.0
92100 ALL OTHER MET. &PLAS. MACH. SET/OPS	109	132	52.9	64.8 64.5	11.9
85128 MACHINERY MAINTENANCE WURKERS	162	181	76.6	88.4	11.8
66014 PSYCHIATRIC AIDES	141	156	109.1	120.6	11.5
91508 COMBINATION MACH. TOOL OPER., M/P	52	70	30.4	41.8	11.4
92971 EXTRUDING & FORMING OPERATOR	207 206	245 335	89.7	101.0	11.3
21505 SPECIAL AGENTS, INSURANCE	52	75	25.7	36.9	11.2
92543 PRINTING PRESS MACHINE OPERATOR	162	202	43.7	54.8	11.1
53908 ADVERTISING CLERKS	153	184	28.7 55.6	66.6	11.0
ZZ114 CHEMICAL ENGINEERS	282	392	26.5	37.4	10.9
63099 ALL OTHER PROTECTIVE SERVICE	202	229	78.8	89.4	10.6
53808 HOTEL DESK CLERKS	353 92	394 121	88.2 37.0	98.8 47.5	10.6 10.5
97199 ALL OTHER MOTOR VEHICLE OPERATOR 93926 CUTTERS AND TRIMMERS, HAND	134	165	48.0	58.4	10.4
87905 BLASTERS AND EXPLOSIVES WORKERS	118	177	22.5	32.9	10.4
91117 MACHINE TOOL CUTTING OPER., M/P	54	71	31.5	41.8	10.3
55326 PROCUREMENT CLERKS	129 159	142 192	70.4 47.9	80.7 57.8	10.3 9.9
91905 LATHE, TURNING MACH, SETTER/OP, M/P 31212 HEALTH SPECIALTIES TEACHERS	104	134		43.5	9.9
93947 PAINTING AND COATING, HAND	90	113	35.8	45.6	9.8
53708 LICENSE CLERKS	323	351			9.8 9.7
32317 RECREATION THERAPISTS 92311 WOODWORKING MACHINE SETTER/OPER.	62 197	87 226			
91714 STRUCTURAL METAL FABRICATORS	104	126		56.6	9.7
85714 ELECTRIC MOTOR REPAIRERS	123	145	53.6		
28399 ALL OTHER LEGAL ASSISTANTS	173 136	191 159			
57108 CENTRAL OFFICE OPERATORS 98311 HELPERS, MASONS & TILE SETTERS	145				
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QES OCCUPATIONAL CODE TITLE 89399 ALL OTHER PRECISION WOODWORKERS 85326 AIRCRAFT ENGINE SPECIALISTS 49002 SALES ENGINEERS 93951 ENGRAVING AND PRINTING, HAND 92923 FURNACE, KILN, OVEN, KETTLE OPER. 97114 TAXI DRIVERS AND CHAUFFEURS 28308 TITLE SEARCHERS 53126 STATEMENT CLERKS 87308 HARD TILE SETTERS 98315 HELPERS, PLUMBERS, PIPEFITTERS 87899 ALL OTHER CONSTRUCTION WORKERS 89123 JEWELERS AND SILVERSMITHS 92519 ALL OTHER PRINTING PRESS SET/OP. 83099 ALL OTHER INSPECTORS, TESTERS 89914 PHOTOGRAPHIC PROCESS WORKERS 39005 TRAFFIC TECHNICIANS 89508 UPHOLSTERERS 61002 FIRE FIGHTING & PREV.SUPERVISORS 89705 US PRINTERS 22521 SURVEYING AND MAPPING TECHNICIAN 21105 CREDIT ANALYSTS 31202 ENGINEERING TEACHERS 21305 PURCHASING AGENTS & BUYERS, FARM 89135 BOILERMAKERS 89705 JOB PRINTERS 21111 TAX PREPARERS 89102 TOOL AND DIE MAKERS 92947 PAINTERS, TRANSPORTATION EQUIP. 93938 MEAT, POULTRY, FISH CUTTERS 31204 CHEMISTRY TEACHERS 56008 MAIL MACHINE OPERATORS 24199 ALL OTHER PHYSICAL SCIENTISTS 24302 FORESTER, CONSERVATION SCIENTIST 27502 CLERCY 91505 COMBINATION MACH.TOOL SET/OP,M/P 92914 PAPER GOODS MACHINE SETTER/OPER. 85711 ELECTR. HOME APPL. & POWER TOOL 53308 INSURANCE EXANINING CLERKS 87805 SHEET METAL DUCT INSTALLERS 89199 ALL OTHER PHYS. SCIENCE TEACHERS 98319 HELPERS, ALL OTHER CONSTRUCTION 31206 COMPUTER SCIENCE TEACHERS 98319 HELPERS, ALL OTHER CONSTRUCTION 31206 COMPUTER SCIENCE TEACHERS 98519 HELPERS, ALL OTHER CONSTRUCTION 31206 ORDER FILLERS, SALES 95028 POWER DISTRIBUTORS & DISPATCHERS 58017 WEIGHERS, MEASURERS, CHECKERS 63011 POLICE DETECTIVES 31517 INSTRUCTIONAL COORDINATORS 87508 PIPELAYERS 53311 INSURANCE CLAIMS CLERKS	1987 STATE EMP	STATE	1987 REGION EMP	2000 REGION EMP	CHANGE
89399 ALL OTHER PRECISION WOODWORKERS	184	212	62.1	71.5	9.4
85326 AIRCRAFT ENGINE SPECIALISTS	64 52	62 68	27.3	36.7	9.4
93951 ENGRAVING AND PRINTING, HAND	63	89	21.7	30.9	9.2
92923 FURNACE, KILN, OVEN, KETTLE OPER.	534	627	52.6	61.4	5.5 8.8
97114 TAXI DRIVERS AND CHAUFFEURS	50 50	76 76	31.0	39.6	8.6
53126 STATEMENT CLERKS	61	80	27.3	35.9	8.6
87308 HARD TILE SETTERS	82	103	33.9	42.3	8.4
98315 HELPERS, PLUMBERS, PIPEFITTERS	122 184	143 204	75.7	83.9	8.2
89123 JEWELERS AND SILVERSMITHS	161	181	63.5	71.7	8.2
92519 ALL OTHER PRINTING PRESS SET/OP.	80	100	32.8	40.8	8.0 7.0
83099 ALL OTHER INSPECTORS, TESTERS	118 67	138 87	24.8	32.7	7.9
39005 TRAFFIC TECHNICIANS	330	344	191.0	198.8	7.8
89508 UPHOLSTERERS	143	162	63.9	71.7	7.8
61002 FIRE FIGHTING & PREV.SUPERVISORS	133	154 268	112.3	120.0	7.7
2521 SURVEYING AND MAPPING TECHNICIAN	177	199	75.7	83.4	7.7
21105 CREDIT ANALYSTS	108	124	50.7	58.2	7.5
31222 ENGINEERING TEACHERS	31 108	104 210	26.2 70.1	33.0 77.4	7.3
27305 PURCHASING AGENIS & BUTERS, PARM	69	86	29.9	37.2	7.3
89705 JOB PRINTERS	69	87	27.7	35.0	7.3
21111 TAX PREPARERS	111	129	46.4 12.6	22.0 19.8	7.2
89102 TOOL AND DIE MAKERS 020/7 DAINTERS TRANSPORTATION EQUIP.	دے 62	78	26.2	33.3	7.1
93938 HEAT, POULTRY, FISH CUTTERS	195	216	65.7	72.8	7.1
31204 CHEMISTRY TEACHERS	79 48	101	25.6 25.7	32.7 32.7	7.0
56008 MAIL MACHINE OPERATORS	149	177	40.3	47.3	7.0
24302 FORESTER, CONSERVATION SCIENTIST	775	794	366.0	373.0	7.0
27502 CLERCY	31	49	12.1	19.1 35 0	7.U 6.9
91505 COMBINATION MACH.TOOL SET/OP, M/P	100	124	26.8	33.7	6.9
85711 ELECTR. HOME APPL. & POWER TOOL	146	163	58.6	65.5	6.9
53308 INSURANCE EXAMINING CLERKS	25	40	11.6	18.5	6.9
87805 SHEET METAL DUCT INSTALLERS	42	53	22.7	29.6	6.9
32923 ELECTROENCEPHALOGRAPH TECHN.	13	22	10.2	17.0	6.8
31209 ALL OTHER PHYS. SCIENCE TEACHERS	75 07	96	24.3	31.1	6.6
98319 HELPERS, ALL OTHER CONSTRUCTION	73 71	91	22.9	29.5	6.6
92525 BINDERY MACHINE SETTER/OPERATOR	70	87	27.9	34.4	6.5
58026 ORDER FILLERS, SALES	490	506	204.4	210.9	6.5 6.5
95028 POWER DISTRIBUTORS & DISPATCHERS	114	135	35.4	41.8	6.4
63011 POLICE DETECTIVES	179	196	69.1	75.5	6.4
31517 INSTRUCTIONAL COORDINATORS	97	116	38.4	44.8 52.8	6.4 6.4
87508 PIPELAYERS 53311 INSURANCE CLAIMS CLERKS	120 144	137 158	46.4 72.2	78.4	6.2
91917 ELECTROLYTIC PLATING SET/OP.,M/P	14	24	7.9	14.1	6.2
93105 MACHINE BUILDERS	25	35			
58021 MARKING CLERKS 32914 NUCLEAR MEDICINE TECHNOLOGISTS	99 19	115 27			
87602 CARPET INSTALLERS	97	112	40.3	46.4	6.1
85502 CENTRAL OFFICE & PBX INSTAL/RPR.	239	254		103.7 68.5	
21917 ASSESSORS	181 147	199 164			5.9
89308 WOOD MACHINISTS 53914 REAL ESTATE CLERKS	89	102	43.2	49.0	5.8
22311 SURVEYING AND MAPPING SCIENTISTS	119	134			
25313 ACTUARIES	12 64	24 78			
68008 MANICURISTS 92944 CUTTING & SLICING MACHINE OPER.	83	96	32.3	37.9	5.6
68021 USHERS, LOBBY ATT., TICKET TAKER	90	108			
89808 FOOD BATCHMAKERS	231 57	247 71			
53911 PROOFREADERS AND COPY MARKERS	31	•			,

IDAHO
EMPLOYMENT by OCCUPATION
FOR DIS REGION 111

OES CODE	OCCUPATIONAL TITLE	1987 STATE EMP	2000 STATE EMP	1987 REGION EMP	2000 REGION EMP	CHANGE
8731488985660232531932956002557055600255705534056911066304497944580945630449794458094580943099831130857232910929665023530087300857253909878909899899999999	REINFORCING METAL WORKERS BAKERS, MANUFACTURING AMBULANCE DRIVERS & ATTENDANTS ALL OTHER MATHEMATICAL SCIENTIST ALL OTHER THERAPISTS DUPLICATING MACHINE OPERATORS DRILLING, BORING MACH.SET/OP., M/P PHOTOGENGRAVING & LITH. PHOTOGRA. CONSTRUCTION, BUILDING INSPECTOR PHYSICS TEACHERS LAW CLERKS BILL., POST, CALCULATING MACH.OP MUNICIPAL CLERKS PROO., D. TOT., ACTORS, ENTERTAINER LATHE, TURNING MACH.SETTER/OP, M/P MAIL CLERKS, EXC. MAIL MACHINE POWER GENERATING PLANT OPERATOR ROASTING, DRYING OPER., FOOD/TOB. METEOROLOGISTS CROSSING GUARDS HOIST AND WINCH OPERATORS BINDERY MACHINE OPERATORS BINDERY MACHINE OPERATORS ALL OTHER MATERIAL MORKERS BALL OTHER MATERIAL MORKERS CANDIST AND CHOREOGRAPHERS HELPERS, ELECTRICIANS ALL OTHER SERVICE SALES OCC. HELPERS, ROOFERS HELPERS, ELECTRICIANS ALL OTHER TRANSPORTATION WORKERS LANDSCAPE ARCHITECTS HEAD SALYERS ALL OTHER TRANSPORTATION WORKERS LOG GRADERS AND SCALERS MACHINERY MECHANICS: PLANT POWERHOUSE & RELAY ELECTRICIANS ELECTROCARDIOGRAPH TECHNICIANS FENCE ERECTORS MINING AND RELATED MANAGERS BROKERAGE CLERKS ANT TRAFFIC CONTROLLERS FUNCARIA DETAIL DESIGN DECORATORS & PAINT OCCUPATIONAL THERPY ASSISTANTS COMMING MACHINE OPER., FOOD/TOB. JANITORS, CLEANERS, MAIDS I JANITORS, CLEANERS, MAIDS I INTERIOR DESIGNERS	76 76 34 98 124 55 17 49 149 571 237 129 333 87 190 526 46 76 120 49 52 80 111 17 61 77 101 62 52 175 59 63 74 68 51 34 429 70 404 768	90 91 112 132 70 561 161 742 249 1352 400 3468 820 1166 35 7 91 882 249 1352 400 3468 820 1166 35 7 91 882 249 123 362 110 75 77 124 86 872 731 101 90 582 233 7 94 1233 75	REGION EMP 31.0 28.7 23.3 42.4 73.3 19.0 19.3 97.9 18.8 29.0 19.9 96.0 9.9 19.6 141.0 45.5 125.4 13.1 7.2 25.4 13.1 7.2 25.4 18.7 25.4 18.7 25.4 18.7 25.4 18.7 25.4 18.7 36.1 18.7 39.5 29.0 18.7 18.7 18.7 18.7 18.7 18.7 18.7 18.7	REGION EMP 36.4 34.1 28.6 47.7 78.5 24.4 15.2 63.9 34.3 100.9 22.4 63.9 34.7 22.4 145.7 23.2 24.7 23.3 24.7 25.6 27.6 28.8 29.5 29.5 20.1 30.6 21.7 21.7 22.8 23.1 25.6 27.6 28.8 29.8 29.8 29.8 29.8 29.8 29.8 20.6	3.2 3.2 3.2 3.2 3.1 3.1 3.1
3252 9395 2211 9130 8593 2719 3211 853	23 DIETETIC TECHNICIANS 23 GRINDING AND POLISHING, HAND 21 PETROLEUM ENGINEERS 28 SHEAR, SLITTER MACH. SET/OP.,M/P 28 MOBILE HOME INSTALLER & REPAIRER 29 ALL OTHER SOCIAL SCIENTISTS 21 PODIATRISTS 21 RAIL CAR REPAIRERS 24 MERCHANDISE DISPLAYERS	68 37 15 18 121 66 43 67 35	76 45 23 23 128 73 49 83 42	30.7 17.3 10.4	28.5 17.6 9.3 12.3 49.6 33.5 20.1 13.2 15.5	3.0 3.0 3.0 2.9 2.8 2.8 2.5

	1987	2000	1987	2000	
OES OCCUPATIONAL CODE TITLE	STATE	STATE	REGION EMP	EXP	CHANGE
85599 ALL OTHER COMMUN.EQUIP.MECHANICS 55323 ORDER CLERKS: MATERIALS, SERVICE 87111 TAPERS 91305 PRESS, BRAKE MACH.SETTER/OP.,M/P 87811 GLAZIERS 53505 INVESTIGATORS, CLERICAL 63041 FISH AND GAME WARDENS 53111 LOAN INTERVIEWERS 85908 ELECTROMEDICAL & BIOMED. REPAIR. 98314 HELPERS, PAINTERS, PLASTERERS 92956 CEMPTING & GLUING MACHINE OPER. 83008 TRANSPORTATION INSPECTORS 92932 DAIRY PROCESSING EQUIP. OPERATOR 92951 COATING, PAINTING SETTER/OPER. 31511 CURATORS, ARCHIVISTS, MUSEUM TECH 87899 ALL OTHER PRECISION FOOD, TOBACCO 79021 FARK EQUIPMENT OPERATORS 97914 MAIN LINE STATION ENGINEERS 95032 STATIONARY ENGINEERS 89117 PRECISION LAYOUT WORKERS, METAL 85728 ELECTRICAL INSTALLERS & REPAIRER 31508 AUDIO-VISUAL SPECIALISTS 23117 CREDIT CHECKERS 27102 ECONOMISTS, MARKET ANALYSTS 93108 STRUCTURAL METAL FITTERS 85905 PRECISION INSTRUMENT REPAIRERS 85799 ALL OTHER ELECTRIC, ELECTRO.MECH 9208 PHOTOGRAPHIC PROCESSING MACH.OP. 25315 FINANCIAL ANALYSTS, STATISTICAL 85932 ELEVATOR INSTALLERS & REPAIRERS 34028 BROADCAST TECHNICIANS 49032 DEMONSTRATORS, PROMOTERS, MODELS 63023 BAILIFFS 87989 ALL OTHER EXTRACTIVE OCC., EX.HEL 34014 BROADCAST NEWS ANALYSTS 93914 GLAZIER, MANUFACTURING 93914 SPOTTERS, DRY CLEANING 21302 WHOLESALE, RETAIL BUTTERS, EX.FARM 97317 RAILROAD BRAKE, SIGNAL, SWITCH 73099 ALL OTHER TIMBER CUTTING WORKERS 97908 PRESSERS, DELICATE FABRICS 85512 STATISTICIANS 35951 BICYCLE REPAIRERS 89517 PRESSERS, DELICATE FABRICS 85512 RAIDIO MECHANICS 92941 CUTTING ARM SISTANTS 93910 GLAZIER, MANUFACTURING 89514 SPOTTERS, DRY CLEANING 21302 WHOLESALE, RETAIL BUTTERS, EX.FARM 97317 RAILROAD BRAKE, SIGNAL, SWITCH 73099 ALL OTHER TIMBER CUTTING WORKERS 97908 PRESSERS, DELICATE FABRICS 85511 SETILISTICIANS 35951 BICYCLE REPAIRERS 89517 PRESSERS, DELICATE FABRICS 85512 RAOIO MECHANICS 92941 CUTTING AND SLICING SETTER/OPER. 91921 ELECTROLYTIC PLATING OPER., M/P 91114 GRINDING, BUFFING MACH.SET/OP.M/P 953802 TRAVEL CLERKS 28103 JUDGES AND MAGISTRATES 91923 MOWELECTROLYTIC PLATING OPER. 85935 RIGGERS 68021 RAMER A PHOTOGRAPHIC RE	46 548 37 36 21 62 23 7 9 7 4 9 8 6 102 23 7 9 7 4 9 8 9 11 25 22 38 9 21 60 22 34 2 15 37 6 4 7 15 3 16 3 17 6 3 17 7 9 8 24 24 5 18 9 18 9 18 9 18 9 18 9 18 9 18 9 18	538 428 5139 86 8 88 1026 1276 1276 1276 1276 1276 1276 1276 12	18.80 212.04 215.04 215.04 215.04 215.04 215.04 215.04 215.04 215.04 215.04 215.04 215.04 215.04 215.04 215.04 215.04 215.04 216.03 216.03 216.03 217.04 217	21.57 17.60 18.88 15.88 15.88 15.88 15.88 15.88 17.19.89 10.77 17.42 10.31 10.77 10.53 11.18 10.26 11.18 11.	0.9 0.9 0.8 0.8 0.7 0.7 0.7
63021 PARKING ENFORCEMENT OFFICERS	۵	٤:) ,,,		,



OES COOE	OCCUPATIONAL TITLE	1987 STATE EMP	2000 STATE EMP	1987 REGION EMP	REGION EMP	CHANGE
63005 63028 97302 77005 89314 85502 93921 97944 97305 63002 241323 89502 87714 85708 85708 85708 85726 92515 92515 92516 85702 58014 55324 55334 55334 55334	FOREST FIRE INSPECT & PREVENTION CRIMINAL INVESTIGATORS, FEDERAL RAILROAD CONDUCTORS, YARDMASTERS FISHERS, HUNTERS, AND TRAPPERS FURNITURE FINISHERS FRAME WIRERS, CENTRAL OFFICE PRESSERS, HAND CRANE AND TOMER OPERATORS LOCOMOTIVE ENGINEERS FIRE INSPECTORS PHYSICISTS AND ASTRONOMERS FARM & HOME MANAGEMENT ADVISORS FABRIC PATTERNMAKER, LAYOUT WORKR RAIL-TRACK LAYING EQUIP. OPER. HOME ENTERTAINMENT EQ. REPAIRERS WATCHMAKERS NUCLEAR ENGINEERS FILE CLERKS FARM EQUIPMENT MECHANICS TYPESETTING MACH. OPERATOR/TEND. MUSICAL INSTRUMENT REPAIR & TUNE MOTORCYCLE REPAIRERS TELEPH. STATION INSTALL.& REPAIR LETTERPRESS SETTER/OPERATOR DRIVER/SALES WORKERS TELEPHONE & CABLE TV INSTAL/RPR. METER READERS, UTILITIES OPTICIANS, DISPENSING & MEASUR. PRECISION COMPOSITOR, TYPESETTER OPTOMETRISTS STOCK CLERKS:STOCKROOM OR WAREH. INSURANCE POLICY PROCESS. CLERKS STATISTICAL CLERKS PAYROLL AND TIMEKEEPING CLERKS STATISTICAL CLERKS PAYROLL AND TIMEKEEPING CLERKS STATISTICAL CLERKS PAYROLL AND TIMEKEEPING CLERKS STENOGRAPHERS DATA ENTRY KEYERS, EX. COMPOSING ELECTRICAL, ELECTRONIC ASSEMBLER ELECTRONIC SEMICONDUCTOR BOOKKEEPING & ACCOUNTING CLERKS TINDUSTRIAL TRUCK & TRACTOR OPER.	18 42 135 15 19 18 21 22 155 27 78 208 17 53 287 288 492 880 884 161 16 180 129 225 1016 558 174 312 168	19 43 138 16 20 19 22 24 157 208 18 52 285 25 495 889 877 157 12 174 1215 999 538 150 286	10.2 21.4 21.6 5.8 9.9 7.3 8.7 8.2 24.6 29.5 67.7 9.8 3121.6 175.1 359.9 63.8 175.1 359.9 70.1 70.1 83.7 70.1 71.9 83.7 70.1 71.9 83.7 71.9 71.9 71.9 71.9 71.9 71.9 71.9 71	10.8 21.9 22.0 6.2 10.7 9.1 8.5 25.9 29.5 67.6 8.1 29.9 174.1 358.8 49.3 388.4 49.5 364.8 60.7 112.7 62.8 643.4 243.6 243.6 364.2	0.6 0.5 0.4 0.4 0.4 0.3 0.3 0.3 0.3 0.0 0.1 0.2 0.2 0.2 0.4 0.1 1.1 1.3 0.2 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3
	P DATA ENTRY KEYERS, EX. COMPOSING ELECTRICAL, ELECTRONIC ASSEMBLER ELECTRONIC SEMICONDUCTOR BOOKKEEPING & ACCOUNTING CLERKS INDUSTRIAL TRUCK & TRACTOR OPER. FARM WORKERS	740 556 819 9250 1989 9543	548 403 635 8872 1515 8528			

OES OCCUPATIONAL CODE TITLE	1987	2000	1987	2000	
OES OCCUPATIONAL	STATE	STATE	REGION	REGION	
CODE TITLE	EMP	EMP	EMP	EMP	CHANGE
COSE TITLE 49011 SALESPERSONS, RETAIL 97101 TRUCK DRIVERS 32502 REGISTERED NURSES 79014 GARDENERS AND GROUNDSKEEPERS 49023 CASNIERS 65008 WAITERS AND WAITRESSES 19005 GENERAL MANAGERS AND TOP EXEC. 68038 CHILD CARE WORKERS 55199 GENERAL SECRETARIES 31305 TEACHERS, SECONDARY SCHOOL 67005 JANITORS AND CLEANERS, EXC.MAIDS 55347 GENERAL OFFICE CLERKS 65041 COMB. FOOD PREPARATION, SERVICE 85132 MAINTENANCE REPAIRERS, GEN.UTIL. 21114 ACCOUNTANTS AND AUDITORS 65026 COOKS, RESTAURANT 71005 FARM MANAGERS 66008 NURSING AIDES AND ORDERLIES 43008 SALES AGENTS, REAL ESTATE 15011 PROPERTY, REAL ESTATE MANAGEMENT 68005 HAIRDRESSERS AND COSMETOLOGISTS 73002 FALLERS AND BUCKERS 43002 INSURANCE SALES WORKERS 43002 INSURANCE SALES WORKERS 43002 INSURANCE SALES WORKERS 43002 INSURANCE SALES WORKERS 65015 BARTENDERS 87402 PAINTERS AND PAPERHANGERS 87402 PAINTERS AND PAPERHANGERS 87402 PAINTERS AND PAPERHANGERS 87102 CARPENTERS 65014 DINING ROOM & BARTENDER HELPERS 65014 DINING ROOM & BARTENDER HELPERS 65012 COOKS, SPECIALTY FAST FOOD 22126 ELECTRICAL & ELECTRONIC ENGINEER 87502 PLUMBER, PIPEFITTER, STEAMFITTER 65017 COUNTER ATTENDANTS 97111 BUS DRIVERS, SCHOOL 31521 TEACHERS AIDES, PARAPROFESSIONAL 93956 ALL OTHER ASSEMBLERS, FABRICATOR 87202 ELECTRICIANS 65028 COOKS, INSTITUTION OR CAFETERIA 98999 ALL OTHER ASSEMBLERS, FABRICATOR 87202 ELECTRICIANS 65028 COOKS, INSTITUTION OR CAFETERIA 98999 ALL OTHER ASSEMBLERS, FABRICATOR 87202 ELECTRICIANS 65028 COOKS, INSTITUTION OR CAFETERIA 98999 ALL OTHER HELPER, LABORER, MOVER 41002 FIRST LINE SUPERVISORS, SALES 85311 BUS, TRUCK, DIESEL ENG. MECHANIC 93935 CANNERY WORKERS 15026 FOOD SERVICE & LOOGING MANAGERS 98902 HAND PACKERS AND PACKAGERS 98709 ALL OTHER HAND MATERIAL MOVERS 13011 MARKETING, ADV., PUBLIC REL.MGRS 43021 TRAVEL AGENTS 31317 INSTRUCTORS, NONVOCATIONAL EDUC.				2/27 4	
49011 SALESPERSONS, RETAIL	13603	17229	2066.7	2623.1	556.4
97101 TRUCK DRIVERS	11908	15031	1845.6	2310.7	4/1.1
32502 REGISTERED NURSES	4595	/156	222.7	065.7	497.5 201.4
79014 GARDENERS AND GROUNDSKEEPERS	3839	3438	1274 4	1517 4	201.0
490Z3 CASHIERS	8017	10702	006 1	1252 6	267.7
65008 MATTERS AND MATTRESSES	11077	17797	1330 7	1506 0	257.2
19005 GENERAL MANAGERS AND TOP EXEC.	5308	20CC1	884 0	1100.8	216.8
SEIOG CEVEDAL SECOSTADIES	8777	10109	956.1	1141.7	185.6
71706 TEACHEDS ELEMENTADY	5203	0888	619.7	795.6	175.9
31309 TEACHERS SECONDARY SCHOOL	4687	6146	558.7	732.5	173.8
67005 JANITORS AND CLEANERS, EXC.MAIDS	5612	7194	661.9	816.7	154.8
55347 GENERAL OFFICE CLERKS	7083	8239	869.6	995.0	125.4
65041 COMB. FOOD PREPARATION, SERVICE	3686	4583	515.4	640.2	124.8
85132 MAINTENANCE REPAIRERS, GEN.UTIL.	3884	4823	570.4	692.4	122.0
21114 ACCOUNTANTS AND AUDITORS	3380	4523	400.4	516.8	116.4
65026 COOKS, RESTAURANT	2389	3111	373.2	486.0	112.8
71005 FARM MANAGERS	610	1078	149.8	260.6	110.8
66008 NURSING AIDES AND ORDERLIES	3697	4586	441.6	551.0	109.4
43008 SALES AGENTS, REAL ESTATE	1754	2378	295.5	400.5	105.0
15011 PROPERTY, REAL ESTATE MANAGEMENT	1590	2215	262.9	366.2	103.3
68005 HAIRDRESSERS AND COSMETOLOGISTS	4206	4778	655.6	746.7	91.1
73002 FALLERS AND BUCKERS	2059	2608	256.8	347.0	90.2
43002 INSURANCE SALES WORKERS	1949	2572	271.6	357.8	80.2
49021 STOCK CLERKS, SALES FLOOR	3921	4526	543.9	627.1	ಥ
65038 FOOD PREPARATION WORKERS	2356	2893	331.0	7/0.1	70.Y
32505 LICENSED PRACTICAL NURSES	4352	3003	202.1	347.1	70.0 A 0A
65005 BARTENDERS	1007	دري دون	220 /	208.7	07.0 7 04
874UZ PAINTERS AND PAPERHANGERS	1449	2147	267.4	322 n	68 7
ACIUZ CARPENIERS	1/30	1808	208.0	273 2	65.2
47002 WAIRS AND MONISSYSSOLING CLEANEDS	2222	2673	433.7	498.3	64.6
Sinns first like Sheesnishes Ciesical	3142	3770	384.3	446.2	61.9
ASORE COOKS SPECIALTY FAST FOOD	1776	2213	244.7	304.9	60.2
22126 ELECTRICAL & FLECTRONIC ENGINEER	1114	2127	74.5	131.7	57.2
87502 PLUMBER, PIPEFITTER, STEAMFITTER	1424	1855	188.4	245.3	56.9
65017 COUNTER ATTENDANTS	1576	1965	227.6	284.2	56.6
97111 BUS DRIVERS, SCHOOL	1743	2153	249.1	304.7	55.6
31521 TEACHERS ALDES, PARAPROFESSIONAL	1637	2098	194.5	249.3	54.8
93956 ALL OTHER ASSEMBLERS, FABRICATOR	2890	3644	221.6	274.1	52.5
87202 ELECTRICIANS	1645	2092	200.9	251.9	51.0
65028 COOKS, INSTITUTION OR CAFETERIA	2070	2474	255.1	306.0	50.9
98999 ALL OTHER HELPER, LABORER, MOVER	3175	3588	391.9	441.9	50.0
41002 FIRST LINE SUPERVISORS, SALES	2084	2465	306.1	356.0	49.9
85311 BUS, TRUCK, DIESEL ENG. MECHANIC	1593	1993	210.9	200.0	49.1
93935 CANNERY WORKERS	41/3	4312	1403.4	1314.4	47.0 47.6
15026 FOOD SERVICE & LOUGING MANAGERS	2092	2350	403.7	474 0	47.3
989UZ HAND PACKERS AND PACKAGERS	2184	2578	326 Q	377 3	45.4
13011 MARKETING, ADV., PUBLIC RELIMORS	1164	1517	164.6	209.3	45.2
/3034 TRAVEL ACENTS	358	627	56.6	99.9	43.3
43021 TRAVEL AGENTS 31317 INSTRUCTORS, NONVOCATIONAL EDUC.	677	945	108.6	151.8	43.2
55305 RECEPTIONISTS, INFORMATION CLERKS	2809	3290	349.7	391.4	41.7
49008 SALES REPS.EXC.SCIENTIF & RETAIL	2693	3002	365.2	406.1	40.9
15005 EDUCATION ADMINISTRATORS	1073	1385	133.6	172.9	39.3
49999 ALL OTHER SALES & RELATED OCC.	1313	1619	184.8	223.7	38.9
13002 FINANCIAL MANAGERS	2024	2398	223.8	262.1	38.3
66002 DENTAL ASSISTANTS	729	1058	82.3	120.4	37.6
22505 ELECTRICAL & ELECTRONIC TECHNS.	1026	1838	71.9	109.1	37.2
22135 MECHANICAL ENGINEERS	850	1385	64.1	101.1	37.0
25102 COMPUTER SYSTEMS ANALYSTS, EDP	667	1028	70.0	106.2	36.2
65099 ALL OTHER FOOD SERVICE WORKERS	990	1245	147.6		35.3
19999 ALL OTHER MANAGERS & ADMINIST.	1619	1925	190.6		34.9
65002 HOSTS & HOSTESSES: REST., LOUNGE	1074	1306	172.5	206.3	33.8
93999 ALL OTHER HAND WORKERS	1601	1976	147.1		33.0
79999 ALL OTHER AGRIC., FOREST, FISH.	1718	1914	288.5		
65035 COOKS, SHORT ORDER	1009	1243	143.1		32.0 31.7
34035 ARTISTS AND RELATED WORKERS	660	857	105.9	131.0	21.1



OES CODE	OCCUPATIONAL TITLE	1987 STATE EMP	2000 STATE EMP	1987 REGION EMP	2000 REGION EMP 133.2 133.5 137.6 642.5 173.5 122.3 254.4 221.0 323.6 99.8 163.2 266.7 98.8 158.9	CHANGE
27108 31302 31399	PSYCHOLOGISTS TEACHERS, PRESCHOOL & KINDERGARTN ALL OTHER TEACHERS, INSTRUCTORS AUTOMOTIVE MECHANICS TYPISTS LEGAL SECRETARIES FIRST LINE SUPERV.:MECH.& REPAIR SERVICE STATION ATTENDANTS PACKAGING & FILLING MACHINE OPER MEDICAL SECRETARIES ALL OTHER SERVICE SUPERVISORS FIRST LINE SUPERV.: PRODUCTION VETERINARIANS, VET. INSPECTORS WELDERS AND CUTTERS ALL OTHER POST SECONDARY TEACHER AMUSEMENT & RECREATION ATTENDANT HELPERS, CARPENTERS TRAFFIC, SHIPPING, & REC. CLERKS AUTOMOTIVE BODY, RELATED REPAIRER HEATING, A/C, REFRIG. MECHANICS OPERATING ENGINEERS VEHICLE, EQUIPMENT CLEANERS TEACHERS, SPECIAL EDUCATION POLICE PATROL OFFICERS PHYSICAL THERAPISTS DENTAL HYGIENISTS MEDICAL RECORDS TECHN.& TECHNOL. COMPUTER OPERATORS, EXC. PERIPH. TEACHERS, VOCATIONAL EDUCATION TEACHER AIDES & EDUC. ASSISTANTS SECURITIES, FINANCIAL SERV.SALES LOAN OFFICERS AND COUNSELORS PERSONNEL, TRAIN., LABOR REL. SPEC EXCAVATION LOADING MACHINE OPER. BAKERS, BREAD AND PASTRY EXTRUDING & FORMING OPERATOR BUTCHERS AND MEAT CUTTERS BUTCHERS AND MEAT CUTTERS BUTCHERS AND MEAT CUTTERS HOUSEKEEPERS, INSTITUTIONAL FIRST LINE SUPERV.:CONST.EXTRAC. ALL OTHER MACHINERY MECHANICS PALL OTHER MACHINERY MECHANICS ALL OTHER MACHINER	661 795 906	858 1037 1162	101.5 101.8 107.0	133.2 133.5 137.6	31.7 31.7 30.6
85302 55308	AUTOMOTIVE MECHANICS TYPISTS	1407	1704	143.3	173.5	30.2
55102	LEGAL SECRETARIES	729	968	92.3	122.3	30.0
81002 97805	FIRST LINE SUPERV.: MECH. & REPAIR - SERVICE STATION ATTENDANTS	1672	1425	192.3	221.0	28.7
92974	PACKAGING & FILLING MACHINE OPER	1015	1133	295.0	323.6	28.6
55105 61000	MEDICAL SECRETARIES ALL OTHER SERVICE SUPERVISORS	1020	1270	134.8	163.2	28.4
81008	FIRST LINE SUPERV .: PRODUCTION	1708	2130	238.4	266.7	28.3
32114	VETERINARIANS, VET. INSPECTORS UFLIGHTS AND CUTTERS	372 1329	1650	131.1	158.9	27.8
31299	ALL OTHER POST SECONDARY TEACHER	825	1059	98.4	126.2	27.8
68014	AMUSEMENT & RECREATION ATTENDANT	749 602	947 763	109.7 97.0	124.5	27.7
58028	TRAFFIC, SHIPPING, & REG. CLERKS	1623	1849	228.2	255.1	26.9
85305	AUTOMOTIVE 800Y, RELATED REPAIRER	967 683	1150 857	142.0 103.6	168.3 129.3	26.3 25.7
57305	POSTAL MAIL CARRIERS	872	1080	105.6	130.8	25.2
97956	OPERATING ENGINEERS	1100	1391 968	105.9 110.1	131.0 135.2	25.1 25.1
31311	TEACHERS, SPECIAL EDUCATION	744	955	88.7	113.8	25.1
63014	POLICE PATROL OFFICERS	983 255	1140	142.2	166.6 56.1	24.4
32308	DENTAL HYGIENISTS	416	627	47.4	71.5	24.1
3291	MEDICAL RECORDS TECHN.& TECHNOL.	197	401 801	22.3	46.1 101.2	23.8 23.4
31314	TEACHERS. VOCATIONAL EDUCATION	645	840	71.1	94.5	23.4
5390	TEACHER AIDES & EDUC. ASSISTANTS	618	802	77.6 50.5	100.9	23.3
2110	SECURITIES, FINANCIAL SERV.SALES LOAN OFFICERS AND COUNSELORS	859	1056	93.9	116.4	22.5
4901	COUNTER AND RENTAL CLERKS	615	830	68.4	90.7	22.3
2151	1 PERSONNEL,TRAIN.,LABOR REL. SPEC 3 FXCAVATION LOADING MACKINE OPER.	935 501	669	61.8	83.4	21.6
6502	1 BAKERS, BREAD AND PASTRY	479	634	69.5	91.1	21.6
9297 6502	1 EXTRUDING & FORMING OPERATOR 3 RUTCHERS AND MEAT CUITIERS	207 676	833	89.5	109.7	20.2
6100	8 HOUSEKEEPERS, INSTITUTIONAL	699	855	103.2	123.3	20.1
8100 8511	5 FIRST LINE SUPERV.:CONST.EXTRAC.	721 878	1018	158.6	178.5	19.9
3290	2 HED./CLINICAL LAB. TECHNOLOGISTS	475	646	53.4	73.0	19.6
9710	8 BUS DRIVERS	329 640	428 768	99.6	119.1	19.5
3210	5 DENTISTS	1197	1356	185.6	204.8	19.2
6600	5 MEDICAL ASSISTANTS	323 714	485 793	37.3 178.3	56.0 196.9	18.7 18.6
2199	9 ALL OTHER MANAGEMENT SUPPORT OCC	1006	1220	105.1	123.5	18.4
9190	5 LATHE, TURNING MACH. SETTER/OP, M/P	159 359	192 515	88.0 39.9	106.2 57.9	18.2
5999	9 ALL OTHER HEALTH SERVICE WORKERS 9 ALL OTHER CLERICAL & ADM.SUPPORT	938	1102	94.9	112.8	17.9
.,,,,,	a condition, minute the contract	653 250	779 360	88.4 39.6	106.0 57.0	17.6 17.4
9251 1301	2 OFFSET LITHOGRAPHIC PRESS SETTER 4 ADMINISTRATIVE SERVICES MANAGER	806	978	94.6	112.0	17.4
3299	ALL OTHER HEALTH PROF., PARA, TECH	567	704	70.0 98.3	87.0 115.2	17.0 16.9
	7 PHARMACISTS 18 ROOFERS	687 486	827 596		91.3	16.9
7900)5 MURSERY WORKERS	192	275	35.7		16.3 16.3
225	14 DRAFTERS D5 PRODUCTION INSPECTORS, GRADERS	865 950	1140 1305		144.4	16.2
8980	2 SLAUGHTERERS AND BUTCHERS	658	704	231.1	247.2	16.1
6300	08 FIRE FIGHTERS	684 519	794 618			15.9 15.8
580	23 PHOTOGRAPHERS D5 DISPATCHERS: EXC. POL.,FIRE,AMB.	449	568	59.0	74.7	15.7
150	17 CONSTRUCTION MANAGERS	538 447	651 547			
	D5 REFUSE COLLECTORS 17 CORRECTION OFFICERS AND JAILERS	434	567			

	OCCUPATIONAL FITLE	1087	2000	1987 REGION EMP	2000	
ace o	OCCUPATIONAL	STATE	STATE	REGION	REGION	
CODE	ALL OTHER ENGINEERS CCMPUTER PROGRAMMERS SALESPERSONS, PARTS INSTRUCTORS AND COACHES, SPORTS REPORTERS AND CORRESPONDENTS CONCRETE AND TERRAZZO FINISHERS INSURANCE ADJUSTERS, INVESTIGATOR ALL OTHER MACHINE OPERATORS ELECTRONICS REPAIRERS, COMM.&IND. LIBRARY ASSISTANTS & BOOKMOBILE HIGHWAY MAINTENANCE WORKERS ALL OTHER FIRST LINE SUPERVISORS CUSTOM TAILORS AND SEWERS ELECTRICAL POMERLINE INSTAL/RPR. INTERVIEWING CLERKS, EX.PERSONNEL PERSONNEL, TRAINING, LABOR REL.MGR COURT CLERKS PARALEGAL PERSONNEL TYPISTS, WORD PROCESSING EQUIP. ANIMAL CARETAKERS, EXCEPT FARM EMERGENCY MEDICAL TECHNICIANS MILLWRIGHTS ENGLISH & FOREIGN LANG. TEACHERS FOREST AND CONSERVATION WORKERS MACHINISTS MEDICINE AND HEALTH SERV. MGRS LOG HANDLING EQUIPMENT OPERATORS ADJUSTMENT CLERKS GUARDS AND WATCH GUARDS GEOLOGIST, GEOPHYSICIST, OCEANOG FARMERS BILL AND ACCOUNT COLLECTORS LIBRARIANS, PROFESSIONAL VOCATIONAL & EDUC. COUNSELORS MUSICIANS, INSTRUMENTAL ENGINEER, MATH., NAT. SCI. MGR. COST ESTIMATORS SOCIAL SCIENCE TEACHERS SHEET METAL WORKERS ART, DRAMA, AND MUSIC TEACHERS CIVIL ENGINEERS, INCL. TRAFFIC REAL ESTATE APPRAISERS SMALL ENGINE SPECIALISTS SPEECH PATHOLOGISTS, AUDIOLOGISTS RADIOLOGIC TECHNICIANS INDUSTRIAL PRODUCTION MANAGERS GRADUATE ASSISTANTS, TEACHING CUSTOMER SERVICE REPS, UTILITIES ATHLETE, COACH, UMPIRE & RELATED LAUNDRY, DRYCLEANING MACH. OPER. ALL OTHER CLEAN, BUILDING SERVICE HOTEL DESK CLERKS	FMP	EMP	EMP	EMP	CHANGE
W .	11144	~ "				
22100	ALL OTHER ENGINEERS	740	1045	52.5	67.8	15.3
25105	COMPLITED DECCEANMERS	814	1032	80.8	96.0	15.2
4001/	CALECDEDONS DATE	1616	1740	208.3	223.5	15.2
71771	INCTINITIONS AND CHARUES SPORTS	577	703	64.3	79.4	15.1
3/011	DENOTEDS AND CONCRES, STORIS	462	561	71.5	86.5	15.0
27744	CONCRETE AND TEDRATION CINISHEDS	134	545	57.2	72.2	15.0
67700	CONCRETE AND TERRALLO FIRTHERS	412	400	36.6	51.3	14.7
22202	INSURANCE ADJUSTERS, INVESTIGATION .	777	925	114.2	128.8	14.5
92598	ALL VINER MACHINE OPERATORS	254	420	23 0	38.4	14.5
67/1/	ELECTRONICS REPAIRERS, COMMISSION	23 4	562	52.6	67.4	14.5
22405	FIRMAN MAINTENANCE INDACES	1106	1306	147.4	161.7	14.3
8//11	HIGHWAT MAINICHANGE WUKKEKS	541	605	72 1	86.3	14.2
01077	WILL MINER SING! FINE SOPERALISONS	460	554	76.7	90.5	13.8
04203	CUSION INITORS AND SEMENS	/08	570	85.2	98.9	13.7
02(43	ELECTRICAL POMERCIAE INSTAC/APR.	230	377	30.5	44 1	13.6
22226	INTEXALEMING CTEXY2'EX'SEKJOHUET	408	524	48.8	62.3	13.5
13005	PERSURNEL, IRAINING, LABOR RELINGR	7/0	426	51.6	65 1	13.5
53702	COOK! CLEKK?	125	221	16.3	20 6	13.3
28305	PARALEGAL PERSONNEL	123	820	57 1	70.4	13.3
55311	ITPISIS, WORD PROCESSING EQUIP.	507	620	05.7	108 0	13.2
79017	ANIMAL CARETAKERS, CACEPT FARM	202	207	45 1	58 2	13.1
32508	EMERGENCY MEDICAL TECHNICIANS	424	203 5/0	77.1	60.2	13.1
85123	MILLWRIGHTS	770	/85	4/.0	57.8	12 0
31216	ENGLISH & FOREIGN LANG. TEACHERS	2070	214/	175 /	188 1	12.7
79002	FOREST AND CONSERVATION WORKERS	2037	210	71 1	83 7	12.6
89108	MACHINISTS	725	600 600	/1 9	54.3	12.5
15008	MEDICINE AND HEALTH SERV. MGRS	303	472 505	3/. 7	47.2	12.5
73008	LOG HANDLING EQUIPMENT OPERATORS	404 707	503	52.5	45 0	12.5
53123	ADJUSTMENT CLERKS	377	1100	08 1	110.5	12.4
63047	GUARDS AND WATCH GUARDS	733	1190	70.1	/5 3	12.3
24111	GEOLOGIST, GEOPHYSICIST, OCEANUG	337	401 207	42.7	75.0	12.3
71002	FARMERS	232 707	200	/1 9	(3.0	12.3
53508	BILL AND ACCOUNT COLLECTORS	397	5/4	56.7	53.7 67.2	11 0
31502	LIBRARIANS, PROFESSIONAL	44/	740	74.0	/ Q R	11 0
31514	VOCATIONAL & EDUC. COUNSELORS	317	410	JO. 9	57 O	11.7
34051	MUSICIANS, INSTRUMENTAL	330	966	47.4	7/ 8	11.8
13017	ENGINEER., MATH., NAT. SCI. MGR.	725	577	77.5	58.0	11.0
21902	COST ESTIMATORS	419	775	47.3	51.8	11.4
31210	SOCIAL SCIENCE TEACHERS	224	433	40.4	52.8	11.4
89132	SHEET METAL WORKERS	242	(20	30.8	51.0	11.7
31218	ART, DRAMA, AND MUSIC TEACHERS	222	400	57.0	68.2	11 0
22121	CIVIL ENGINEERS, INCL. TRAFFIC	202	740	17.6	58.4	11.0
43011	REAL ESTATE APPRAISERS	770	779	50.2	70.3	11.0
85328	SMALL ENGINE SPECIALISTS	370	303	25.5	34.3	10.8
32314	SPEECH PATHOLOGISTS, AUDIOLOGISTS	210	747	30.1	40.9	10.8
32921	RADIOLOGIC TECHNICIANS	401	303 707	95.7	96.5	10.3
15014	INDUSTRIAL PRODUCTION MANAGERS	933	707	34.0	17.1	10.5
31117	GRADUATE ASSISTANTS, TEACHING	310	754	50.9	48.4	10.3
55335	CUSTOMER SERVICE REPS, UTILITIES	300	75.9	37.4	47.7	10.3
34058	ATHLETE, COACH, UMPIRE & RELATED	450	737	9/ 9	105 1	10.3
92726	LAUNDRY, DRYCLEANING MACH. OPER.	659	131	78.0	88.2	10.2
67099	ALL OTHER CLEAN, BUILDING SERVICE	471	538	70.0	99.2	10.2
53808	HOTEL DESK CLERKS	353	394	89.0	51.3	9.8
87708	PAVING, SURFACING, TAMPING	399	488	41.5	85.0	9.7
97989	ALL OTHER TRANSP., MAT. MOVING CPR	452	511	75.3	63.2	9.7
	PURCHASING AGENT EX.WHO/RET/FARM	645	782	53.5		9.5
	MOSILE HEAVY EQUIPMENT MECHANICS	608	732	51.8	61.3	9.3
27302	SOCIAL WORKER, MED. & PSYCHIATRIC	251	324	30.1	39.4	9.2
	DENTAL LABORATORY TECHNICIANS	170	237	22.8	32.0	9.2
58008	PRODUCTION, EXPEDITING CLERKS	333	490		43.1	9.1
66017	PHYSICAL, CORRECT. THERAPY ASSIST	135	215	15.5	24.6	
	RESPIRATORY THERAPISTS	145	223		25.1	9.0
	RECREATION WORKERS	477	554		72.2	9.0
	S SALES AGENTS, ADVERTISING	335	417		46.6	8.9 8.8
	TECHNICAL ASSISTANTS, LIBRARY	251	323		39.4	8.8
	2 TELLERS	1729	1798		215.2	8.3
58002	DISPATCHER: POLICE, FIRE, AMBULANCE	465	520		78.7	8.5
	SALES REPS, SCIENTIF. PROD. EXC.RET	641	731		90.0	8.5 8.4
32928	B SURGICAL TECHNICIANS	59	95	13.4	21.5	8.4



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	E TITLE 28 INDUSTRIAL ENGINEERS, EXC. SAFETY 102 WRITERS AND EDITORS 111 SHOE AND LEATHER WORKERS 102 POSTHASTERS, MAIL SUPERINTENDENT 132 SHERIFFS AND DEPUTY SHERIFFS 133 TIRE REPAIRERS AND CHANGERS 134 CONVEYOR OPERATORS AND TENDERS 138 DESIGNERS, EXC. INTERIOR DESIGN. 139 ALL OTHER LIFE SCIENTISTS 102 MECHANIC AND REPAIRER HELPERS 139 ALL OTHER SERVICE WORKERS 139 ALL OTHER SCIENCE TECHNICIANS 130 SOCIAL WORKERS, EX. HED. PSYCH. 138 GRADER, DOZER, SCRAPER OPERATORS 139 POLICE AND DETECTIVE SUPERVISORS 138 MEAT, POULTRY, FISH CUTTERS 130 POLICE AND DETECTIVE SUPERVISORS 139 ALL OTHER PROF., PARAPROF., TECHN. 130 SOCIAL WELFARE SERVICE AIDES 131 LOGGING TRACTOR OPERATORS 132 MEAT, POULTRY, FISH CUTTERS 133 SOCIAL WELFARE SERVICE AIDES 130 AUDIC ADMIN., LEG., GEN. ADMIN. 131 FOOD SERVERS, CUTSIDE 1308 SOCIAL SERVICE TECHNICIANS 1324 MATHEMATICAL SCIENCE TEACHERS 1305 OCCUPATIONAL THEAT. 1307 PHYSICIANS AND SURGEONS 1308 MOSTAL SERVICE TECHNICIANS 1308 POSTAL SERVICE TECHNICIANS 1309 PASTAL SERVICE TECHNICIANS 1301 HOME HEALTH AIDES 1307 RADIOLOGIC TECHNOLOGISTS 1308 POSTAL SERVICE CLERKS 1309 OSTAL SERVICE CLERKS 1305 OCCUPATIONAL THERAPISTS 1305 OCCUPATIONAL THERAPISTS 1306 SOCIAL SERVICE CLERKS 1307 SALES AGENTS, BUSINESS SERVICES 1308 POSTAL SERVICE CLERKS 1309 POSTAL SERVICE CLERKS 1309 DOSTAL SERVICE CLERKS 1309 OSTAL SERVICE CLERKS 1301 SARBERS 1301 SARBERS 1302 BROKERS, REAL ESTATE 1305 OCCUPATIONAL THERAPISTS 1306 DOSTAL SERVICE CLERKS 1307 SALES AGENTS, BUSINESS SERVICES 1308 POSTAL SERVICE CLERKS 1309 DOSTAL SERVICE CLERKS 1301 SALES AGENTS, BUSINESS SERVICES 1302 BROKERS, REAL ESTATE 1305 OCCUPATIONAL THERAPISTS 1307 SALES AGENTS, BUSINESS SERVICES 1308 POSTAL SERVICE CLERKS 1309 OCCUPATIONAL THERAPISTS 1309 ALL OTHER MACHINE SETTERS/OPER. 1309 ALL OTHER MACHINE SETTERS/OPER. 1309 ALL OTHER FINANCIAL SPECIALISTS 1309 ALL OTHER FINANCIAL SPECIALISTS 1309 ALL OTHER FINANCIAL SPECIALISTS 1301 FIRST LINE SUPERV: TRANSPORT.					
221	28 INDUSTRIAL ENGINEERS.EXC. SAFETY	197	298	18.9	27.3	8.4
340	02 WRITERS AND EDITORS	283	344	36.1	44.4	8.3
895	11 SHOE AND LEATHER WORKERS	123	182	15.7	24.0	8.3
150	102 POSTHASTERS, MAIL SUPERINTENDENT	288	357	35.0	43.2	8.2
630	32 SHERIFFS AND DEPUTY SHERIFFS	479	531	74.2	82.3	8.1
859	S3 TIRE REPAIRERS AND CHANGERS	573	640	82.7	90.8	8.1
312	202 LIFE SCIENCE TEACHERS	239	307	28.5	36.6	8.1
979	51 CONVEYOR OPERATORS AND TENDERS	398	445	97.5	105.5	8.0
340	138 DESIGNERS, EXC. INTERIOR DESIGN.	315	377	40.2	48.0	7.8
243	199 ALL OTHER LIFE SCIENTISTS	260	323	34.1	41.8	7.7
981	102 MECHANIC AND REPAIRER HELPERS	446	524	57.8	65.5	7.7
699	99 ALL OTHER SERVICE WORKERS	294	339	67.7	75.4	7.7
245	599 ALL OTHER SCIENCE TECHNICIANS	458	568	32.2	39.8	7.6
27.	305 SOCIAL WORKERS, EX. MED.& PSYCH.	545	606	51.0	58.6	7.6
979	38 GRADER, DOZER, SCRAPER OPERATORS	364	446	35.4	43.0	7.6
610	005 POLICE AND DETECTIVE SUPERVISORS	259	308	36.7	44.2	7.5
939	738 MEAT, POULTRY, FISH CUTTERS	195	216	68.5	76.0	7.5
730	111 LOGGING TRACTOR OPERATORS	473	584	26.4	33.9	7.5
39	999 ALL OTHER PROF., PARAPROF., TECHN.	938	1014	71.7	79.1	7.4
329	905 MED./CLINICAL LAB. TECHNICIANS	189	250	20.7	28.0	7.3
68	035 SOCIAL WELFARE SERVICE AIDES	147	198	20.1	27.4	7.3
13	008 PURCHASING MANAGERS	1007	1077	133.9	141.1	7.2
92	717 SEWING MACH. OPERATOR, GARMENT	245	316	22.2	29.2	7.0
19	002 PUBLIC ADMIN., LEG., GEN. ADMIN.	378	423	58.2	65.1	6.9
95	002 WATER & WASTE TREAT, PLANT OPER.	265	307	41.4	48.3	6.9
65	011 FOOD SERVERS, OUTSIDE	191	244	30.8	37.7	6.9
27	308 SOCIAL SERVICE TECHNICIANS	213	267	26.1	32.9	6.8
31	224 MATHEMATICAL SCIENCE TEACHERS	193	248	22.9	29.7	6.8
32	102 PHYSICIANS AND SURGEONS	1555	1684	219.4	226.1	6.7
24	305 AGRICULTURAL AND FOOD SCIENTISTS	308	359	35.2	41.9	6.7
66	011 HOME HEALTH AIDES	217	272	22.9	29.6	6.7
32	917 RADIOLOGIC TECHNOLOGISTS	161	221	18.6	43.4	0.0
22	599 ALL OTHER ENGINEERING TECHNICIAN	580	645	62.2	68.8	0.0
57	102 SWITCHBOARD OPERATORS	619	708	61.0	6/.5	0.2
57	308 POSTAL SERVICE CLERKS	288	343	35.0	41.5	0.5
43	005 BROKERS, REAL ESTATE	120	158	20.0	20.3	0.3
32	305 OCCUPATIONAL THERAPISTS	69	115	8.4	14.0	0.4
97	702 AIRCRAFT PILOTS, FLIGHT ENGINEERS	229	294	20.9	2/.0	0.1
68	002 BARBERS	1//	212	29.1	35.4	0.1
43	017 SALES AGENTS, BUSINESS SERVICES	216	2/2	20.1	34.4	6.1
87	302 BRICK MASONS	206	243	47.0	32.9	4.0
63	035 PRIVATE DETECTIVE & INVESTIGATOR	201	304	17.4	24.4	4.0
89	705 DATA PROCESSING EQUIP. REPAIRERS	216	200	20.7	40.7	4.0
53	121 LOAN AND CREDIT CLERKS	316	1001	71/ 0	710 0	5.0
7	2000 SUPERVISORS, FARM, FOREST, AG. REL	1001	1001	314.0	30.0	5.7
53	3805 RESERVATION & TRANS.TICKET AGENT	212	346 775	24.0	41 5	5.9
92	2997 ALL OTHER MACHINE SETTERS/OPER.	270 15/	201	17.8	23.6	5.8
34	2521 DIETITIANS AND NUIRITIONISTS	134	712	30 1	2.0	5.8
٤.	1199 ALL OTHER FINANCIAL SPECIALISTS	118	167	13.6	19.3	5.7
34	4008 PUBLIC RELATIONS SPECIALISTS	118	421	39.4	45.1	5.7
34	4017 ANNOUNCERS, RADIO AND TV	366 292	338	43.7	49.4	5.7
8	1011 FIRST LINE SUPERV.: TRANSPORT.	175	211	26.5	32.2	5.7
	7814 STRUCTURAL METAL WORKERS	231	247	81.1	86.7	5.6
	9808 FOOD BATCHMAKERS		202	21.6		5.4
	2543 PRINTING PRESS MACHINE OPERATOR	162 421	511	49.6		5.4
	2965 CRUSHING & MIXING MACHINE OPER.		335	15.0		5.4
2	4508 MUCLEAR TECHNICIAN, TECHNOLOGIST	244	140			5.4
8	9708 PRECISION LITHOGRAPHERS & PHOTO.	106 233	288			5.3
	5099 ALL OTHER PLANT AND SYSTEM OCC.	324	449			5.2 5.2
	2511 MECHANICAL ENGINEERING TECHN.	192	206			5.1
9	2921 ROASTING, DRYING OPER., FOOD/TOB.	243	324			5.1
	1017 FIRST LINE SUPERV.:HELP, LABORERS	175	217			4.9
3	2511 PHYSICIAN ASSISTANTS	428	486			4.9
	5999 ALL OTHER MECHANICS, INSTALLERS	371	485		44.1	4.8
	4505 CHEMICAL TECHNICIANS, EXC.HEALTH	1460	1574			4.8
	8502 MACHINE FEEDERS AND OFFBEARERS	130				
	6026 PHARMACY ASSISTANTS	236				4.6
ō	S323 AIRCRAFT MECHANICS	بازع	-/-			

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OES COOE	OCCUPATIONAL TITLE	1987 STATE EMP		1987 REGION EMP	0CC10U	CHANGE
21905 31114 53908 92926 56021 25108 87802 57311 53708 92721 21305 85128 85947 89805 468021 53105 87999 24106 87999 24106 87999 92911 49026 31211 49026 31211 89500 89791 24308 92912 31305 89799 92914 89500 89799 92912		299 129 129 129 129 129 129 129 120 142 246 323 262 198 154 285 76 237 266 339 267 321 552 201 100 282 123 153 104 82 141 82 144 299 145 80 162 168 133 300 129 146 189 189 116 139 1283 116 139 129 148 117 139 136 149 159 169 170 136 136 137 136 137 136 136 137 136 137 136 137 136 137 136 137 136 137 136 137 136 137 136 137 137 137 138 138 138 139 139 139 130 130 130 130 130 130 130 130 130 130		REGION	0CC10U	E 44443222110099988887777777666655555444444333333333333333333
5312	26 STATEMENT CLERKS D8 EMPLOYMENT INTERVIEWERS	61 128	80 165		9.9 11.2	2.5 2.5



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EMPLOYMENT by OCCUPATION
FOR OIS REGION IV

0E\$ C00E	CCCUPATIONAL TITLE PHOTOGRAPHIC PROCESS WORKERS MAIL CLERKS, EXC. MAIL MACHINE AIRCRAFT ENGINE SPECIALISTS ELECTR. HOME APPL. & POWER TOOL CARPET INSTALLERS MAIL MACHINE OPERATORS MANICURISTS COMPUTER SCIENCE TEACHERS INSTRUCTIONAL COORDINATORS ALL OTHER CONSTRUCTION WORKERS MARKING CLERKS CUITING & SLICING MACHINE OPER. COMPLIANCE & ENFORCE. INSPECTORS ALL OTHER MATERIAL WORKERS SHEET METAL DUCT INSTALLERS MANICIPAL CLERKS JOB PRINTERS ALL OTHER HOTOR VEHICLE OPERATOR FARM EQUIPMENT OPERATORS ALL OTHER INSPECTORS, TESTERS SAFETY ENGINEERS, EXCEPT MINING ALL OTHER INSPECTORS, TESTERS CATIONARY ENGINEERS SAFETY ENGINEERS, EXCEPT MINING ALL OTHER PRECISION FOOD, TOBACCO PROOFREADERS AND COPY MARKERS PAINTERS, TRANSPORTATION EQUIP. ALL OTHER TRANSPORTATION WORKERS POMER DISTRIBUTORS & DISPATCHERS PHOTOENGRAVING & LITH. PHOTOGRA. TITLE EXAMINERS AND ABSTRACTORS MECHANICAL WRITERS PHOTOENGRAVING & LITH. PHOTOGRA. TITLE EXAMINERS AND ABSTRACTORS MECHANICAL CONTROL INSTAL.& REPR PHYSICS TEACHERS PHYSICS TEACHERS POWER GENERATING PLANT OPERATOR CREDIT ANALYSTS BOILERMAKERS REAL ESTATE CLERKS ALL OTHER PHYSICAL SCIENTISTS PROOFED TO INSTRUMENT SET ANTENDANTS TAX PREPARERS ALL OTHER PHYSICAL SCIENTISTS PROOF, DIRECT., ACTORS, ENTERTAINER CEILING TILE INSTALLERS PIPELAYERS AMAULANCE DRIVERS & ATTENDANTS TAX PREPARERS AMACHING OPERATOR, TENDER TAX PREPARERS AMACHING OPERATOR, TENDER TAX PREPARERS AMACHING OPERATOR, TENDER CEILING TILE INSTALLERS CHICKERS CH	1987 STATE EMP	2000 STATE EMP	1987 REGION EMP	2000 REGION EMP	CHANGE
89914	PHOTOGRAPHIC PROCESS WORKERS	67 333	87 346	7.4 40.1	9.9 42.5	2.5 2.4
85326	AIRCRAFT ENGINE SPECIALISTS	64	82	7.6	10.0	2.4
85711	ELECTR. HOME APPL. & POWER TOOL	146	163	22.5	24.9 18.4	2.4 2.4
87602	CARPET INSTALLERS	65	81	8.9	11.2	2.3
68008	MANICURISTS	64	78	9.7	12.0	2.3
31226	COMPUTER SCIENCE TEACHERS	71	91	8.5	10.5	2.3
31517	INSTRUCTIONAL COORDINATORS	184	204	21.0	23.2	2.2
58021	MARKING CLERKS	99	115	14.9	17.1	2.2
92944	CUTTING & SLICING MACHINE OPER.	83	96	16.7	18.9 41.6	2.2
21911	COMPLIANCE & ENFORCE. INSPECTORS	71	82	9.9	12.1	2.2
87805	SHEET METAL DUCT INSTALLERS	108	125	14.4	16.6	2.2
53705	MUNICIPAL CLERKS	121	135	18.7	20.9	2.2
89705	JOS PRINTERS	92	121	8.0	10.1	2.1
79021	FARM EQUIPMENT OPERATORS	80	86	28.1	30.2	2.1
83099	ALL OTHER INSPECTORS, TESTERS	118	138	13.6	15.7	2.1
95032	STATIONARY ENGINEERS	102 133	108 171	29.6 7.2	9.3	2.1 2.1
80800	ALL OTHER PRECISION FOOD TOBACCO	87	93	30.6	32.7	2.1
5391	PROOFREADERS AND COPY MARKERS	57	71	8.1	10.2	2.1
92947	7 PAINTERS, TRANSPORTATION EQUIP.	62 120	78 137	15.2	10.9	2.0 2.0
95028	R POWER DISTRIBUTORS & DISPATCHERS	99	112	13.5	15.5	2.0
3400	5 TECHNICAL WRITERS	90	125	5.3	7.3	2.0
9252	1 PHOTOENGRAVING & LITH. PHOTOGRA.	49 96	61 122	7.5	11.0	2.0 2.0
8592	R MECHANICAL CONTROL INSTAL.& REPR	100	111	16.4	18.4	2.0
3120	6 PHYSICS TEACHERS	58	74	6.9	8.9	2.0
9502	1 POWER GENERATING PLANT OPERATOR	87 108	98 124	15.8	17.7	1.9 1.9
2110 8913	S ROTIFEMAKEES	69	86	6.5	8.4	1.9
5391	4 REAL ESTATE CLERKS	89	102	8.4	10.3	1.9
2419	9 ALL OTHER PHYSICAL SCIENTISTS	149	177	9.9	11./ 8.4	1.8 1.8
3405 8710	6 PROD.,DIRECT.,ACTURS,ENTERTAINER 5 CETTING THE INSTALLERS	55	66	8.0	9.8	1.8
8750	8 PIPELAYERS	120	137	14.5	16.3	1.8
6602	3 AMBULANCE DRIVERS & ATTENDANTS	34 111	41 120	10.8	12.3	1.7 1.7
2111 8511	1 IAX PREPARERS 8 MACHINERY MECHANICS: PLANT	111	123	14.9	16.6	1.7
8731	4 REINFORCING METAL WORKERS	76	90	9.4	11.1	1.7
9230	8 SAWING MACHING OPERATOR/TENDER	864 117	994 135	9.9 13.0	11.5	1.6 1.6
5801 8550	/ WEIGHERS, MEASURERS, CHECKERS 12 CENTRAL OFFICE & PRY INSTAL/RPR.	239	254	25.6	27.2	1.6
2839	ALL OTHER LEGAL ASSISTANTS	173	191	13.8	15.4	1.6
8931	1 CABINETHAKERS & BENCH CARPENTERS	346 46	394 58	6.6	8.1	1.6 1.5
9254 8500	66 BINDERY MACHINE OPERATORS D5 PRECISION INSTRUMENT REPAIRERS	92	108	8.5	10.0	1.5
9831	16 HELPERS, ROOFERS	65	75	8.5	10.0	1.5
2252	21 SURVEYING AND MAPPING TECHNICIAN	177 55	199 70	14.5	10.3	1.5 1.4
5600	D5 DUPLICATING MACHINE OPERATORS D0 ALL OTHER MET.&PLAS.MACH.SET/OPS	109	132			
3409	53 DANCERS AND CHOREOGRAPHERS	46	56	6.6	8.0	1.4
2130	12 WHOLESALE, RETAIL BUYERS, EX. FARM	776	779			1.4
223	11 SURVEYING AND MAPPING SCIENTISTS 23 FURNACE, KILN, OVEN,KETTLE OPER.	119 534	134 627			1.3
219	OS CONSTRUCTION, BUILDING INSPECTOR	149	161	18.2	19.5	1.3
857	21 POWERHOUSE & RELAY ELECTRICIANS	61	69			1.3
670	O1 JANITORS, CLEANERS, MAIDS 41 CUTTING AND SLICING SETTER/OPER.	77 38	83 44			
983	13 HELPERS, ELECTRICIANS	71	81	9.8	11.0	1.2
271	05 URBAN AND REGIONAL PLANNERS	70	79			1.2
283	02 LAW CLERKS 11 ELECTRIC METER INSTALLERS/REPAIR	71 51	82 58			1.2
	14 STRUCTURAL METAL FABRICATORS	104	126			

OES COOE	ALL OTHER THERAPISTS INSURANCE CLAIMS CLERKS ALL OTHER SOCIAL SCIENTISTS TRAFFIC TECHNICIANS LANDSCAPE ARCHITECTS TITLE SEARCHERS LECTURERS DRYWALL INSTALLERS FENCE ERECTORS TOOL GRINDERS, FILERS, SHARPENERS POOLATRISTS MERCHANDISE DISPLAYERS FARM EQUIPMENT MECHANICS GLAZIERS DIETETIC TECHNICIANS ALL OTHER MATHEMATICAL SCIENTIST INTERIOR DESIGNERS BILL, POST, CALCULATING MACH.OP FUNERAL DIRECTORS AND MORTICIANS CLEANING, PICKLING EQUIP. OPER. CHARLOTHER PRECISION METAL WORKER FORESTER, CONSERVATION SCIENTIST SHILLFFS SPEST CONTROLLERS AND ASSISTANTS BAILIFFS SPEST CONTROLLERS AND ASSISTANTS SAGGAGE PORTERS AND BELLHOPS FISH AND GAME WARDENS COOLING, FREEZING EQUIP. CPER. ARADIO MECHANICS AND MAGISTRATES BICYCLE REPAIRERS COMMENTS, MARKET ANALYSTS RAILROAD BRAKE, SIGNAL, SWITCH WOOD MACHINISTS BROADCAST TECHNICIANS TRANSPORTATION INSPECTORS THEDICAL SCIENTISTS RAILROAD CONDUCTORS, YARDMASTERS COMMINISTS, MARKET ANALYSTS RAILROAD CONDUCTORS, YARDMASTERS CHAIROAD CONDUCTORS CHECKS: MATERIALS, SERVICE CHECTORIC SEMICONDUCTOR			1987 REGION EMP		CHANGE
32399	ALL OTHER THERAPISTS	124	132	10.8	11.9 12.0	1.1
27100	INSURANCE CLAIMS CLERKS ALL OTHER SOCIAL SCIENTISTS	66	73	5.4	6.5	1.1
39005	TRAFFIC TECHNICIANS	330	344	26.2	27.3	1.1
22308	LANDSCAPE ARCHITECTS	49 80	59 76	5.4	6.2	1.1
28308	TITLE SEARCHERS	101	- 110	11.8	12.9	1.1
87108	DRYWALL INSTALLERS	59	68	8.0	9.1	1.1
87817	FENCE ERECTORS	63 160	72 198	8.5 6.9	8.0	1.1
89111 32111	PODIATRISTS	43	49	6.7	7.7	1.0
34044	MERCHANDISE DISPLAYERS	35	42	5.3	6.3	1.0
85321	FARM EQUIPMENT MECHANICS	884 312	318	46.9	47.9	1.0
32523	DIETETIC TECHNICIANS	68	76	7.5	8.4	0.9
25319	ALL OTHER MATHEMATICAL SCIENTIST	98	112	7.7	8.6 10.4	0.9
34041	INTERIOR DESIGNERS	237	249	33.2	34.0	0.8
39011	FUNERAL DIRECTORS AND MORTICIANS	82	90	9.6	10.4	0.8
92958	CLEANING, PICKLING EQUIP. OPER.	25	128	8.8	9.5 15.6	0.7
85938	MOBILE HOME INSTALLER & REPAIRER MAIL OTHER OPECISION METAL WORKER	42	53	6.6	7.3	0.7
2430	FORESTER, CONSERVATION SCIENTIST	775	794	54.7	55.3	0.6
63023	BAILIFFS	34	38	5.4	12.2	0.6
67008	B PEST CONTROLLERS AND ASSISTANTS RACGACE PORTERS AND RELLYOPS	115 79	82	20.4	21.0	0.6
6304	1 FISH AND GAME WARDENS	92	96	7.0	7.6	0.6
9292	B COOLING, FREEZING EQUIP. CPER.	35	37	12.4	13.0	0.6
85514	4 RADIO MECHANICS 2 AIR TRAFFIC CONTROLLERS	95	101	6.2	6.7	0.5
2810	2 JUDGES AND MAGISTRATES	50	53	5.5	6.0	0.5
8595	1 BICYCLE REPAIRERS	103	106	17.2 7.8	17.0 8.2	0.4
2710	4 CAMERA & PHOTOGRAPHIC REPAIRERS 2 FOCHOMISTS MARKET ANALYSTS	118	123	15.4	15.8	0.4
9731	7 RAILROAD BRAKE, SIGNAL, SWITCH	374	381	15.1	15.5	0.4
8930	8 WOOD MACHINISTS	147 60	164	6.5	6.8	0.3
3402 8300	8 TRANSPORTATION INSPECTORS	126	130	8.9	9.2	0.3
2431	1 MEDICAL SCIENTISTS	74	177	5.6	5.8	0.2
9730	2 RAILROAD CONDUCTORS, YARDMASTERS	155	157	6.0	6.0	0.0
5532	A PROCUREMENT CLERKS	129	142	12.8	12.7	-0.1
8570	8 HOME ENTERTAINMENT EQ. REPAIRERS	287	285	45.7	45.6	-0.1 -0.1
2410	IZ PHYSICISTS AND ASTRONOMERS	208	208	27.0	26.6	-0.4
2211	7 NUCLEAR ENGINEERS	492	495	29.2	28.7	-0.5
9254	1 TYPESETTING MACH. OPERATOR/TEND.	161	157	24.9	14.2	-0.7
8574	S TELEPH. STATION INSTALL & REPAIR NO MOTORCYCLE REPAIRERS	180	174	29.1	28.1	-1.0
5532	ORDER CLERKS: MATERIALS, SERVICE	548	548	75.8	74.7	-1.1
5534	4 BILLING, COST AND RATE CLERKS	700 819	722 635	85.6 6.4	84.4 5.0	·1.2 -1.4
9290	D2 ELECTRONIC SEMICONDUCTOR 15 LETTERPRESS SETTER/OPERATOR	225	215	34.8	33.3	-1.5
553	21 FILE CLERKS	880	889			-2.2 -2.5
857	DZ TELEPHONE & CABLE TV INSTAL/RPR.	558 556	538 403			-3.1
580	05 ELECTRICAL, ELECTRONIC ASSEMBLER 14 METER READERS, UTILITIES	174	150	30.2	25.8	-4.4
533	14 INSURANCE POLICY PROCESS. CLERKS	508	479			-5.1 -5.2
553	28 STATISTICAL CLERKS 02 PRECISION COMPOSITOR, TYPESETTER	140 168	94 136			.5.3
325	14 OPTICIANS, DISPENSING & MEASUR.	312	286	38.9	33.4	-5.5
321	08 OPTOMETRISTS	187	154			·6.2 -7.3
	23 STOCK CLERKS:STOCYROOM OR WAREH. 17 DRIVER/SALES WORKERS	1711 1016	1676 999			
	1/ URIVER/SALES WORKERS D8 LAWYERS	3080	3146	471.7	462.4	-9.3
553	O2 STENOGRAPHERS	218	131			
553	41 PAYROLL AND TIMEKEEPING CLERKS	402 740	332 548			
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ŒS CODE	OCCUPATIONAL TITLE	1987 State EMP	2000 STATE EMP	1987 REGION EMP	2000 REGION EMP	CHANGE
97947	BOOKKEEPING & ACCOUNTING CLERKS	9250	8872	1277.3	1203.1	-74.2
	INDUSTRIAL TRUCK & TRACTOR OPER.	1989	1515	349.8	263.8	-86.0
	FARM WORKERS	9543	8528	2100.1	1944.1	-156.0

OES OCCUPAT	ERSONS, RETAIL PRIVERS MANAGERS AND TOP EXEC. RS, ELEMENTARY RS, SECONDARY SCHOOL L SECRETARIES S AND WAITRESSES ERED NURSES ERED NURSES ERS AND CLEANERS, EXC.MAIDS ERS AND GROUNDSKEEPERS TANTS AND AUDITORS ICAL & ELECTRONIC TECHNS. L OFFICE CLERKS CARE WORKERS NANCE REPAIRERS, GEN.UTIL. FOOD PREPARATION, SERVICE G AIDES AND ORDERLIES ING ENGINEERS RUCK, DIESEL ENG. MECHANIC LINE SUPERVISORS, CLERICAL CLERKS, SALES FLOOR LINE SUPERVISORS, CLERICAL CLERKS, SALES FLOOR LINE SUPERVISORS, GRADERS REPARATION MORKERS IICAL ENGINEERS INSTITUTION OR CAFETERIA RIY, REAL ESTATE MANAGEMENT IER SYSTEMS ANALYSTS, EDP G ROOM & BARTENDER HELPERS MODERS AGENTS, REAL ESTATE , SPECIALTY FAST FOOD IIONISTS, INFORMATION CLERKS RESSERS AND COSMETOLOGISTS RICIANS LINE SUPERVISORS, SALES CAL ENGINEERS LINE SUPERVISORS, SALES CAL MANAGERS TION ADMINISTRATORS RS AND BUCKERS OTIVE MECHANICS ANCE ADJUSTERS, INVESTIGATOR	1987 STATE EMP	2000 STATE EMP	1987 REGION EMP	2000 REGION EMP	CHANGE
49011 SALESPE 97101 TRUCK 0	RSONS, RETAIL DRIVERS	13603 11908	17229 15031	1569.0 1277.1	1979.0 1610.6	410.0 333.5
19005 GENERAL	MANAGERS AND TOP EXEC.	11032	13382	1284.8	1567.8	283.0
49023 CASHIER	RS DC FIFMFUTARY	8617 5203	6680	802.9	1030.8	227.9
31308 TEACHER	S, SECONDARY SCHOOL	4687	6146	723.3	948.4	225.1
55199 GENERAL	L SECRETARIES	8333 6727	10109 8520	765.2	973.6	208.4
32502 REGIST	ERED NURSES	4595	7156	340.1	524.9	184.8
67005 JANITO	RS AND CLEANERS, EXC.MAIDS	5612	7194	625.4	790.2 577.2	164.8 160.6
79014 GARDENI 21114 ACCOUNT	ERS AND GROUNDSKEEPERS TANTS AND AUDITORS	3380	4523	405.0	542.0	137.0
22126 ELECTR	ICAL & ELECTRONIC ENGINEER	1114	2127	133.6	265.7	132.1
22505 ELECTR	ICAL & ELECTRONIC TECHNS.	1026 7083	1838	127.7 826.1	250.5 945.3	119.2
55547 GENERA 68038 CHILD	CARE WORKERS	5308	6623	456.8	571.9	115.1
85132 MAINTE	NANCE REPAIRERS, GEN.UTIL.	3884	4823	485.7	600.2	114.5
65041 COMB.	FOOD PREPARATION, SERVICE	3686 3697	4585 4586	367.7	464.9	97.2
97956 OPERAT	ING ENGINEERS	1100	1391	242.3	335.2	92.9
85311 BUS, T	RUCK, DIESEL ENG. MECHANIC	1593	1993	263.3	353.9 483.7	90.6 70.0
51002 FIRST	CLERKS SALES FLOOR	3921	4526	497.3	574.1	76.8
81008 FIRST	LINE SUPERV .: PRODUCTION	1708	2130	257.7	332.7	75.0
65026 COCKS,	RESTAURANT	2389 1637	3111 2008	251.4 251.3	322.4	71.1
83005 PRODUC	TION INSPECTORS, GRADERS	950	1305	119.4	187.4	68.0
65038 F000 P	REPARATION WORKERS	2356	2893	268.5	330.9 160.6	62.4 62.1
22135 MECHAN	IICAL ENGINEERS	1949	2572	174.3	234.4	60.1
97111 BUS DR	IVERS, SCHOOL	1743	2153	234.6	292.5	57.9
32505 LICENS	SED PRACTICAL NURSES	2352	3003 2474	187.0 275.6	330.5	54.9
15011 PROPER	TY REAL ESTATE MANAGEMENT	1590	2215	134.6	188.3	53.7
25102 COMPUT	ER SYSTEMS ANALYSTS, EDP	667	1028	84.7	137.4	52.7 52.3
65014 DINING	ROOM & BARTENDER HELPERS	1436 1867	1898 2336	204.0	256.2	52.2
43008 SALES	AGENTS, REAL ESTATE	1754	2378	146.5	198.5	52.1
65032 COOKS	, SPECIALTY FAST FOOD	1776	2213	210.1	262.1 332.2	52.0 51.4
55305 RECEP	TIONISTS, INFORMATION CLERKS PESSEDS AND COSMETOLOGISTS	4206	4778	377.8	428.2	50.4
87202 ELECT	RICIANS	1645	2092	182.9	232.6	49.7
41002 FIRST	LINE SUPERVISORS, SALES	2084	2465	121.7	168.8	40.4 47.1
65017 COUNT	CAL ENGINEERS FR ATTENDANTS	1576	1965	188.8	235.3	46.5
93956 ALL 0	THER ASSEMBLERS, FABRICATOR	2890	3644	170.7	215.8	45.1
87502 PLUMB	ER, PIPEFITTER, STEAMFITTER	1424	1650	141.2	221.1	44.3
13002 FINAN	CIAL MANAGERS	2024	2398	222.1	266.0	43.9
15005 EDUCA	TION ADMINISTRATORS	1073	1385	151.6	195.2	43.6 43.3
73002 FALLE	RS AND BUCKERS OTIVE MECHANICS	4009	4340	417.5	460.3	43.3
53302 NOTUR	ANCE ADJUSTERS, INVESTIGATOR	412	609	68.1	109.9	41.8
98799 ALL 0	THER HAND MATERIAL MOVERS	2100	4370	224.3	263.7 174.0	39.4 39.2
13011 MARKE 71005 FARM	TING, ADV., PUBLIC REL.MGRS	1164 610		134.8 52.9		39.0
98999 ALL 0	THER HELPER, LABORER, MOVER	3175		440.8	479.5	38.7
31399 ALL 0	THER TEACHERS, INSTRUCTORS	906		135.0 163.3		38.3 37.5
49999 ALL 0	THER SALES & RELATED CCC. ERS AND PAPERHANGERS	1313 1449				37.5
31299 ALL 0	THER POST SECONDARY TEACHER	825	1059	127.3	163.5	36.2
22514 DRAFT	ERS	865 1407				36.0 36.0
55308 TYPIS	STS ACE, KILN, OVEN,KETTLE OPER.	1407 534				35.5
87102 CARPE	ENTERS	1730	2163	155.5	190.4	
24105 CHEM1	ISTS, EXCEPT BIOCHEMISTS	267 740				
22199 ALL 0	OTHER ENGINEERS OTHER MANAGERS & ADMINIST.	1619				



DES OCCUPATIONAL CODE TITLE 15026 FOOD SERVICE & LOOGING MANAGERS 61099 ALL OTHER SERVICE SUPERVISORS 81002 FIRST LINE SUPERY: MECH. & REPAIR 31311 TEACHERS, SPECIAL EDUCATION 21511 PERSONNEL, TRAIN., LABOR REL. SPEC 49008 SALES REPS.EXC.SCIENTIF & RETAIL 57305 POSTAL MAIL CARRIERS 98902 HAND PACKERS AND PACKAGERS 31302 TEACHERS, PRESCHOOL & KINDERGARTN 58028 TRAFFIC, SHIPPING, & REC. CLERKS 65099 ALL OTHER FOOD SERVICE WORKERS 65009 DENTAL ASSISTANIS 67002 MAIDS AND HOUSEKEEPING CLEANERS 31314 TEACHERS, VOCATIONAL EDUCATION 93935 CANNERY WORKERS 85717 ELECTRONICS REPAIRERS, COMM.&IND. 56011 COMPUTER OPERATORS, EXC. PERIPH. 65035 COOKS, SHORT ORDER 59999 ALL OTHER CLERICAL & ADM.SUPPORT 65002 HOSTS & HOSTESSES: REST., LOUNGE 22511 MECHANICAL ENGINEERING TECHN. 58008 PRODUCTION, EXPEDITING CLERKS 53905 TEACHER AIDES & EDUC. ASSISTANTS 92965 CRUSHING & MIXING MACHINE OPER. 79999 ALL OTHER MACHINERY MECHANICS 98905 VEHICLE, EQUIPMENT CLEANERS 21108 LOAN OFFICERS AND COUNSELORS 25105 COMPUTER PROGRAMMERS 31317 INSTRUCTORS, NONVOCATIONAL EDUC. 43021 TRAVEL AGENTS 97805 SERVICE STATION ATTENDANTS 15014 INDUSTRIAL PRODUCTION MANAGERS 51051 MEDICAL SECRETARIES 63014 POLICE PATROL OFFICERS 21999 ALL OTHER MANAGEMENT SUPPORT OCC 68014 AMUSEMENT & RECREATION ATTENDANT 13017 FINGINEER., MATH., NAT. SCI. MGR. 92935 CHEMICAL ECQUIP. CONTROLLER/OPER. 55102 LEGAL SECRETARIES 63014 POLICE PATROL OFFICERS 24999 ALL OTHER MANAGEMENT SUPPORT OCC 68014 AMUSEMENT & RECREATION ATTENDANT 13017 FINGINEER., MATH., NAT. SCI. MGR. 92935 CHEMICAL TECHNICIANS, EXC. HEALTH 85902 HEATING, A/C, REFRIG. MECHANICS 65023 BUTCHERS AND MEAT CUTTERS 24108 DENTAL HYGIENISTS 55111 TYPISTS, WORD PROCESSING EQUIP. 53902 LIBRARY ASSISTANTS & BOOKMOBILE 65021 BAKERS, BREAD AND PASTRY 13014 ADMINISTRATIVE SERVICES MANAGER 92974 PACKAGING & FILLLING MACHINE OPER	1987 STATE EMP	STATE	1987 REGION EMP	2000 REGION EMP	CHANGE
15026 FOOD SERVICE & LONGING MANAGERS	2893	3206	261.3	295.3	34.0
61099 ALL OTHER SERVICE SUPERVISORS	1020	1270	124.U 231 Q	264.5	33.3 32.6
31311 TEACHERS SPECIAL EDUCATION	744	955	114.7	147.3	32.6
21511 PERSONNEL TRAIN. LABOR REL. SPEC	935	1193	108.8	141.2	32.4
49008 SALES REPS.EXC.SCIENTIF & RETAIL	2693	3002	298.2	330.5	32.3
57305 POSTAL MAIL CARRIERS	872 2007	1080 2350	296.5	328.0	31.5
78902 HAND PACKERS AND PACKAGERS	795	1037	106.4	137.9	31.5
58028 TRAFFIC, SHIPPING, & REC. CLERKS	1623	1849	213.8	245.0	31.2
65099 ALL OTHER FOOD SERVICE WORKERS	990	1245	121.2	152.1	30.9
66002 DENTAL ASSISTANTS	729	1058	152 1	182 3	30.9 30.2
67002 MAIDS AND HOUSEKEEPING CLEANERS	4422 645	2073 840	86.3	115.2	28.9
OZOZS CANNERY WORKERS	4173	4312	866.0	894.7	28.7
85717 ELECTRONICS REPAIRERS, COMM.&IND.	254	429	28.2	56.3	28.1
56011 COMPUTER OPERATORS, EXC. PERIPH.	665	891	78.0	105.5	27.5
65035 COOKS, SHORT ORDER	1009	1243	110.1	143.0	27.4
59999 ALL DIREK CLERICAL & ADM. SUPPORT	930 1074	1306	114.6	141.6	27.0
22511 MECHANICAL ENGINEERING TECHN.	324	449	66.0	92.7	26.7
58008 PRODUCTION, EXPEDITING CLERKS	333	490	41.9	67.8	25.9
53905 TEACHER AIDES & EDUC. ASSISTANTS	618	802	86.5	111.8	25.3
92965 CRUSHING & MIXING MACHINE OPER.	421	101/	223.5	248 2	24.7
7999 ALL DINER AGRIC., PURESI, PISH.	878	1018	180.2	204.5	24.3
98905 VEHICLE, EQUIPMENT CLEANERS	766	968	93.0	116.6	23.6
21108 LOAN OFFICERS AND COUNSELORS	859	1056	98.3	121.9	23.6
25105 COMPUTER PROGRAMMERS	814	1032	86.1	109.6	23.3
31317 INSTRUCTORS, NONVOCATIONAL EDUC.	0(/ 358	945 627	32 R	56.1	23.3
OTROS SERVICE STATION ATTENDANTS	1231	1425	149.8	172.8	23.0
15014 INDUSTRIAL PRODUCTION MANAGERS	633	787	85.9	108.9	23.0
55105 MEDICAL SECRETARIES	622	872	55.6	78.3	22.7
63014 POLICE PATROL OFFICERS	983	1140	132.0	134.3	22.3
21999 ALL OTHER MANAGEMENT SUPPORT OCC	740	947	82.5	103.9	21.4
13017 ENGINEER MATH. NAT. SCI. MGR.	725	899	101.6	122.9	21.3
92935 CHENICAL EQUIP. CONTROLLER/OPER.	245	285	128.2	149.2	21.0
55102 LEGAL SECRETARIES	729	968	63.3	84.1	20.8
24505 CHEMICAL TECHNICIANS, EXC.HEALTH	77C 78A	400 857	72.3	92.9	20.6
ASONE DITCUEDS AND MEAT CUTTERS	676	833	86.8	107.2	20.4
22128 INDUSTRIAL ENGINEERS, EXC. SAFETY	197	298	37.3	57.5	20.2
21102 UNDERWRITERS	116	180	30.3	50.2	19.9
27108 PSYCHOLOGISTS	661	858	70 1	58.0	19.9
52908 DENIAL RIGIENISIS	644	820	68.3	88.0	19.7
53902 LIBRARY ASSISTANTS & BOOKMOBILE	433	562	64.6	84.1	19.5
65021 BAKERS, BREAD AND PASTRY	479	634	56.5	75.9	19.4
13014 ADMINISTRATIVE SERVICES MANAGER	806	978	94.7 185.9	113.7 204.7	19.0 18.8
	1015 501	1133 669	53.3	72.1	18.8
97923 EXCAVATION LOADING MACHINE OPER. 85305 AUTOMOTIVE BODY, RELATED REPAIRER	967	1150	99.5	118.0	18.5
49017 COUNTER AND RENTAL CLERKS	615	830	54.8	73.2	18.4
53123 ADJUSTMENT CLERKS	397	503	57.7	75.1	17.4
24599 ALL OTHER SCIENCE TECHNICIANS	458	568 703			16.8 16.7
31321 INSTRUCTORS AND COACHES, SPORTS 31216 ENGLISH & FOREIGN LANG. TEACHERS	577 378	703 485	58.3		16.6
22121 CIVIL ENGINEERS, INCL. TRAFFIC	585	694	75.3	91.8	16.5
21308 PURCHASING AGENT EX.WHO/RET/FARM	645	782			
32308 PHYSICAL THERAPISTS	255	445			15.5 15.5
029 1 1	4595 1616	7156 1740			
49014 SALESPERSONS, PARTS 34035 ARTISTS AND RELATED WORKERS	660	857			
13005 PERSONNEL, TELINING, LABOR REL.MGR	408	526	49.0	64.3	15.3
63008 FIRE FIGHTE'	684	794			
43014 SECURITIES. FINANCIAL SERV. SALES	538	735	40.5	55.6	15.1



QES OCCUPATIONAL CODE TITLE 49005 SALES REPS, SCIENTIF.PROD.EXC.RET 31210 SOCIAL SCIENCE TEACHERS 87902 EARTH DRILLERS, EX. OIL & GAS 31502 LIBRARIANS, PROFESSICNAL 32105 DENTISTS 63017 CORRECTION OFFICERS AND JAILERS 31218 ART, DRAMA, AND MUSIC TEACHERS 32999 ALL OTHER HEALTH PROF., PARA, TECH 32102 PHYSICIANS AND SURGEONS 66005 MEDICAL ASSISTANTS 28108 LAWYERS 21921 CLAIMS EXAMINERS, INSURANCE 32114 VETERINARIANS, VET. INSPECTORS 32911 MEDICAL RECORDS TECHN.& TECHNOL. 31514 VOCATIONAL & EDUC. COUNSELORS 22302 ARCHITECTS, EXC. LAND. & MARINE 31117 GRADUATE ASSISTANTS, IEACHING 81017 FIRST LINE SUPERV.:HELP, LABORERS 87711 HIGHWAY MAINTENANCE WORKERS 32517 PHARMACISTS 98312 HELPERS, CARPENTERS 81005 FIRST LINE SUPERV.:CONST.EXTRAC. 93999 ALL OTHER HAND WORKERS 32902 MED./CLINICAL LAB. TECHNOLOGISTS 79011 GRADERS & SORTERS, AGRIC.PRODUCT 81099 ALL OTHER FIRST LINE SUPERVISORS 53702 COURT CLERKS 63047 GUARDS AND WATCH GUARDS 15023 COMMUNICATION, TRANSP., UTIL.MGRS 89132 SHEET METAL WORKERS 31505 TECHNICAL ASSISTANTS, LIBRARY 15017 CONSTRUCTION MANAGERS 58005 DISPATCHERS: EXC. PCL., FIRE, AMB. 61008 HOUSEKEEPERS, INSTITUTIONAL 13008 PURCHASING MANAGERS 15002 POSTMASTERS, MAIL SUPERINTENDENT 31202 LIFE SCIENCE TEACHERS 87511 CONCRETE AND TERRAZZO FINISHERS 56099 ALL OTHER HEALTH SERVICE WORKERS 87511 CONCRETE AND TERRAZZO FINISHERS 56099 ALL OTHER HEALTH SERVICE WORKERS 87518 PAVING, SURFACING, TAMPING 34058 ATHLETE, COACH, UMPIRE & RELATED 24399 ALL OTHER LIFE SCIENTISTS 34051 MUSICIANS, INSTRUMENTAL 27311 RECREATION WORKERS 87708 PAVING, SURFACING, TAMPING 34058 ATHLETE, COACH, UMPIRE & RELATED 24399 ALL OTHER LIFE SCIENTISTS 34051 MUSICIANS, INSTRUMENTAL 27311 RECREATION WORKERS 87708 PAVING, SURFACING, TAMPING 34058 ATHLETE, COACH, UMPIRE & RELATED 24399 ALL OTHER LIFE SCIENTISTS 35008 BILL AND ACCOUNT COLLECTORS 87802 SLAUGHTERERS AND BUTCHERS 79002 FOREST AND CONSERVATION WORKERS 87903 FEFUSE COLLECTORS 87902 FOREST AND CONSERVATION WORKERS	1987 STATE EMP	2000 STATE EMP	1987 REGION ENP	2000 REGION EMP	CHANGE
49005 SALES REPS, SCIENTIF. PROD. EXC. RET	641	731	85.5	100.5	15.0
31210 SOCIAL SCIENCE TEACHERS	339	435	52.3	07.1	14.5
87902 EARTH DRILLERS, EX. OIL & GAS	299	43U 57.4	30.9 64.3	79.0	14.0
31502 LIBRARIANS, PROFESSIONAL	1107	1356	101.7	116.4	14.7
AZOLZ COOPECTION OFFICERS AND JAILERS	434	567	47.7	62.4	14.7
31218 ART. DRAMA. AND MUSIC TEACHERS	333	428	51.3	. 66.0	14.7
32999 ALL OTHER HEALTH PROF., PARA, TECH	567	704	57.6	72.2	14.6
32102 PHYSICIANS AND SURGEONS	1555	1684	135.3	149.0	14.3
66005 HEDICAL ASSISTANTS	323	400 7146	277 1	291.3	14.2
20100 LAWIEKS 21021 CLAIMS FYAMINEDS INSURANCE	50	89	16.9	30.8	13.9
32114 VETERINARIANS, VET. INSPECTORS	372	526	38.2	52.0	13.8
32911 MEDICAL RECORDS TECHN. TECHNOL.	197	401	13.5	27.3	13.8
31514 VOCATIONAL & EDUC. COUNSELORS	317	410	44.8	58.3 0/ 3	13.5
22302 ARCHITECTS, EXC. LAND. & MARINE	649 710	708	60.0 47.8	61.3	13.5
31117 GRADUATE ASSISTANTS, TEACHING	210 243	324	44.7	58.1	13.4
87711 WIGHUAY WAINTENANCE WORKERS	1196	1306	139.4	152.8	13.4
32517 PHARMACISTS	687	827	67.1	80.4	13.3
98312 HELPERS, CARPENTERS	602	763	50.3	63.2	12.9
81005 FIRST LINE SUPERV.: CCHST.EXTRAC.	721	879	85.3	47.9	12.0
93999 ALL OTHER HAND WORKERS	1601	1970	34.4	47.0	12.4
32902 MED./CLINICAL LAB. IECKNOLOGISTS	714	793	117.3	129.6	12.3
81000 ALL OTHER FIRST LINE SUPERVISORS	561	695	58.6	70.9	12.3
53702 COURT CLERKS	340	426	47.6	59.9	12.3
63047 GUARDS AND WATCH GUARDS	935	1190	76.1	87.9	11.8
15023 COMMUNICATION, TRANSP., UTIL. MGRS	653	451	67.7 53.8	65.7	11.4
89132 SHEET METAL WORKERS	323 351	323	37.7	48.8	11.1
15017 CONSTRUCTION MANAGERS	538	651	51.8	62.9	11.1
SAGOS DISPATCHERS: EXC. PCLFIRE.AMB.	449	568	58.0	68.8	10.8
61008 HOUSEKEEPERS, INSTITUTIONAL	699	855	48.7	59.5	10.8
13008 PURCHASING MANAGERS	1007	1077	119.7	130.5	10.8
15002 POSTMASTERS, MAIL SUPERINTENDENT	288	307 307	37.0	47.4	10.4
STATE CONCRETE AND TERRATOR FINISHERS	436	545	44.0	54.4	10.4
SAGO ALL OTHER OFFICE MACH. OPERATORS	141	181	25.2	35.5	10.3
87808 ROOFERS	486	596	45.6	55.9	10.3
66099 ALL OTHER HEALTH SERVICE WORKERS	359	515	43.9	34.1 57.0	10.2
87708 PAVING, SURFACING, TAMPING	399	400 758	*3.7 *3.6	46.7	10.1
34058 ATRLETE, COACH, UMPIRE & RECATED	260	323	39.6	49.5	9.9
Z4399 ALL OTHER LIFE SCIENTISTS	336	422	38.9	48.7	9.8
27311 RECREATION WORKERS	477	554	63.9	73.7	9.5
85723 ELECTRICAL POWERLINE INSTAL/RPR.	498	579	59.4	69.4 727.7	9.0
53102 TELLERS	1/29	1790 524	33.7	43.3	9.6
53508 BILL AND ACCOUNT COLLECTORS	447	547	49.0	58.5	9.5
98705 REFUSE COLLECTORS 89802 SLAUGHTERERS AND BUTCHERS	658	704	136.5	146.0	9.5
79002 FOREST AND CONSERVATION WORKERS	2039	2164	144.6	153.9	9.3
55332 INTERVIEWING CLERKS, EX. PERSONNEL	230	341	20.7	30.1	· · ·
85314 MOBILE HEAVY EQUIPMENT HECHANICS	608	732			
21902 COST ESTIMATORS	419 210	521 2 92			
32314 SPEECH PATHOLOGISTS, AUDIOLOGISTS 97938 GRADER, DOZER, SCRAPER OPERATORS	364	446			8.3
39999 ALL OTHER PROF., PARAPROF., TECHN.	938	1014	93.4	102.2	8.3
85123 MILLWRIGHTS	405	540			
89108 MACHINISTS	728	886			
32508 EMERGENCY MEDICAL TECHNICIANS	222 503	283 577			
79017 ANIMAL CARETAKERS, EXCEPT FARM	386			5 56.1	
55335 CUSTOMER SERVICE REPS, UTILITIES 85953 TIRE REPAIRERS AND CHANGERS	573			3 80.8	8.5
15008 MEDICINE AND HEALTH SERV. MGRS	383	492	30.		
28305 PARALEGAL PERSONNEL	125				8.4
31224 MATHEMATICAL SCIENCE TEACHERS	193				
24111 GEOLOGIST, GEOPHYSICIST, OCEANOG	337	461	. دع		,

	OCCUPATIONAL TITLE	1987	2000	1987	2000	
OE S	OCCUPATIONAL	STATE	STATE	REGION	REGION	
CODE	TITLE	EMP	EMP	EHP	EMP	CHANGE
	POSTAL SERVICE CLERKS ELECTRICAL, ELECTRONIC ASSEMBLER MECHANIC AND REPAIRER HELPERS BUS DRIVERS RADIOLOGIC TECHNICIANS CUSTOM TAILORS AND SEWERS DISPATCHER:POLICE, FIRE, AMBULANCE ALL OTHER MACHINE OPERATORS PHOTOGRAPHERS SPECIAL AGENTS, INSURANCE ALL OTHER PLANT AND SYSTEM OCC. SHERIFFS AND DEPUTY SHERIFFS ALL OTHER TRANSP., MAT.MOVING OPR ALL OTHER CLEAN, BUILDING SERVICE DESIGNERS, EXC. INTERIOR DESIGN. MINING AND RELATED MANAGERS POLICE AND DETECTIVE SUPERVISORS SOCIAL WORKER, MED.& PSYCHIATRIC NURSERY WORKERS OPERATIONS AND SYSTEMS ANALYSTS LAUNDRY, DRYCLEANING MACH. OPER. ANNOUNCERS, RADIO AND TV OFFSET LITHOGRAPHIC PRESS SETTER LOAN AND CREDIT CLERKS PUBLIC ADMIN., LEG., GEN. ADMIN. ALL OTHER ENGINEERING TECHNICIAN REPORTERS AND CORRESPONDENTS REAL ESTATE APPRAISERS SOLDERERS AND BRAZERS PHYSICAL, CORRECT.THERAPY ASSIST LOG HANDLING EQUIPMENT OPERATORS SOCIAL WORKERS, EX. MED.& PSYCH. PRECISION INSPEC., TESTERS, &GRADE SOCIAL SERVICE TECHNICIANS COMPUTER PHYSICAL SCIENTISTS WATER & WASTE TREAT. PLANT OPER. SWITCHBOARD OPERATORS SURGICAL TECHNICIANS COMPUTER PROGRAMMER AIDES WATER & WASTE TREAT, PLANT OPER. SWITCHBOARD OPERATOR, GARMENT SURGICAL TECHNICIAN, TECHNOLOGIST SEWING MACH. OPERATOR, GARMENT SMALL ENGINE SPECIALISTS ALL OTHER MECHANICS, INSTALLERS ALL OTHER CHANTICS, INSTALLERS ALL OTHER CONSTR. & EXTRACTIVE TITLE EXAMINERS AND ABSTRACTORS ALL OTHER SERVICE WORKERS					
57308	POSTAL SERVICE CLERKS	288	343	43.9	52.1	8.2
93114	ELECTRICAL, ELECTRONIC ASSEMBLER	300	381	23.1	31.3	8.2
98102	MECHANIC AND REPAIRER HELPERS	446	524	52.2	60.4	8.2
97108	BUS DRIVERS	329	428	26.4	34.4	8.0
32921	RADIOLOGIC TECHNICIANS	267	363	20.8	28.6	7.8
89505	CUSTOM TAILORS AND SEWERS	469	554	42.8	50.6	7.8
58002	DISPATCHER: POLICE, FIRE, AMBULANCE	465	520	64.8	72.5	7.7
92998	ALL OTHER MACHINE OPERATORS	777	925	81.1	88.8	7.7
34023	PHOTOGRAPHERS	519	618	43.3	50.9	7.6
21505	SPECIAL AGENTS. INSURANCE	52	75	13.0	20.4	7.4
95099	ALL OTHER PLANT AND SYSTEM OCC.	233	288	32.5	39.8	7.3
63032	SHERIFFS AND DEPUTY SHERIFFS	479	531	68.4	75.7	7.3
97989	ALL OTHER TRANSP. MAT. MOVING OPR	452	511	53.7	61.0	7.3
67000	ALL OTHER CLEAN BUILDING SERVICE	471	538	60.6	67.7	7.1
34038	DESIGNERS EXC. INTERIOR DESIGN.	315	377	42.0	49.1	7.1
15021	MINING AND RELATED MANAGERS	47	71	16.1	23.2	7.1
61005	POLICE AND DETECTIVE SUPERVISORS	250	308	34.3	41.2	6.9
27302	SOCIAL MORYER MEN & DOYCHIATRIC	251	324	23.3	30.2	6.9
70005	MIDGEDY MOYEDS	102	275	16.8	23.6	6.8
25302	OPERATIONS AND SYSTEMS ANALYSTS	ŔĠ	134	9.7	16.5	6.8
02726	I ALINDA UDALI EMING MACH UDED	450	737	57.6	64.3	6.7
3/017	AUNCHICEDE DANTO AUN TV	325	421	43.5	50.2	6.7
02512	OFFICE LITUOCOADUIC DDECC CETTED	250	360	15 1	21.7	6.6
57121	I DAY AND COUNTY CIEDES	512	567	56.0	62.6	6.6
10002	DIGITO ADMIN LEG CEN ADMIN	379	428	30.00	60.1	6.5
17002	PUBLIC ADMIR., LEG., GER. ADMIR.	510	4/5	53.0	60.0	6.5
26399	ALL DIREK ENGINEEKING IECHNICIAN	/42	541	77.9	40.2	6.6
77011	REPURIERS AND CORRESPONDENTS	40Z	360	33.0 28 /	3/. 8	6.4
07047	KEAL ESTATE APPRAISERS	277	209 20	4 7	12.4	6.7
73717	SULUERERS AND BRAZERS	175	215	10.3	17.0	4.3
00017	PHISICAL, CORRECT. THERAPT ASSIST	133	212	17.0	23.7	4.3
73008	LOG HANDLING EQUIPMENT OPERATORS	402 E/E	373	/0.4	23.1	4.3
2/303	SOCIAL WORKERS, EX. MEDIE PSTUH.	120	105	10 /	14.4	4.2
83002	PRECISION INSPEC., TESTERS, &GRADE	127	102	10.4	25 8	4.0
27308	SOCIAL SERVICE TECHNICIANS	213	407	17.0	77.7	6.0
85905	PRECISION INSTRUMENT REPAIRERS	92	100	27.3	33.3 17.3	5.0
26014	PERIPHERAL EUP EQUIP. OPERATORS	1/0	142	75 0	/1 7	5.7
24199	ALL DIRER PHYSICAL SCIENTISTS	149	1//	32.0	77.2	5.7
95002	WATER & WASTE TREAT. PLANT OPER.	200	307	37.3	43.2	2.7
5/104	SWITCHBOARD OPERATORS	019	705	40.9	24.7	2.0
8905	DENTAL LABORATORY TECHNICIANS	170	237	15.2	21.0	2.0
21 - 1	COMPLIANCE & ENFORCE. INSPECTORS	228	201	22.0	01.4	2.0
327	SURGICAL TECHNICIANS	27	75	9.2	14.0	5.6
53300	INSURANCE EXAMINING CLERKS	25	700	20.7	14.5	2.0
251C	COMPUTER PROGRAMMER AIDES	260	328	22.7	20.2	2.2
34002	WRITERS AND EDITORS	283	344	25.2	30.7	2.7
24508	NUCLEAR TECHNICIAN, TECHNOLOGIST	244	335	19.8	25.2	2.4
9271	7 SEWING MACH. OPERATOR, GARMENT	245	316	19.8	25.2	2.4
85328	S SMALL ENGINE SPECIALISTS	370	438	32.4	37.8	2.4
85999	ALL OTHER MECHANICS, INSTALLERS	428	486	68.5	73.9	5.4
87999	ALL OTHER CONSTR. & EXTRACTIVE	201	252	14.3	19.7	5.4
2831	1 TITLE EXAMINERS AND ABSTRACTORS	96	122	12.7	18.0	5.3
6999	P ALL OTHER SERVICE WORKERS	294	339	40.8	46.0	5.2
6601	1 HOME HEALTH AIDES	217	272	18.3	25.5	5.2
8512	B MACHINERY MAINTENANCE WORKERS	154	189	19.6	24.7	5.1
4302	3 SALES AGENTS, ADVERTISING	335	417	24.9	30.0	5.1
5531	4 PERSONNEL CLERKS, EXCEPT PAYROLL	341	377	39.4	44.5	5.1
3230	2 RESPIRATORY THERAPISTS	145	223	9.6	14.6	5.0
9795	1 CONVEYOR OPERATORS AND TENDERS	398	445	60 .6	65.6	5.0
	5 SOCIAL WELFARE SERVICE AIDES	147	198	14.9	19.9	5.0
	4 NURSING INSTRUCTORS	129	167	18.2	23.1	4.9
	2 AIRCRAFT PILOTS, FLIGHT ENGINEERS	229	294	17.4	22.2	4.8
	2 FARMERS	232	283	22.4	27.2	4.8
	2 HEALTH SPECIALTIES TEACHERS	104	134	15.9	20.7	4.8
	9 ALL OTHER FINANCIAL SPECIALISTS	267	312	29.3	34.0	4.7
	5 RESERVATION & TRANS. TICKET AGENT	272	342	27.3	32.0	4.7
	1 INSURANCE CLAIMS CLERKS	144	158	21.1	25.7	4.6
	3 COATING, PAINTING MACH. OPER.	139	174	8.5	13.0	4.5
2213	2 SAFETY ENGINEERS, EXCEPT MINING	133	171	20.4	24.9	4.5
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OES OCCUPATIONAL CODE TITLE	1987 STATE EMP	2000 STATE EMP	1987 REGION EMP	2000 REGION EMP	CHANGE
32917 RADIOLOGIC TECHNOLOGISTS 24305 AGRICULTURAL AND FOOD SCIENTISTS 63035 PRIVATE DETECTIVE & INVESTIGATOR 97317 RAILROAD BRAKE, SIGNAL, SMITCH 34008 PUBLIC RELATIONS SPECIALISTS 22502 CIVIL ENGINEERING TECHNICIANS 32905 MED./CLINICAL LAB. TECHNICIANS 32905 MED./CLINICAL LAB. TECHNICIANS 85323 AIRCRAFT MECHANICS 43017 SALES AGENTS, BUSINESS SERVICES 89999 ALL OTHER PRECISION WORKERS 93105 NEW ACCOUNTS CLERKS 93938 MEAT, POULTRY, FISH CUTTERS 89511 SNOE AND LEATHER WORKERS 91705 WELDING MACHINE OPERATORS 21117 BUDGET ANALYSTS 32521 DIETITIANS AND NUTRITIONISTS 73011 LOGGING TRACTOR OPERATORS 32511 PHYSICIAN ASSISTANTS 22108 MINING ENGINEERS, INC. SAFETY 21111 TAX PREPARERS 87302 BRICK MASCNS 55344 BILLING, COST AND RATE CLERKS 28308 TITLE SEARCHERS 53708 LICENSE CLERKS 22521 SURVEYING AND MAPPING TECHNICIAN 22105 METALLURGISTS AND REL. ENGINEERS 85705 DATA PROCESSING EQUIP. REPAIRERS 24308 BIOLOGICAL SCIENTISTS 87814 STRUCTURAL METAL WORKERS 21914 TAX EXAMINER, COLLECTOR, REV. AGENT 66026 PHARMACY ASSISTANTS 89808 FOOD BATCHMAKERS 65011 FOOD SERVERS, OUTSIDE 31204 CHEMISTRY TEACHERS 31209 ALL OTHER PHYS. SCIENCE TEACHERS 92997 ALL OTHER PHYS. SCIENCE TEACHERS 92998 CHEMICAL EQUIPMENT TENDER 81011 FIRST LINE SUPERV.: TRANSPORT. 85317 RAIL CAR REPAIRERS 87802 INSULATION WORKERS 43005 BROKERS, REAL ESTATE 21305 PURCHASING AGENTS & BUYERS, FARM 31226 COMPUTER SCIENCE TEACHERS 931517 INSTRUCTIONAL COORDINATORS 97311 MESSENGERS 92728 PRESSING MACH. OPERATOR, TEXTILES 63009 ALL OTHER PROTECTIVE SERVICE 95326 PROCUREMENT CLERKS	161 308 261 374 118 308 189 236 216 339 266 195 123 166 168 154 473	221 359 362 381 167 354 250 297 272 392 299 216 182 227 213 201 584 217	11.3 23.5 13.2 253.5 10.6 32.1 13.5 17.2 18.8 25.0 32.5 40.6 9.0 10.2 14.3 13.9 14.2	15.8 27.9 17.6 257.9 15.0 36.5 17.8 21.5 23.1 29.3 36.7 44.7 13.1 14.2 18.3 17.8 18.1 18.5	4.4.4.4.3.3.3.3.2.1.1.0.0.9.9.8.8.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3
22105 MINING ENTIREES, INC. SAFETY 21111 TAX PREPARERS 87302 BRICK MASONS 55344 BILLING, COST AND RATE CLERKS 28308 TITLE SEARCHERS 22521 SURVEYING AND MAPPING TECHNICIAN 22105 METALLURGISTS AND REL. ENGINEERS 85705 DATA PROCESSING EQUIP. REPAIRERS 24308 BIOLOGICAL SCIENTISTS 87814 STRUCTURAL METAL WORKERS 21914 TAX EXAMINER, COLLECTOR, REV. AGENT 66026 PHARMACY ASSISTANTS 89808 FOOD BATCHMAKERS	111 206 700 59 323 177 69 216 299 175 237 130 231	129 245 722 76 351 199 109 288 342 211 271 168	21.3 20.7 82.4 8.7 41.0 24.7 7.0 18.3 22.1 16.9 22.4 12.5 47.9	25.1 24.5 86.1 11.4 44.7 28.4 10.6 21.9 25.6 25.8 15.9	3.8 3.8 3.7 3.7 3.7 3.6 3.6 3.5 3.4 3.4
31204 CHEMISTRY TEACHERS 31204 CHEMISTRY TEACHERS 31209 ALL OTHER PHYS. SCIENCE TEACHERS 92997 ALL OTHER MACHINE SETTERS/CPER. 53502 WELFARE ELIGIBILITY WORKERS 31222 ENGINEERING TEACHERS 91117 MACHINE TOOL CUITING OPER., M/P 32305 OCCUPATIONAL THERAPISTS 92938 CHEMICAL EQUIPMENT TENDER 81011 FIRST LINE SUPERV.: TRANSPORT. 85317 RAIL CAR REPAIRERS 87802 INSULATION WORKERS 43005 BROKERS, REAL ESTATE 21305 PURCHASING AGENTS & BUYERS, FARM	79 75 296 283 81 54 69 40 292 67 142 120 198	101 96 335 313 104 71 115 46 338 83 175 158 219	12.2 11.6 33.0 25.3 12.6 9.6 5.0 20.9 58.4 32.0 14.5 10.3 30.3	15.5 14.9 36.3 28.6 15.9 12.8 8.2 24.1 61.6 35.2 17.7 13.4	3.3 3.3 3.3 3.2 3.2 3.2 3.2 3.2 3.3 3.3
31226 COMPUTER SCIENCE TEACHERS 31517 INSTRUCTIONAL COORDINATORS 57311 MESSENGERS 92728 PRESSING MACH.OPERATOR, TEXTILES 63099 ALL OTHER PROTECTIVE SERVICE 55326 PROCUREMENT CLERKS 85118 MACHINERY MECHANICS: PLANT 98502 MACHINE FEEDERS AND OFFBEARERS 28399 ALL OTHER LEGAL ASSISTANTS 87905 BLASTERS AND EXPLOSIVES WORKERS 55321 FILE CLERKS 91321 MACHINE FORMING OPERATORS, M/P 92921 ROASTING, DRYING OPER., FOOO/TOB. 24502 BIOLOGICAL, AGRIC., FOOO TECHN. 97199 ALL OTHER MOTOR VEHICLE OPERATOR 25319 ALL OTHER MATHEMATICAL SCIENTIST 53808 HOTEL DESK CLERKS	71 97 246 162 202 129 111 1460 173 118 880 166 192 321 92 98 353 508	91 116 282 181 229 142 123 1574 191 177 889 225 206 355 121 112 394	20.0 66.9 15.0 6.7 106.9 7.4 40.0 30.2 7.5 15.5	69.8 17.9 9.6 109.8 10.2 42.8 33.0 10.3 18.3	2.99 2.99 2.9 2.8 2.8 2.8 2.8
93916 CENTRAL OFFICE OPERATORS 92926 LOW PRESSURE BOILER OPERATOR 61002 FIRE FIGHTING & PREV.SUPERVISORS 93947 PAINTING AND COATING, HAND	136 176 133 90	159 204 154 113	16.3 19.5 17.0	19.0 22.2 19.7	2.7 2.7 2.7



89135 BOILERMAKERS 69	OES COOE	OCCUPATIONAL TITLE	1987 STATE EMP	2000 STATE EMP	1987 REGION EMP	REGION	CHANGE
79021 FARM EQUIPMENT OPERATORS 80 86 16.5 17.9 1 39005 TRAFFIC TECHNICIANS 330 344 26.2 27.6 1 95032 STATIONARY ENGINEERS 102 108 18.3 19.7 1 87314 REINFORCING METAL WORKERS 76 90 7.5 8.9 92543 PRINTING PRESS MACHINE OPERATOR 162 202 5.3 6.6 1 97305 LOCOMOTIVE ENGINEERS 155 157 105.6 106.9	21917 98311 43099 22311 219026 68002 49026 85947 53126 92721 58026 66014 34005 85711 63011 92100 58311 8710 8710 8710 8710 8710 8710 8710 87	ASSESSORS HELPERS, MASONS & TILE SETTERS ALL OTHER SERVICE SALES OCC. SURVEYING AND MAPPING SCIENTISTS MANAGEMENT ANALYSTS BARBERS 'VENDORS, SOLICITORS, DOOR-TO-DOOR 'COIN & VENDING MACHINE SERVICERS STATEMENT CLERKS SEWING MACH. OPER., NON-GARMENT GORDER FILLERS, SALES PSYCHIATRIC AIDES TECHNICAL WRITERS LELECTR. HOME APPL. & POWER TOOL POLICE DETECTIVES ALL OTHER HET. &PLAS. MACH.SET/OPS MEIGHERS, MEASURERS, CHECKERS FARM EQUIPMENT MECHANICS HAYSICS TEACHERS CHECTRIC MOTOR REPAIRERS MUNICIPAL CLERKS STRUCTURAL METAL FABRICATORS MUNICIPAL CLERKS STRUCTURAL METAL FABRICATORS ALL OTHER CONSTRUCTION WORKERS SUBPRATING, FILTERING MACH. OP. JEWELERS AND SILVERSMITHS JOB PRINTERS DUPLICATING MACHINE OPERATORS MARKING CLERKS, EXC. MAIL MACHINE HELPERS, PLUMBERS, PIPEFITTERS MARKING CLERKS PRECISION LITHOGRAPHERS & PHOTO. COOKING MACHINE OPER., FOOO/TOB. RAILROAD COMDUCTORS, YARDMASTERS CREDIT ANALYSTS HARD TILE SETTERS PIPELAYERS CHARLO OFFICE & PBX INSTAL/RPR. CHARLOS OFFICE & PBX	181 145 25 119 299 177 153 285 61 262 490 144 188 58 123 149 104 184 114 182 105 114 115 106 114 115 107 116 117 117 118 119 119 119 119 119 119 119 119 119	199 169 351 328 315 506 125 166 125 166 125 167 161 132 161 132 161 161 161 161 161 161 161 161 161 16	REGION EMP 24.8 15.1 17.9 24.8 14.9 15.2 7.6 721.8 14.9 15.7 27.8 12.0 97.1 11.9 11.9 11.9 11.9 12.1 27.8 32.8 32.9 12.6 13.6 13.6 10.4 25.9 11.9 11.9 11.9 11.9 11.9 11.9 11.9 1	REGION EMP 27.5 17.8 20.6 27.5 17.8 21.0.5 17.8 21.0.5 14.1 25.4 12.1 14.3 91.3 14.3 91.3 14.3 91.3 14.8 93.8 14.9 16.0 11.3 10.8 27.4 10.1 13.3 14.9 11.9 7.4 13.4 12.4	1.5 1.5 1.4
87105 CEILING TILE INSTALLERS 55 66 5.3 6.6 87602 CARPET INSTALLERS 97 112 8.3 9.6 92308 SALING MACHING OPERATOR/TENDER 864 994 7.6 8.8	7200 7902 3900 9503 873 9256 973 2716 871 876	OO SUPERVISORS, FARM, FOREST,AG.REL 21 FARM EQUIPMENT OPERATORS 32 STATIONARY ENGINEERS 14 REINFORCING METAL WORKERS 43 PRINTING PRESS MACHINE OPERATOR 05 LOCOMOTIVE ENGINEERS 05 URBAN AND REGIONAL PLANNERS 05 CEILING TILE INSTALLERS 02 CARPET INSTALLERS 03 SAWING MACHING OPERATOR/TENDER	1851 80 330 102 76 162 155 70 55 97 864	1881 86 344 108 90 202 157 79 66 112	153.3 16.5 26.2 18.3 7.5 5.3 105.6 8.7 8.3 7.6	154.7 17.9 27.6 19.7 8.9 6.6 106.9 10.0 9.6	1.4 1.4 1.4 1.4 1.3 1.3 1.3 1.3



OES OCCUPATIONAL CODE TITLE 91505 COMBINATION MACH.TOX 68008 MANICURISTS 27199 ALL OTHER SOCIAL SCI 98316 HELPERS, ROOFERS 97899 ALL OTHER TRANSPORT/ 53914 REAL ESTATE CLERKS 98313 HELPERS, ELECTRICIAN 89899 ALL OTHER PRECISION 87817 FENCE ERECTORS 56002 BILL., POST, CALCUL 32399 ALL OTHER THERAPIST: 93944 MOLDERS AND CASTERS 87108 DRYWALL INSTALLERS 92944 CUITING & SLICING M. 85911 ELECTRIC METER INST 89311 CABINETMAKERS & BELAY 34041 INTERIOR DESIGNERS 31111 LECTURERS 87811 GLAZIERS 39011 FUNERAL DIRECTORS A 85599 ALL OTHER COMMUN.EQ 92971 EXTRUDING & FORMING 85728 ELECTRICAL INSTALLE 39002 AIR TRAFFIC CONTROL 92958 CLEANING, PICKLING 67001 JANITORS, CLEANERS, 34028 BROADCAST TECHNICIA 27102 ECONOMISTS, MARKET 83008 TRANSPORTATION INSP 92928 COOLING, FREEZING E 24302 FORESTER, CONSERVAL 28102 JUDGES AND MAGISTA/ 21302 WHOLESALE, RETAIL E 85308 MOBILE HOME INSTALL 26311 MEDICAL SCIENTISTS 67008 PEST CONTROLLERS AN 68023 BAGGAGE PORTERS AN 68024 FISH AND GAME WARD 31333 FARM & HOME MANAGE 85708 HOME ENTERTAINMENT 92541 TYPESETTING MACH. 92515 LETTERPRESS SETTER 85308 MOTORCYCLE REPAIRE 85702 PRECISION COMPOSIT 32514 CPTICIANS, DISPENS		1987 STATE EKP	2000 STATE EMP	1987 REGION EMP	2000 REGION EMP	CHANGE
91505 COMBINATION MACH.TOO	OL SET/CP,M/P	57 64	70 78	5.1 5.9	6.2 7.0	1.1
27199 ALL OTHER SOCIAL SCI	IENTISTS	66	73	6.4	7.5	1.1
98316 HELPERS, ROOFERS	ATTOM LINOVEDS	65 120	/5 137	12.2	13.3	1.1
53914 REAL ESTATE CLERKS	ATTON WORKERS	89	102	7.0	8.1	1.1
98313 HELPERS, ELECTRICIA	NS	71	81	7.8	8.9	1.1
89899 ALL OTHER PRECISION	FOOD, TOBACCO	87 53	72 72	6.7	7.7	1.0
56002 BILL., POST, CALCULA	ATING MACH.OP	237	249	24.3	25.2	0.9
32399 ALL OTHER THERAPIST	S	124	132	10.3 5.7	6.6	0.9
87108 DRYWALL INSTALLERS	, MANU	59	68	6.3	7.2	0.9
92944 CUTTING & SLICING M	ACHINE OPER.	83	96	7.7	8.6	0.9
85911 ELECTRIC METER INST	ALLERS/REPAIR	51 346	36 394	6.5	7.4	0.9
85721 POWERHOUSE & RELAY	ELECTRICIANS	61	69	7.7	8.6	0.9
34041 INTERIOR DESIGNERS		68	75	6.9	7.7	0.8
31111 LECTURERS		101 312	110 318	30.8	31.5	0.7
39011 FUNERAL DIRECTORS A	NO MORTICIANS	82	90	9.2	9.9	0.7
85599 ALL OTHER COMMUN.EQ	UIP.MECHANICS	46	53	5.6	6.3	0.7
92971 EXTRUDING & FORMING	CPERATOR	207 37	41	5.2	5.7	0.5
39002 AIR TRAFFIC CONTROL	LERS	95	101	7.0	7.4	0.4
92958 CLEANING, PICKLING	EQUIP. OPER.	25	27	5.2	5.6	0.4
67001 JANITORS, CLEANERS,	, MAIDS	77 60	64 64	7.3	7.7	0.4
27102 ECONOMISTS, MARKET	ANALYSTS	118	123	11.2	11.6	0.4
83008 TRANSPORTATION INSP	PECTORS	126	130	25.6	26.0 7.6	0.4
92928 COOLING, FREEZING E	EQUIP. OPER. FION SCIENTIST	32 775	794	49.8	50.1	0.3
28102 JUDGES AND HAGISTRA	ATES	50	53	5.4	5.7	0.3
21302 WHOLESALE, RETAIL	BUYERS, EX. FARM	776	779	84.5 11 T	84.8	0.3
85938 MOBILE HOME INSTALL	LER & KEPAIKEK	74	77	5.7	5.9	0.2
67008 PEST CONTROLLERS AN	STHATELEZA OF	115	119	7.7	7.9	0.2
68023 BAGGAGE PORTERS AND	SELLHOPS	79 79	82 77	5.3	5.5	0.2
ARM ARM GAME VARD	KUNUMEKS ENS	92	96	7.3	7.5	0.2
31323 FARM & HOME MANAGE	MENT ADVISORS	208	208	31.2	31.3	0.1
85951 BICYCLE REPAIRERS	TVDE 00EDAT006	103	106	9.2 5.7	9.3 5.7	0.0
55333 OPDER CLERKS: MATE	RIALS, SERVICE	548	548	68.8	68.8	0.0
85708 HOME ENTERTAINMENT	EQ. REPAIRERS	287	285	26.1	25.9	-0.2
92541 TYPESETTING MACH.	OPERATOR/TEND.	161 225	157 215	12.2	11.3	-0.4
85308 MOTORCYCLE REPAIRE	RS	180	174	19.3	18.8	-0.5
85726 TELEPH. STATION IN	STALL.& REPAIR	129	121	14.8	14.0	-U.8 -O.8
87714 RAIL-TRACK LAYING 89702 PRECISION COMPOSIT	EQUIP. OPER.	168	136	11.7	10.3	-1.4
32514 CPTICIANS, DISPENS	ING & HEASUR.	312	286	27.7	25.4	-2.3
32108 OPTOMETRISTS		101	134	16.0 64.9	13.6 62.1	·2.4 -2.8
85702 TELEPHONE & CABLE 58014 METER READERS, UTI		558 174	538 150	22.6	19.7	-2.9
97117 DRIVER/SALES WORKE		1016	999		137.4	•3.6
55328 STATISTICAL CLERKS		140 492	94 495		8.2 28.2	-3.6 -4.7
22117 NUCLEAR ENGINEERS 58023 STOCK CLERKS:STOCK	CROOM OR WAREH.	1711	1676		211.4	-4.9
55341 PAYROLL AND TIMEKE	EPING CLERKS	402	332	45.7		.8.2
95008 CHEMICAL PLANT AND	SYSTEM OPER.	164 21 8	143 131			
55302 STENOGRAPHERS 56017 DATA ENTRY KEYERS,	EX. COMPOSING	740	548	87.2	65.7	•21.5
55338 BOOKKEEPING & ACC	CUNTING CLERKS	9250	8872			
93905 ELECTRICAL, ELECT	RONIC ASSEMBLER	556 1989	403 1515			
97947 INDUSTRIAL TRUCK (819	635	213.1	165.2	-47.9
74002 FARM WORKERS		9543	8528	816.8	731.9	-84.9



OES OCCUPATIONAL CODE TITLE	1987 STATE EMP	2000 STATE EMP	1987 REGION EMP	2000 REGION EMP	CHANGE
CODE TITLE 49011 SALESPERSONS, RETAIL 67005 JANITORS AND CLEANERS, EXC.MAIDS 97101 TRUCK DRIVERS 19005 GENERAL MANAGERS AND TOP EXEC. 32502 REGISTERED NURSES 55199 GENERAL SECRETARIES 49023 CASHIERS 79014 GARDENERS AND GROUNDSKEEPERS 21114 ACCOUNTANTS AND AUDITORS 65008 WAITERS AND WAITRESSES 31305 TEACHERS, ELEMENTARY 31308 TEACHERS, SECONDARY SCHOOL 55347 GENERAL OFFICE CLERKS 68038 CHILD CARE WORKERS 85132 MAINTENANCE REPAIRERS, GEN.UTIL. 66008 MURSING AIDES AND ORDERLIES 22135 MECHANICAL ENGINEERS 65041 COMB. FOOD PREPARATION, SERVICE 63047 GUARDS AND WATCH GUARDS 22126 ELECTRICAL & ELECTRONIC ENGINEER 22199 ALL OTHER ENGINEERS 65026 COOKS, RESTAURANT 51002 FIRST LINE SUPERVISORS, CLERICAL 32505 LICENSED PRACTICAL NURSES 49021 STOCK CLERKS, SALES FLOOR 67002 MAIDS AND HOUSEKEEPING CLEANERS 55305 RECEPTIONISTS, INFORMATION CLERKS 87102 CARPENTERS 43008 SALES AGENTS, REAL ESTATE 15011 PROPERTY, REAL ESTATE MANAGEMENT 68005 HAIRDRESSERS AND COSMETOLOGISTS 22514 DRAFTERS 65038 FOOD PREPARATION WORKERS 73002 FALLERS AND BUCKERS 87202 ELECTRICALS 22505 ELECTRICALS 22506 ELECTRICALS 22507 ELECTRICALS 22508 ELECTRICALS 22509 ALL OTHER MANAGERS 22509 ALL OTHER MANAGERS 22509 ALL OTHER MANAGERS 22509 ALL OTHER MANAGERS 23500 ENDRYLER PROGRAMMERS 235010 COMPUTER SYSTEMS ANALYSTS, EDP 65014 DINING ROOM & BARTENDER HELPERS 23601 ENDRYLER MELPER, LABORER, MOVER 65002 BARTENDERS 13011 MARKETING, ADV., PUBLIC REL.MGRS 71005 FARM MANAGERS 65032 COOKS, SPECIALTY FAST FOOD 649017 COUNTER AND RENTAL CLERKS	13603 5612 11908	17229 7194 15031	2020.8 1168.6 1516.9	2553.1 1552.6 1891.2	532.3 384.0 374.3
19005 GENERAL MANAGERS AND TOP EXEC.	11032	13382	1613.4	1966.8	353.4
32502 REGISTERED NURSES	4595 8333	/150 10109	1255.2	1557.7	302.5
49023 CASHIERS	8617	10702	1163.3	1443.9	280.6
79014 GARDENERS AND GROUNDSKEEPERS	3839 3380	5438 4523	615.8 556.7	2003.0 775.6	247.8 218.9
65008 WAITERS AND WAITERSSES	6727	8520	806.0	1022.2	216.2
31305 TEACHERS, ELEMENTARY	5203	6680	736.1	945.2 870 3	209.1 206.5
31308 TEACHERS, SECONDARY SCHOOL	4007 7083	8239	1016.5	1218.2	201.7
68038 CHILD CARE WORKERS	5308	6623	642.8	800.1	157.3
85132 MAINTENANCE REPAIRERS, GEN.UTIL.	3884 3407	4823 4586	529.1 486.0	603.6	132.6
66008 NURSING AIDES AND ORDERLIES 22135 MECHANICAL ENGINEERS	8 50	1385	214.7	328.8	114.1
65041 COMB. FOOD PREPARATION, SERVICE	3686	4583	454.5	565.2	110.7
63047 GUARDS AND WATCH GUARDS	935 1114	1190 2127	239.6 148.4	251.4	103.0
22120 ELECTRICAL & ELECTRONIC ENGINEER 22100 ALL OTHER ENGINEERS	740	1045	230.5	318.0	87.5
65026 COOKS, RESTAURANT	2389	3111	286.7	373.3	86.6
51002 FIRST LINE SUPERVISORS, CLERICAL	3142 2352	3 <i>72</i> 9 3003	450.0 306.2	391.5	85.3
49021 STOCK CLERKS, SALES FLOOR	3921	4526	566.9	652.0	85.1
67002 MAIDS AND HOUSEKEEPING CLEANERS	2222	2673	323.9	408.1	84.2
55305 RECEPTIONISTS, INFORMATION CLERKS	2809 1730	3290 2163	291.2	370.3	79.1
43008 SALES AGENTS, REAL ESTATE	1754	2378	205.2	279.1	73.9
15011 PROPERTY, REAL ESTATE MANAGEMENT	1590	2215	183.9	256.2 581.7	72.3 60.8
68005 HAIRDRESSERS AND COSMETOLOGISTS	4206 865	1140	206.4	274.2	67.8
65038 FOOD PREPARATION WORKERS	2356	2893	296.4	363.6	67.2
73002 FALLERS AND BUCKERS	2059	2608	204.3	270.4	66.1 65.0
87202 ELECTRICIANS 31521 TEACHERS AIDES PARAPROFESSIONAL	1637	2092	231.6	296.9	65.3
22505 ELECTRICAL & ELECTRONIC TECHNS.	1026	1838	132.3	197.5	65.2
43002 INSURANCE SALES WORKERS	1949	2572	197.7	261.2 254 N	63.5 63.1
25105 COMPUTER PROGRAMMERS	1424	1855	207.4	268.5	61.1
87402 PAINTERS AND PAPERHANGERS	1449	1888	192.5	251.5	59.0
93999 ALL OTHER HAND WORKERS	1601	1976	1/5.1	233.9 369.7	58.5
41002 FIRST LINE SUPERVISORS, SALES 21000 ALL OTHER MANAGEMENT SUPPORT OCC	1006	1220	195.7	253.8	58.1
25102 COMPUTER SYSTEMS ANALYSTS, EDP	667	1028	95.0	151.6	56.6
65014 DINING ROOM & BARTENDER HELPERS	1436 3175	1898 3588	174.5 356.7	412.8	56.1
65005 BARTENDERS	1867	2336	220.2	275.4	55.2
13011 MARKETING, ADV., PUBLIC RELIMGRS	1164	1517	163.9	218.5	54.6 54.2
71005 FARM MANAGERS 65032 COOKS, SPECIALTY FAST FOOD	610 1776	1078 2213	219.0	273.0	54.0
49017 COUNTER AND RENTAL CLERKS	615	830	131.7	184.7	53.0
65028 COOKS, INSTITUTION OR CAFETERIA	2070	2414	2/3.0	327.9 576.0	52.9 52.6
85302 AUTOMOTIVE MECHANICS 97111 BUS DRIVERS, SCHOOL	4009 1743	4340 2153	523.4 213.0		52.5
13002 FINANCIAL MANAGERS	2024	2398	269.5	321.7	52.2
65017 COUNTER ATTENDANTS	1576	1965			
21511 PERSONNEL, TRAIN., LABOR REL. SPEC 19999 ALL OTHER MANAGERS & ADMINIST.	935 1619	1193 1925			
98799 ALL OTHER HAND MATERIAL MOVERS	2186	2578	272.7	321.9	49.2
49008 SALES REPS.EXC.SCIENTIF & RETAIL	2693	3002		460.0	
49999 ALL OTHER SALES & RELATED OCC.	1313 1407	1619 1704			46.3
55308 TYPISTS 63035 PRIVATE DETECTIVE & INVESTIGATOR	261	362	110.2	155.2	45.0
56011 COMPUTER OPERATORS, EXC. PERIPH.	665	891			
66002 DENTAL ASSISTANTS 22114 CHEMICAL ENGINEERS	729 282	1058 392			
15005 EDUCATION ADMINISTRATORS	1073				



OES OCCUPATIONAL CODE TITLE 55311 TYPISTS, WORD PROO 93914 WELDERS AND CUTTER 65099 ALL OTHER FOOD SER 85311 BUS, TRUCK, DIESEL 24508 NUCLEAR TECHNICIAN 98002 HAND PACKERS AND F 15026 FOOD SERVICE & LOC 93956 ALL OTHER ASSEMBLE 61099 ALL OTHER ASSEMBLE 61099 ALL OTHER FIRST LI 31399 ALL OTHER FIRST LI 31399 ALL OTHER MACHINE 79999 ALL OTHER MACHINE 79999 ALL OTHER POST SE 81002 FIRST LINE SUPERV 55332 INTERVIEWING CLERI 55105 MEDICAL SECRETARI 31299 ALL OTHER POST SE 13017 ENGINEER., MATH., 34035 ARTISTS AND RELAT 92923 FURNACE, KILN, OV 31317 INSTRUCTORS, NONV 13014 ADMINISTRATIVE SE 57102 SWITCHBCARD OPERA 98312 HELPERS, CARPENTE 55102 LEGAL SECRETARIES 31311 TEACHERS, SPECIAL 81005 FIRST LINE SUPERV 31302 TEACHERS, PRESCHOO 32908 DENTAL HYGIENISTS 65035 COOKS, SHORT ORD 65002 HOSTS & HOSTESSES 98905 VEHICLE, EQUIPMEN 24599 ALL OTHER SCIENCE 58028 TRAFFIC, SHIPPING 81008 FIRST LINE SUPERV 97805 SERVICE STATION / 85119 ALL OTHER MACHINE 27108 PSYCHOLOGISTS 85705 DATA PROCESSING 6 31314 TEACHERS, VOCATIO 87902 EARTH DRILLERS, IN 97823 EXCAVATION LOAD: 24111 GEOLOGIST, GEOPH 61008 HOUSEKEEPERS, IN 91321 MACHINE FORMING 32308 PHYSICAL THERAPI 85305 AUTOMOTIVE 800Y, 57305 POSTAL MAIL CARR		1987 STATE EMP	2000 STATE EMP	1987 REGION EMP	2000 REGION EMP	CHANGE
55311 TYPISTS, WORD PROC	ESSING EQUIP.	644	820	128.7	170.4	41.7 41.6
93914 WELDERS AND CUTTER	is	1329	1650 1245	142.5	188.4	40.6
85311 RHS TRUCK DIESEL	IVILE WUKKEKS ENG. MECHANIC	1593	1993	177.2	216.7	39.5
24508 NUCLEAR TECHNICIAN	, TECHNOLOGIST	244	335	96.2	134.8	38.6
98902 HAND PACKERS AND F	PACKAGERS	2094	2350 3206	301.3	330.0 390.4	37.5 37.2
- 15026 FOOD SERVICE & LOU- - 53508 RILL AND ACCOUNT (OLLECTORS	397	524	90.6	127.7	37.1
93956 ALL OTHER ASSEMBLE	RS, FABRICATOR	2890	3644	155.5	192.4	36.9
61099 ALL OTHER SERVICE	SUPERVI SORS	1020	1270	138.9	173.3	36.6 36.1
31399 ALL OTHER TEACHERS	S. INSTRUCTORS	906	1162	125.4	161.3	35.9
92998 ALL OTHER MACHINE	OPERATORS	777	925	120.5	155.6	35.1 35.0
79999 ALL OTHER AGRIC.,	FOREST, FISH.	1/18	1914	149.7	184.6	34.9
81002 FIRST LINE SUPERV	.:MECH.& REPAIR	1672	1951	208.8	243.4	34.6
55332 INTERVIEWING CLER	KS, EX. PERSONNEL	230	327	75.3	109.2	33.9 33.8
55105 MEDICAL SECRETARI	ES CONDARY TEACHER	644 825	1059	117.1	150.0	32.9
13017 ENGINEER., MATH.,	NAT. SCI. MGR.	725	899	129.6	161.9	32.3
34035 ARTISTS AND RELAT	ED WORKERS	660	857	102.9	135.1	32.2 31.9
92923 FURNACE, KILN, OV	EN,KETTLE OPER.	534 677	945	82.0	113.9	31.9
13014 ADMINISTRATIVE SE	RVICES MANAGER	806	978	124.3	155.4	31.1
57102 SWITCHBOARD OPERA	TORS	619	708 747	161.0	191.3	30.3 30.3
98312 HELPERS, CARPENTE	RS	604 729	763 968	90.5	120.3	29.8
31311 TEACHERS, SPECIAL	EDUCATION	744	955	105.5	135.3	29.8
81005 FIRST LINE SUPERV	.:CONST.EXTRAC.	721	879 1037	119.4	149.0	29.6 29.0
31302 TEACHERS, PRESCHOOL	L & KINDERGARIN	416	627	56.1	84.6	28.5
65035 COOKS, SHORT ORDE	R	1009	1243	123.1	151.6	28.5
65002 HOSTS & HOSTESSES	S: REST., LOUNGE	1074	1306	127.7	129.8	28.0 27.9
2/500 ALL OTHER SCIENCE	TECHNICIANS	458	568	103.2	130.7	27.5
58028 TRAFFIC, SHIPPING	, & REC. CLERKS	1623	1849	204.9	232.3	27.4 27.3
81008 FIRST LINE SUPER	V.: PRODUCTION	1708	1425	170.6	197.8	27.2
85119 ALL OTHER MACHINE	ERY MECHANICS	878	1018	150.1	177.1	27.0
27108 PSYCHOLOGISTS		661	858	85.3	112.1	26.8 26.8
85705 DATA PROCESSING	EQUIP. REPAIRERS	416 645	266 840	82.8	109.4	26.6
87902 EARTH DRILLERS.	EX. OIL & GAS	299	430	57.0	83.5	26.5
32911 HEDICAL RECORDS	TECHN.& TECHNOL.	197	401	25.1	51.5	26.4 26.0
43021 TRAVEL AGENTS	NO MACHINE ODED	358 501	669	80.4	105.7	25.3
24111 GEOLOGIST, GEOPH	YSICIST, OCEANOG	337	461	62.1	87.3	26.0 25.3 25.2 25.2
61008 HOUSEKEEPERS, IN	STITUTIONAL	699	855	106.1 67.8	131.3	25.2
91321 MACHINE FORMING 32308 PHYSICAL THERAPI	OPERATORS, M/P	255	445	32.9	57.6	24.7
85305 AUTOMOTIVE BODY,	RELATED REPAIRER	967	1150	127.7	152.3	24.6
57305 POSTAL HAIL CARR	TERS	872 859	1080 1056	101.8 109.2	126.2 133.6	24.4 24.4
21108 LOAN OFFICERS AN 22128 INDUSTRIAL ENGIN	FFRS.FXC. SAFETY	197	298			23.3
43023 SALES AGENTS, AD	VERTISING	335	417			23.3 22.9
25108 COMPUTER PROGRAM	MER AIDES	260 618	328 802			22.9
53905 TEACHER AIDES & 32902 MED./CLINICAL LA	IB. TECHNOLOGISTS	475	646		84.8	22.5
83005 PRODUCTION INSPE	CTORS, GRADERS	950	1305			22.4 22.1
68014 AMUSEMENT & RECR 58005 DISPATCHERS: EXC	REATION ATTENDANT	749 449	947 568			22.0
66005 MEDICAL ASSISTAN	ITS	323	485	43.3	65.1	21.8
85902 HEATING, A/C, RE	FRIG. MECHANICS	683	857			21.7
92512 OFFSET LITHOGRAF 32114 VETERINARIANS, V	PHIC PRESS SETTER	250 372	360 526			
63014 POLICE PATROL OF	FFICERS	983	1140	126.0	147.4	21.4
32105 DENTISTS		1197 479	1356 634			
65021 BAKERS, BREAD AT	NU PASIKI	419	034	, 01.0	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	

OES CODE	ALL OTHER CLERICAL & ADM. SUPPORT LIBRARY ASSISTANTS & BOOKMOBILE PACKAGING & FILLING MACHINE OPER BUTCHERS AND MEAT CUTTERS PURCHASING AGENT EX.WHO/RET/FARM ALL OTHER HEALTH SERVICE WORKERS CONSTRUCTION MANAGERS COST ESTIMATORS PHYSICIANS AND SURGEONS REPORTERS AND CORRESPONDENTS CIVIL ENGINEERS, INCL. TRAFFIC PHARMACISTS MOBILE HEAVY EQUIPMENT MECHANICS CHEMICAL EQUIP. CONTROLLER/OPER. CHEMICAL TECHNICIANS, EXC.HEALTH ELECTRONICS REPAIRERS, COMM.&IND. CONCRETE AND TERRAZZO FINISHERS SALESPERSONS, PARTS ALL OTHER ENGINEERING TECHNICIAN ALL OTHER HEALTH PROF.,PARA,TECH ARCHITECTS, EXC. LAND. & MARINE PAVING, SURFACING, TAMPING SECURITIES, FINANCIAL SERV.SALES MECHANICAL ENGINEERING TECHN. LIBRARIANS, PROFESSIONAL CHEMISTS, EXCEPT BIOCHEMISTS PHOTOGRAPHERS FOREST AND CONSERVATION WORKERS PHOTOGRAPHERS FOREST AND CONSERVATION WORKERS PHOTOGRAPHERS FOREST AND CONSERVATION WORKERS FOREST ENGINEERS, EXCEPT MINING MECHANIC AND REPAIRER HELPERS COIN & VENDING MACHINE SERVICERS PRODUCTION, EXPEDITING CLERKS CORRECTION OFFICERS AND JAILERS FIRE FIGHTERS PRECISION INSPEC., TESTERS, &GRADE CRUSHING & MIXING MACHINE OPER. BENDLOYMENT INTERVIEWERS INSTRUCTORS AND COACHES, SPORTS BENDLOYMENT INTERVIEWERS INSTRUCTORS AND COACHES, SPORTS BENDLOYMENT INTERVIEWERS INSTRUCTORS AND COACHES, SPORTS CUVIL ENGINEERING TECHNICIANS MEDICINE AND HEALTH SERV. MGRS PERSONNEL, TRAINING, LABOR REL.MGR SOCIAL SCIENCE TEACHERS HIGHWAY MAINTENANCE WORKERS AND LIBRARY AND EXPLOSIVES WORKERS AND LIBRARY AND EXPLOSIVES WORKERS AND LIBRARY AND M	1987 STATE EMP	2000 STATE EMP	1987 REGION EMP	2000 REGION EMP	CHANGE
59999 53902	ALL OTHER CLERICAL & ADM.SUPPORT LIBRARY ASSISTANTS & BOOKHOBILE	938 433	1102 562	118.0 64.7	138.6 85.3	20.6 20.6
92974	PACKAGING & FILLING MACHINE OPER	1015	1133	116.0	136.3	20.3 20.1
65023 21308	BUTCHERS AND MEAT CUTTERS PURCHASING AGENT FX.UHO/RET/FARM	645	782	97.1	117.1	20.0
66099	ALL OTHER HEALTH SERVICE WORKERS	359	515	45.0	64.9	19.9
15017	CONSTRUCTION MANAGERS	538 /10	651 521	95.9 72.1	91.3	19.9 19.2
32102	PHYSICIANS AND SURGEONS	1555	1684	200.3	219.3	19.0
34011	REPORTERS AND CORRESPONDENTS	462	561	76.7	95.7	19.0
22121	CIVIL ENGINEERS, INCL. TRAFFIC	585 687	694 827	87.1 92.0	100.1	19.0 18.9
32317 85314	MOBILE HEAVY EQUIPMENT MECHANICS	608	732	88.5	107.0	18.5
92935	CHEMICAL EQUIP. CONTROLLER/OPER.	245	285	109.5	127.5	18.0
24505	CHEMICAL TECHNICIANS, EXC.HEALTH	371 254	485 429	02.9 33.9	51.7	17.9 17.8
87311	CONCRETE AND TERRAZZO FINISHERS	436	545	73.0	90.8	17.8
49014	SALESPERSONS, PARTS	1616	1740	228.7	246.3	17.6 17.5
22599	ALL OTHER ENGINEERING TECHNICIAN	580 567	645 704	69.2	86.5	17.3
22302	ARCHITECTS. EXC. LAND. & MARINE	649	768	94.1	110.8	16.7
87708	PAVING, SURFACING, TAMPING	399	488	74.3	90.9	16.6 16.5
43014	SECURITIES, FINANCIAL SERV.SALES	538 324	(3)	43.0 57.0	73.2	16.2
31502	LIBRARIANS, PROFESSIONAL	447	546	65.6	81.5	15.9
24105	CHEMISTS, EXCEPT BIOCHEMISTS	267	410	62.0	77.7	15.7 15.7
34023	PHOTOGRAPHERS	519 2030	2164	73.2 251.4	266.9	15.5
31216	S ENGLISH & FOREIGN LANG. TEACHERS	378	485	53.5	68.8	15.3
22132	SAFETY ENGINEERS, EXCEPT MINING	133	171	47.8	63.0	15.2 15.1
98102 850/	MECHANIC AND REPAIRER HELPERS TOTAL & VENDING MACHINE SERVICERS	440 285	324 329	68.3	83.4	15.1
58008	PRODUCTION, EXPEDITING CLERKS	333	490	41.7	56.7	15.0
6301	CORRECTION OFFICERS AND JAILERS	434	567	47.7 /2.5	62.7 57.5	15.0 15.0
21111 8780	F BUDGET ANALYSTS	100 486	596	64.8	79.7	14.9
6300	S FIRE FIGHTERS	684	794	89.0	103.8	14.8
8300	2 PRECISION INSPEC., TESTERS, &GRADE	129 731	185 511	36.9 65.3	51.6 70 0	14.7 14.6
2150	S CRUSHING & MIXING MACHINE OPER. R FMPLOYMENT INTERVIEWERS	128	165	30.4	44.9	14.5
3132	1 INSTRUCTORS AND COACHES, SPORTS	577	703	64.0	78.5	14.5
9793	8 GRADER, DOZER, SCRAPER OPERATORS	364 308	446 357	61.3 54.1	73.3 68.1	14.0 14.0
1500	R MEDICINE AND HEALTH SERV. MGRS	. 383	492	46.1	59.9	13.8
1300	5 PERSONNEL, TRAINING, LABOR REL.MGR	408	526	45.9	59.7	13.8 13.5
3121	O SOCIAL SCIENCE TEACHERS	339 1106	1306	137.7	151.1	13.4
3121	8 ART, DRAMA, AND MUSIC TEACHERS	333	428	47.2	60.6	13.4
5312	3 ADJUSTHENT CLERKS	397	503	55.5	68.8 39.7	13.3 13.3
8790	5 BLASTERS AND EXPLOSIVES WORKERS 8 MACHINISTS	118 728	177 886	26.4 63.2	76.1	12.9
7901	1 GRADERS & SORTERS, AGRIC.PRODUCT			108.6		12.8
3292	1 RADIOLOGIC TECHNICIANS	267	363	34.6	47.3 54.4	12.7 12.5
3151	4 VOCATIONAL & EDUC. COUNSELORS 8 EMERGENCY MEDICAL TECHNICIANS	317 222	410 283	41.9 40.5	53.0	12.5.
3400	2 WRITERS AND EDITORS	283	344	54.5	67.0	12.5
3111	7 GRADUATE ASSISTANTS, TEACHING	310 412	398 609	43.9 29.5	56.3 41.9	12.4 12.4
1502	2 INSURANCE ADJUSTERS, INVESTIGATOR 23 COMMUNICATION, TRANSP., UTIL.MGRS	653	779		76.2	12.4
3400	5 TECHNICAL WRITERS	90	125		43.0	12.3
	MILLWRIGHTS	405 428	540 486		49.1 74.6	12.3 12.2
	PO ALL OTHER MECHANICS, INSTALLERS BE DESIGNERS, EXC. INTERIOR DESIGN.	315	377			12.1
430	17 SALES AGENTS, BUSINESS SERVICES	216	272	37.3	49.4	12.1
4900	DS SALES REPS, SCIENT! F.PROD.EXC.RET	641 503	731 577			12.0 11.9
221	17 ANIMAL CARETAKERS, EXCEPT FARM D5 METALLURGISTS AND REL. ENGINEERS	69	109	20.6	32.2	11.6
	08 PURCHASING MANAGERS	1007	1077	145.4	157.0	11.6



OES OCCUPATIONAL CODE TITLE	1987 STATE EMP	2000 STATE EMP	1987 REGION EMP	2000 REGION EMP	CHANGE
OCCUPATIONAL CODE TITLE 89505 CUSTOM TAILORS AND SEWERS 15014 INDUSTRIAL PRODUCTION MANAGERS 28305 PARALEGAL PERSONNEL 53702 COURT CLERKS 93935 CANNERY WORKERS 93935 ENGRAVING AND PRINTING, HAND 89132 SHEET METAL WORKERS 73008 LOG HANDLING EQUIPMENT OPERATORS 32314 SPEECH PATHOLOGISTS, AUDIOLOGISTS 24502 BIOLOGICAL, AGRIC., FOOD TECHN. 66017 PHYSICAL, CORRECT.THERAPY ASSIST 34058 ATHLETE, COACH, UMPIRE & RELATED 31505 TECHNICAL ASSISTANTS, LIBRARY 79005 NURSERY WORKERS 32302 RESPIRATORY THERAPISTS 34051 MUSICIANS, INSTRUMENTAL 69999 ALL OTHER SERVICE WORKERS 92726 LAUNDRY, ORTCLEANING MACH. OPER. 32928 SURGICAL TECHNICIANS 85953 TIRE REPAIRERS AND CHANGERS 31202 LIFE SCIENCE TEACHERS 98705 REFUSE COLLECTORS 85328 SMALL ENGINE SPECIALISTS 28108 LAWTERS 27311 RECREATION WORKERS 89921 DENTAL LABORATORY TECHNICIANS 24399 ALL OTHER PHYSICAL SCIENTISTS 24199 ALL OTHER PHYSICAL SCIENTISTS 92717 SEWING MACH. OPERATOR, GARMENT 22117 NUCLEAR ENGINEERS 39999 ALL OTHER PLANT AND SYSTEM OCC. 67099 ALL OTHER CLEAN, BUILDING SERVICE 55321 FILE CLERKS 27302 SOCIAL WORKER, MED. PSYCHIATRIC 56021 DATA ENTRY KEYERS, COMPOSING 24305 AGRICULTURAL AND FOOD SCIENTISTS 87999 ALL OTHER CONSTR. & EXTRACTIVE 15002 POSTMASTERS, MAIL SUPERINTENDENT 92543 PRINTING PRESS MACHINE OPERATOR 32905 MED./CLINICAL LAB. TECHNICIANS 32917 RADIOLOGIC TECHNOLOGISTS 56014 PERIPHERAL EDP EQUIP. OPERATOR 32905 MED./CLINICAL LAB. TECHNICIANS 32917 RADIOLOGIC TECHNOLOGISTS 56014 PERIPHERAL EDP EQUIP. OPERATOR 32905 MED./CLINICAL LAB. TECHNICIANS 32917 RADIOLOGIC TECHNOLOGISTS 56014 PERIPHERAL EDP EQUIP. OPERATOR 31224 MATHEMATICAL SCIENCE TEACHERS 73011 LOGGING TRACTOR OPERATORS 97108 BUS DRIVERS 53102 TELLERS 34008 PUBLIC RELATIONS SPECIALISTS 43011 REAL ESTATE APPRAISERS 98502 MACHINE FEEDERS AND OFFBEARERS 85723 ELECTRICAL POWERL	469 633 125	554 787 221	62.0 61.8 15.4 45.1	73.6 73.3 26.9	11.6 11.5 11.5
93935 CANNERY WORKERS	4173	4312	344.3	355.7	11.4
93951 ENGRAVING AND PRINTING, HAND	63 525	- 651	26.3 53.1	37.5 64.2	11.1
73008 LOG HANDLING EQUIPMENT OPERATORS	462	595	33.7	44.7 38.2	11.0
32314 SPEECH PATHOLOGISTS, AUDIOLOGISTS 24502 RIOLOGICAL, AGRIC., FOOD TECHN.	321	355	53.4	64.0	10.6
66017 PHYSICAL, CORRECT. THERAPY ASSIST	135 281	215 358	17.9 37.6	28.5 48.1	10.6 10.5
31505 TECHNICAL ASSISTANTS, LIBRARY	251	323	34.8	45.2	10.4
79005 HURSERY WORKERS	192 145	2/5	18.5	28.8	10.4
34051 MUSICIANS, INSTRUMENTAL	336	422	39.6	49.8 52.8	10.2
69999 ALL OTHER SERVICE WORKERS 92726 LAUNDRY, DRYCLEANING MACH, OPER.	294 659	339 737	79.2	88.9	9.7
32928 SURGICAL TECHNICIANS	59	95 440	15.4 76.8	25.0 86.4	9.6 9.6
85953 TIRE REPAIRERS AND CHANGERS 31202 LIFE SCIENCE TEACHERS	239	307	33.9	43.5	9.6
98705 REFUSE COLLECTORS	447 770	547 438	45.5 49.1	54.8 58.3	9.3 9.2
85328 SMALL ENGINE SPECIALISIS 28108 LAWYERS	3080	3146	382.3	391.3	9.0
27311 RECREATION WORKERS	477 170	554 237	56.9 22.1	65.7 30.9	8.8 8.8
24399 ALL OTHER LIFE SCIENTISTS	260	323	35.2	43.9	8.7
24199 ALL OTHER PHYSICAL SCIENTISTS	149 245	316	29.9	48.8 38.5	8.6
22117 NUCLEAR ENGINEERS	492	495	198.7	207.3	8.6
39999 ALL OTHER PROF., PARAPROF., TECHN.	938 233	1014 288	34.2	42.7	8.5
67099 ALL OTHER CLEAN, BUILDING SERVICE	471	538	54.5 1/2.7	62.9	8.4 8.4
55321 FILE CLERKS 27302 SOCIAL MORKER MED.& PSYCHIATRIC	880 251	324	27.6	35.9	8.3
56021 DATA ENTRY KEYERS, COMPOSING	57	88	14.4	22.5 58.8	8.1 8.1
24305 AGRICULTURAL AND FOOD SCIENTISTS 87000 ALL OTHER CONSTR. & EXTRACTIVE	201	252	24.6	32.7	8.1
15002 POSTMASTERS, MAIL SUPERINTENDENT	288	357	33.7 27.0	41.8 35.0	8.1 8.0
92543 PRINTING PRESS MACHINE OPERATOR 32905 MED./CLINICAL LAB. TECHNICIANS	189	250	23.3	31.3	8.0
32917 RAD IOLOGIC TECHNOLOGISTS	161	221 142	20.8 14.9	28.3 22.8	8.0 7.9
31224 MATHEMATICAL SCIENCE TEACHERS	193	248	27.2	35.1	7.9
73011 LOGGING TRACTOR OPERATORS	473 320	584 428	31.5 25.9	39.2	7.6
53102 TELLERS	1729	1798	204.9	212.5	7.6
34008 PUBLIC RELATIONS SPECIALISTS	118 299	167 369	34.3	41.8	7.5
98502 MACHINE FEEDERS AND OFFBEARERS	1460	1574	91.6	99.1	7.5 7.4
85723 ELECTRICAL POWERLINE INSTAL/RPR. 92721 SEWING MACH. OPER., NON-GARMENT	498 262	579 315	42.1 26.7	49.5 34.0	7.3
89511 SHOE AND LEATHER WORKERS	123	182	15.5	22.3	<u>7</u> .3
58002 DISPATCHER: POLICE, FIRE, AMBULANCE 63032 SHERIFFS AND DEPUTY SHERIFFS	465 479	520 531		71.2	7.0
49026 VENDORS.SQLICITORS.DOCR TO DOCR	153	184 127			
98319 HELPERS, ALL OTHER CONSTRUCTION 55314 PERSONNEL CLERKS, EXCEPT PAYROLL	93 341	377	52.3	59.0	6.7
ASOLI FOOD SERVERS, CUISIDE	191 106	244 140			
89703 PRECISION LITHOGRAPHERS & PHOTO. 66011 HOME HEALTH AIDES	217	272	23.0	29.5	6.5
27305 SOCIAL WORKERS, EX. MED. PSYCH.	545 288	606 343			6.4
57308 POSTAL SERVICE CLERKS 71002 FARMERS	232	283	31.1	37.5	6.4
61005 POLICE AND DETECTIVE SUPERVISORS	259 512				
53121 LOAN AND CREDIT CLERKS 87814 STRUCTURAL METAL WORKERS	175	211	27.4	33.6	6.2
32521 DIETITIANS AND MUTRITIONISTS	154	201	1 18.5	24.7	0.4



	OCCUPATIONAL TITLE	1987	2000	1987	2000	
œs	OCCUPATIONAL	STATE	STATE	REGION	REGION	CUANCE
CODE	TITLE	EMP	EMP	EWP	EMP	CHANGE
55775	CUSTOMER SERVICE REPS, UTILITIES PUBLIC ADMIN., LEG., GEN. ADMIN. AIRCRAFT PILOTS, FLIGHT ENGINEERS BRICK MASONS ADVERTISING CLERKS OCCUPATIONAL THERAPISTS CONVEYOR OPERATORS AND TENDERS FIRST LINE SUPERV.: TRANSPORT. COMPLIANCE & ENFORCE. INSPECTORS PHYSICIAN ASSISTANTS SOCIAL MEIFARE SERVICE AIDES PHOTOGRAPHIC PROCESS WORKERS PRECISION INSTRUMENT REPAIRERS MURSING INSTRUCTORS ANNOUNCERS, RADIO AND TV MATER & WASTE TREAT. PLANT OPER. SOCIAL SERVICE TECHNICIANS ALL OTHER PRECISION WORKERS INSULATION WORKERS INSULATION WORKERS RESERVATION & TRANS.TICKET AGENT SAWING MACHING OPERATOR/TENDER PHARMACY ASSISTANTS ALL OTHER MOTOR VEHICLE OPERATOR MINING ENGINEERS, INC. SAFETY FIRST LINE SUPERV.: MELP, LABORERS ALL OTHER FINANCIAL SPECIALISTS ALL OTHER PROTECTIVE SERVICE ALL OTHER PROTECTIVE SERVICE AIRCRAFT MECHANICS HOTEL DESK CLERKS BROKERS, REAL ESTATE OPERATIONS AND SYSTEMS ANALYSTS MACHINERY MAINTENANCE WORKERS HACHINERY MAINTENANCE WORKERS HEALTH SPECIALITIST OPERATIONS AND SYSTEMS ANALYSTS MACHINERY MAINTENANCE WORKERS HEALTH SPECIALITIES TEACHERS BIOLOGICAL SCIENTISTS ALL OTHER INSPECTORS, TESTERS TAX EXAMINER, COLLECTOR, REV. AGENT PSYCHIATRIC AIDES THELPERS, MASONS & TILE SETTERS ALL OTHER MATHEMATICAL SCIENTIST BILDERY MACHINE SETTER/OPERATOR BINDERY MACHINE SETTER/OPERATOR BINDERY MACHINE SETTER/OPERATOR BINDERY MACHINE, REGISTER SERVICER PRESSING MACH. OPERATOR, TEXTILES HINING IND RELATED MANAGERS CHEWACCOUNTS CLERKS SPESSING MACH. OPERATOR, TEXTILES HINING IND RELATED MANAGERS CHEWACCOUNTS CLERKS SPESSING MACH. OPERATOR, TEXTILES HINING IND RELATED MANAGERS CHEWACCOUNTS CLERKS SPERSSING MACH. OPERATOR, TEXTILES HINING IND RELATED MANAGERS CHEWACCOUNTS CLERKS SPERSSING MACH. OPERATOR, TEXTILES SURVEYING AND MAPPING TECHNICIAN PAPER GOOOS MACHINE SETTER/OPER.	386	456	33.2	39.3	6.1
19002	PURLIC ADMIN. LEG. GEN. ADMIN.	378	423	50.6	56.7	6.1
97702	AIRCRAFT PILOTS FLIGHT ENGINEERS	229	294	21.0	27.1	6.1
87302	BRICK MASONS	206	245	31.8	37.7	5.9
53908	ADVERTISING CLERKS	72	100	15.2	21.1	5.9
32305	OCCUPATIONAL THERAPISTS	69	115	8.2	14.0	5.8
97951	CONVEYOR OPERATORS AND TENDERS	398	445	41.6	47.4	5.8
81011	FIRST LINE SUPERV.: TRANSPORT.	292	338	27.8	33.5	5.7
21911	COMPLIANCE & ENFORCE. INSPECTORS	528	561	63.7	69.2	5.5
32511	PHYSICIAN ASSISTANTS	175	217	23.0	28.5	5.5
68035	SOCIAL WEI FARE SERVICE AIDES	147	198	15.0	20.5	5.5
89914	PHOTOGRAPHIC PROCESS WORKERS	6/	100	17.0	22.3	5.5
85905	PRECISION INSTRUMENT REPAIRERS	122	100	23.0	27.0	5.3
31114	NURSING INSTRUCTORS	744	107	77 1	42.3	3.3
34017	ANNOUNCERS, RADIO AND IV	300 245	307	37.1	38.7	5.1
77700	MAICK & WASIC INCAL. PLANT OFCE.	203	267	21.4	26.5	5.1
80000	S ALL OTHER ORECICION MORERS	110	302	31.4	36.5	5.1
97907	FINCH ATION CONTROL	142	175	21.8	26.8	5.0
57808	PESERVATION & TRANS. TICYET AGENT	272	342	19.6	24.6	5.0
02308	SAUTHG MACHING OPERATOR/TENDER	864	994	33.1	38.0	4.9
66026	PHARMACY ASSISTANTS	130	168	17.6	22.5	4.9
97199	ALL OTHER MOTOR VEHICLE OPERATOR	92	121	13.4	18.2	4.8
22108	MINING ENGINEERS, INC. SAFETY	52	77	8.5	13.3	4.8
81017	FIRST LINE SUPERV.: HELP, LABORERS	243	324	17.2	21.9	4.7
21199	ALL OTHER FINANCIAL SPECIALISTS	267	312	27.2	31.9	4.7
68002	2 BARBERS	177	212	21.5	26.1	4.6
5731	1 MESSENGERS	246	282	35.2	39.7	4.2
6309	ALL OTHER PROTECTIVE SERVICE	202	229	29.6	34.1	4.2
8532	AIRCRAFT MECHANICS	236	297	20.7	۷۵.۷	4.3
5380	B HOTEL DESK CLERKS	353	394	3/./	17 2	4.3
4300	BROKERS, REAL ESTATE	120	170	12.0	12.7	7.3
2530	2 OPERATIONS AND STSTEMS ANALYSIS	15/	180	12.1	16.3	7.5
8512	S MACHINERY MAINTENANCE WORKERS	104	134	16.7	18 9	4.2
3121	& BIGIOCICAL CCIENTICIC	200	342	41.6	45.7	4.1
8300	O ALL OTHER INSPECTORS TESTERS	118	138	19.5	23.6	4.1
2101	4 TAX EXAMINER COLLECTOR REV.AGENT	237	271	28.0	31.9	3.9
6401	4 PSYCHIATRIC AIDES	141	156	37.3	41.1	3.8
9831	1 HELPERS, MASONS & TILE SETTERS	145	169	21.3	25.1	3.8
5609	9 ALL OTHER OFFICE MACH. OPERATORS	141	181	15.1	18.8	3.7
9252	S BINDERY MACHINE SETTER/OPERATOR	70	87	14.7	18.4	3.7
2531	9 ALL OTHER MATHEMATICAL SCIENTIST	98	112	17.5	21.2	3.7
5310	5 NEW ACCOUNTS CLERKS	266	299	32.4	36.1	3.7
8980	2 SLAUGHTERERS AND BUTCHERS	658	704	54.3	58.0	3.7
9272	8 PRESSING MACH. OPERATOR, TEXTILES	102	181	22.8	20.4	3.0
1502	1 MINING IND RELATED MANAGERS	2/9	248	79.7	41 0	3.6
8592	6 OFFICE MACHINE, REGISTER SERVICER	108	200	30.3	36.0	3.6
2130	5 PURCHASING AGENIS & BUTERS, PARM	323	351	39.9	43.5	3.6
5370	B LICENSE CLERKS	177	199	26.3	29.9	3.6
2232	1 SURVEYING AND MAPPING TECHNICIAN	100	124	13.6	17.1	3.5
7271	4 PAPER GOODS MACHINE SETTER/OPER. 5 HELPERS, PLUMBERS, PIPEFITTERS	122	143	20.3	23.8	3.5
	S BOILERMAKERS	69	86	14.2		3.5
5350	2 WELFARE ELIGIBILITY WORKERS	283	313	26.5	29.9	3.4
	1 PROOFREADERS AND COPY MARKERS	57	71	12.7	16.1	3.4
	S JOB PRINTERS	69	87	13.5	16.9	3.4
	7 RECREATION THERAPISTS	62	87		11.2	3.3
2190)5 MANAGEMENT ANALYSTS	299	328		39.4	3.3
6802	21 USHERS, LOBBY ATT., TICKET TAKER	90	108			3.3
9798	39 ALL OTHER TRANSP., MAT. MOVING OPR	452	511			3.3
5350	DS INVESTIGATORS, CLERICAL	16	23			3.3
531	17 CREDIT CHECKERS	59	65			3.3
878	99 ALL OTHER CONSTRUCTION WORKERS	184	204			3.3 3.2
	DE DUPLICATING MACHINE OPERATORS	55 45	70			3.2
560	08 MAIL MACHINE OPERATORS	65 80	81 100			3.5
	19 ALL OTHER PRINTING PRESS SET/OP.	490	506			
580	26 ORDER FILLERS, SALES	470	,00	,0.5	,,,,	٠.٠

OES OCCUPATIONAL CODE TITLE	1987	2000	1987	2000	
OES OCCUPATIONAL	STATE	STATE	REGION	REGION	
CODE TITLE	EMP	EMP	EMP	EMP	CHANGE
CCCC TITLE 31222 ENGINEERING TEACHERS 92926 LOW PRESSURE BOILER OPERATOR 85714 ELECTRIC MOTOR REPAIRERS 31209 ALL OTHER PHYS. SCIENCE TEACHERS 92546 BINDERY MACHINE OPERATORS 92997 ALL OTHER MACHINE SETTERS/OPER. 57302 MAIL CLERKS, EXC. MAIL MACHINE 85317 RAIL CAR REPAIRERS 31204 CHEMISTRY TEACHERS 87508 PIPELAYERS 61002 FIRE FIGHTING & PREV.SUPERVISORS 31517 INSTRUCTIONAL COORDINATORS 97502 CAPTAINS, WATER VESSEL 92938 CHEMICAL EQUIPMENT TENDER 21111 TAX PREPARERS 85711 ELECTR. HOME APPL. & POWER TOOL 22311 SURVEYING AND MAPPING SCIENTISTS 31226 COMPUTER SCIENCE TEACHERS 89508 UPHOLSTERERS 91705 WELDING MACHINE OPERATORS 92521 PHOTOENGRAVING & LITH. PHOTOGRA. 93114 ELECTRICAL, ELECTRONIC ASSEMBLER 21102 UNDERWRITERS 87308 HARD TILE SETTERS 58021 MARKING CLERKS 87805 SHEET METAL DUCT INSTALLERS 87301 MARKING CLERKS 87805 SHEET METAL DUCT INSTALLERS 87301 MARKING CLERKS 87305 SHEET METAL DUCT INSTALLERS 87306 HARD TILE SETTERS 58017 WEIGHERS, HEASURERS, CHECKERS 92947 PAINTERS, TRANSPORTATION EQUIP. 97114 TAXI DRIVERS AND CHAUFFEURS 21917 ASSESSORS 92905 MOTION PICTURE PROJECTIONISTS 89123 JEWELERS AND SILVERSMITHS 56002 BILL., POST, CALCULATING MACH.CP 87602 CARPET INSTALLERS 63044 CROSSING GUARDS 31206 PHYSICS TEACHERS 34056 PROD.,DIRECT.,ACTORS,ENTERTAINER 57108 CENTRAL OFFICE OPERATORS 89311 CABINETMAKERS & BENCH CARPENTERS 63011 POLICE DETECTIVES 21105 CREDIT ANALYSTS 53126 STATEMENT CLERKS 93947 PAINTING AND COATING, HAND 85326 AIRCRAFT ENGINE SPECIALISTS 92944 CUTTING & SLICING MACHINE OPER. 92971 EXTRUDING & FORMING OPERATOR 66023 AMBULANCE DRIVERS & ATTENDANTS 85118 MACHINERY MECHANICS: PLANT 87989 ALL OTHER EXTRACTIVE OCC., EX. HEL 53705 MUTICIPAL LERXS 91714 STRUCTURAL METAL FABRICATORS	81	104	11.5	14.7	3.2
02024 I OU DESCRIPT ROLLED UDEDATOR	176	204	14.4	17.5	3.1
85714 ELECTRIC MOTOR REPAIRERS	123	145	14.5	17.9	3.1
31209 ALL OTHER PHYS. SCIENCE TEACHERS	75	96	10.5	13.6	3.1
92546 BINDERY MACHINE OPERATORS	46	58	11.0	14.0	3.0
92997 ALL OTHER MACHINE SETTERS/OPER.	296	335	27.8	30.8	3.0
57302 MAIL CLERKS, EXC. MAIL MACHINE	333	540 97	22.9	20.9 Q 8	3.0
85317 RAIL CAR REPAIRERS	70	101	11 3	14.2	2.9
31500 CHEMISIKI IENCHEKS	120	137	20.4	23.3	2.9
61002 FIRE FIGHTING & PREV.SUPERVISORS	133	154	16.8	19.6	2.8
31517 INSTRUCTIONAL COORDINATORS	97	116	11.7	14.4	2.7
97502 CAPTAINS, WATER VESSEL	38	55	6.1	8.8	2.7
92938 CHEMICAL EQUIPMENT TENDER	40	46	17.9	20.6	2.7
21111 TAX PREPARERS	111	129	10.4	18.9	2.7
85711 ELECTR. HOME APPL. & POWER TOOL	140	134	17.7	20.4	2.7
22311 SURVEYING AND MAPPING SCIENTISTS	71	91	10.0	12.7	2.7
SOUS HONDI CLEDEDS	143	162	16.6	19.3	2.7
91705 WELDING MACHINE OPERATORS	166	227	7.2	9.8	2.6
92521 PHOTOENGRAVING & LITH. PHOTOGRA.	49	61	10.3	12.9	2.6
93114 ELECTRICAL, ELECTRONIC ASSEMBLER	300	381	9.7	12.3	2.6
21102 UNDERWRITERS	116	180	6.0	8.6	2.6
87308 HARD TILE SETTERS	82	103	10.5	13.1	2.0
58021 MARKING CLERKS	100	115	10.7	19.3	2.6
87805 SHEET METAL DUCT INSTALLERS	76	123	13.1	15.6	2.5
SROIT UPIGHERS MEASHRERS CHECKERS	114	135	11.4	13.8	2.4
92947 PAINTERS, TRANSPORTATION EQUIP.	62	78	7.9	10.3	2.4
97114 TAXI DRIVERS AND CHAUFFEURS	55	76	6.5	8.9	2.4
21917 ASSESSORS	181	199	23.7	26.1	2.4
92905 MOTION PICTURE PROJECTIONISTS	62	/5	11.1	13.4	2.3
89123 JEWELERS AND SILVERSMITHS	101	3/0	20.B	36.3	2.2
97/02 CARRET INSTALLERS	انے 17	112	12.1	14.3	2.2
ARONA CARPET INSTACLERS	46	57	8.7	10.9	2.2
31206 PHYSICS TEACHERS	58	74	8.2	10.4	2.2
34056 PROD., DIRECT., ACTORS, ENTERTAINER	49	62	7.4	9.6	2.2
57108 CENTRAL OFFICE OPERATORS	136	159	13.7	15.9	2.2
89311 CABINETMAKERS & BENCH CARPENTERS	346	394	15.8	10.0	2.4
63011 POLICE DETECTIVES	1/9	170	13 5	15 6	2 1
21105 CREDIT ANALYSIS	61	80	7.0	9.0	2.0
030/7 DAINTING AND COATING HAND	90	113	7.8	9.8	2.0
89326 AIRCRAFT ENGINE SPECIALISTS	64	82	7.4	9.4	2.0
92944 CUTTING & SLICING MACHINE OPER.	83	96	9.6	11.5	1.9
92971 EXTRUDING & FORMING OPERATOR	207	245	11.5	13.4	1.9
66023 AMBULANCE DRIVERS & ATTENDANTS	34	41	0.1	19 /	1.9
85118 MACHINERY MECHANICS: PLANT	111	40	5.6	7.5	1.9
87989 ALL OTHER EXTRACTIVE OCC., EX.HEL	32 121	135	16.2	18.1	1.9
53705 MUNICIPAL CLERKS 91714 STRUCTURAL METAL FABRICATORS	104	126	8.1	9.9	1.8
93938 HEAT, POULTRY, FISH CUTTERS	195	216	16.0	17.8	1.8
97117 DRIVER/SALES WORKERS	1016	999	141.1	142.9	1.8
67008 PEST CONTROLLERS AND ASSISTANTS	115	119	34.5	36.3	1.8
87305 STONE MASONS	52	61		12.9	1.8
97899 ALL OTHER TRANSPORTATION WORKERS	120	137			1.7 1.7
68008 MANICURISTS	64 96	78 122			1.7
28311 TITLE EXAMINERS AND ABSTRACTORS	49	59			1.7
22308 LANDSCAPE ARCHITECTS 91905 LATHE, TURNING MACH.SETTER/OP,M/P	159	192			1.6
73005 CHOKE SETTERS	244	281			1.6
89805 BAKERS, MANUFACTURING	76	91	8.0	9.6	
49032 DEMONSTRATORS, PROMOTERS, MODELS	22	26			
21908 CONSTRUCTION, BUILDING INSPECTOR	149	161			
92100 ALL OTHER MET SPLAS MACH SET/OPS	109				
98316 HELPERS, ROOFERS	65 239	75 254			
85502 CENTRAL OFFICE & PSX INSTAL/RPR.	239	٩٤٤	. 67.1		

OES OCCUPATIONAL CODE TITLE	1987 STATE EMP	2000 STATE EMP	1987 REGION EMP	2000 REGION EMP	CHANGE
OES OCCUPATIONAL CODE TITLE 87105 CEILING TILE INSTALLERS 92314 WOODWORKING MACHINE OPERATORS 92962 SEPARATING, FILTERING MACH. OP. 87702 AIR HAMMER OPERATORS 89808 FOOD BATCHMAKERS 89111 TOOL GRINDERS, FILEERS, SHARPENERS 87817 FENCE ERECTORS 89911 DETAIL DESIGN DECORATORS & PAINT 32399 ALL OTHER THERAPISTS 98313 HELPERS, ELECTRICIANS 92921 ROASTING, DRYING OPER., FOOO/TOB. 28302 LAW CLERKS 28399 ALL OTHER LEGAL ASSISTANTS 87108 DRYWALL INSTALLERS 53914 REAL ESTATE CLERKS 89399 ALL OTHER PRECISION WOODWORKERS 92311 WOODWORKING MACHINE SETTER/OPER. 9253 COATING, PAINTING MACH. OPER. 95028 POMER DISTRIBUTORS & DISPATCHERS 34044 MERCHANDISE DISPLAYERS 27199 ALL OTHER SOCIAL SCIENTISTS 39005 TRAFFIC TECHNICIANS 55344 BILLING, COST AND RATE CLERKS 31111 LECTURERS 58099 ALL OTHER MATERIAL WORKERS 93944 MOLDERS AND CASTERS, HAND 34053 DANCERS AND CASTERS, HAND 34053 DANCERS AND CASTERS, HAND 34053 DANCERS AND CHOREOGRAPHERS 34041 INTERIOR DESIGNERS 98314 HELPERS, PAINTERS, PLASTERERS 27105 URBAN AND REGIONAL PLANNERS 87811 GLAZIERS 67001 JANITORS, CLEANERS, MAIDS 72000 SUPERVISORS, FARM, FOREST, AG.REL 39002 AIR TRAFFIC CONTROLLERS 32511 TODIATRISTS 27102 ECONOMISTS, MARKET ANALYSTS 24302 FORESTER, CONSERVATION SCIENTIST 35928 MECHANICAL CONTROL INSTALL& REPR 92917 COOKING MACHINE OPER., FOOO/TOB. 39011 FUNERAL DIRECTORS AND MORTICIANS 95021 POWER GENERATING PLANT OPERATOR 89308 WOOD MACHINISTS 27002 BOOT ACHINISTS 27002 BOOT ACHINISTS 27002 POWER GENERATING PLANT OPERATOR 89308 MOOD MACHINISTS 27002 POWER GENERATING PLANT OPERATOR 89308 MOOD MACHINISTS 27002 BOOT ACHINISTS 27002 POWER GENERATING PLANT OPERATOR 89308 MOOD MACHINISTS 27003 PHOTOGRAPHIC PROCESSING MACH.OP. 85936 MOBILE HOME INSTALLER & REPAIRER 53311 INSURANCE CLAIMS CLERKS 93926 CUTTERS AND TRIMMERS, HAND 92932 DAIRY PROCESSING EQUIP. OPERATOR 26102 JUDGES AND MAGISTATLES 34026 CRIMINAL INVESTIGATORS, FEDERAL	55 246 112 40 231 169 63 34 124 71 173 59 89 184 197 139 99 35 66 330 700 101 71 35 46 88 70 312 77 1851 118 82 87 114 114 114 114 114 115 116 116 116 116 116 116 116 116 116	662 1247 198 102 2216 172 181 102 2216 174 112 118 104 104 105 105 105 106 107 107 107 107 107 107 107 107 107 107	7.54.66.02.99.09.88.09.59.54.66.92.51.3.14.66.7.3.44.8.5.96.66.84.1.66.7.3.44.8.5.96.66.84.12.55.56.0.1.89.5.3.3.44.85.99.66.88.5.1.69.5.66.1.89.5.3.3.44.85.99.66.88.5.1.69.5.66.1.89.5.3.44.85.99.66.88.5.1.69.5.66.1.89.5.3.44.85.99.66.88.5.1.69.5.66.1.89.5.3.44.85.99.66.88.5.1.69.5.66.1.89.5.3.44.85.99.66.88.5.1.69.5.66.1.89.5.3.44.85.99.66.88.5.1.69.5.66.1.89.5.3.44.85.99.66.88.5.1.69.5.5.60.1.89.5.3.44.85.99.66.88.5.1.69.5.5.60.1.89.5.3.44.85.99.66.88.5.1.69.5.5.60.1.89.5.3.44.85.99.66.88.5.1.69.5.5.60.1.89.5.5.60.1.89.5.5.60.1.89.5.5.60.1.89.5.5.60.1.89.5.5.60.1.89.5.5.60.1.89.5.5.60.1.89.5.5.60.1.89.5.5.60.1.89.5.5.60.1.89.5.5.60.1.89.5.5.60.1.89.5.5.60.1.89.5.5.5.60.1.89.5.5.5.60.1.89.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.	9.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 1	0.3
97317 RAILROAD BRAKE, SIGNAL, SWITCH 24311 MEDICAL SCIENTISTS 79021 FARM EQUIPMENT OPERATORS 89899 ALL OTHER PRECISION FOOD, TOBACCO 68023 BAGGAGE PORTERS AND BELLHOPS 97302 RAILROAD CONDUCTORS, YARDMASTERS 85514 RADIO MECHANICS 31323 FARM & HOME MANAGEMENT ADVISORS	374 74 80 87 79 135 49 208	381 77 86 93 82 138 51 208	17.2 6.9 6.7 7.3 8.4 6.1 6.2 29.0	17.5 7.2 7.0 7.6 8.7 6.3 6.4 29.2	0.3 0.3 0.3 0.3 0.3 0.2 0.2
83008 TRANSPORTATION INSPECTORS 85914 CAMERA & PHOTOGRAPHIC REPAIRERS 97305 LOCOMOTIVE ENGINEERS 55326 PROCUREMENT CLERKS 85321 FARM EQUIPMENT MECHANICS	126 48 155 129 884	130 50 157 142 877	6.0 7.0 11.1	6.2 7.1 11.2	0.1 0.1

		1987	2000	1987 REGION	2000 REGION	
OES OCCUPATIONAL		STATE	STATE	EMP	ENP	CHANGE
CODE TITLE		EMP	EMP	CAL	EAP	CRANGE
21302 WHOLESALE, RE	TAIL BUYERS.EX.FARM	776	779	111.4	111.4	0.0
55323 ORDER CLERKS:	MATERIALS, SERVICE	548	548	81.9		-0.1
	ABLE TV INSTAL/RPR.	558	538	63.7		-0.3
	NMENT EQ. REPAIRERS	287	285	37.8		-0.4
	ON INSTALL & REPAIR	129	121	13.4	12.7	
02541 TYPESETTING	ACH. OPERATOR/TEND.	161	157	33.8	33.0	•0.8
24102 PHYSICISTS AN		78	77	25.4	24.5	-0.9
85308 MOTORCYCLE RE		180	174	23.3	22.3	-1.0
58014 METER READERS		174	150	15.7	14.4	-1.3
58023 STOCY CLERKS	STOCKROOM OR WAREH.	1711	1676	246.8	245.1	-1.7
92515 LETTERPRESS		225	215	47.4	45.4	-2.0
	ISPENSING & MEASUR.	312	286	42.9		-2.4
	LECTRONIC ASSEMBLER	556	403	6.0	3.4	-2.6
53314 INCIDANCE POL	ICY PROCESS. CLERKS	508	479	32.4	29.3	
93917 SOLDERERS AND		62	79	19.6	15.9	
32108 OPTOMETRISTS		187	154	23.6	19.6	-4.0
	APOSITOR, TYPESETTER	168	136	29.2	23.4	-5.8
55328 STATISTICAL		148	94	23.8	16.8	-7.0
	TIHEKEEPING CLERKS	402	332	52.0	42.8	-9.2
	NT AND SYSTEM OPER.		143	73.4	64.0	-9.4
55302 STENOGRAPHER		218	131	44.1	27.1	-17.0
56017 DATA ENTRY KI	EYERS, EX. COMPOSING	740	548	111.8	84.2	-27.6
07047 INDUSTRIAL T	RUCK & TRACTOR OPER.	1989	1515	209.2	176.8	-32.4
55338 ROOKKEEPING	& ACCOUNTING CLERKS	9250	8872	1254.1	1210.9	
74002 FARM WORKERS		9543	8528	1164.1	1033.3	-130.8
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