

## Results of NICET/ASCET Salary Survey, 2006

For some time, ASCET has published a regular salary survey of its engineering technician membership population. The last survey they published was in 2003 (Certified Engineering Technician, Vol. 40, No. 6). Meantime, NICET had published a survey of its fire protection population area (results can be found at this link on the NICET web site [http://www.nicet.org/about/fire\\_protection\\_industry\\_survey\\_data.pdf](http://www.nicet.org/about/fire_protection_industry_survey_data.pdf)) and found that a significant percentage of the respondents wanted more information about salary data. Therefore, ASCET and NICET cooperated to publish a salary survey to their combined engineering technician populations. The survey was published on the NICET web site on May 22<sup>nd</sup> and by the time it closed, July 31<sup>st</sup> at midnight, 2976 technicians had replied, for a response rate of approximately 10%.

The results of the 2006 salary survey are shown in the following tables and graphs. Results are not absolute as some areas had ranges that were statistically insignificant, for example too few retired persons answered the survey to provide meaningful data. For the categories 'other' in response to employer, to association membership and to certifications held, survey data have been plotted, with the lower ranges omitted; that is categories where six or fewer responded. Because all respondents did not answer all questions, some of the categories will indicate fewer respondents than the maximum. However, in the case of association membership, while not all of the respondents replied, there are more memberships than individuals because some respondents belong to more than one association. Likewise, some respondents have more than one certification. Thus care should be taken in extrapolating the characteristics of the entire engineering technician population from these results.

### Characteristics of Respondents

The summary data indicate that the prototypical respondent belonged to an association (see Table 1/Chart 1: Association Membership), was a Certified ASCET member (see Table 2/Chart 2: ASCET Membership), with NICET Level II certification (see Tables 3/Charts 3: Certifications Held and 4: Level of Certification), who works for an employer that does not require certification (see Table 5/Chart 5: Certification Required), but does recognize it (see Table 6/Chart 6: Certification Recognized), and is employed by an engineering company (Table 7/Chart 7: Current Employer) in the fire protection area (see Tables 8/Chart 8: Major Specialty Area and 8B: Minor Specialty Area).

Survey demographic data indicate that the respondent is male (see Table 9/Chart 9: Gender), between 40 and 49 years old (see Table 10/Chart 10: Age), has either an associate's degree or some college education (see Table 11/Chart 11: Highest Educational Level), has between 5 to 9 years of experience (see Table 12/Chart 12 Years of Experience) is currently in a supervisory position (see Table 13/Chart 13: Current Job Classification), earns between \$50,000 and \$54,999 (see Table 14/Chart 14: Salary Range) and lives in the Northeast section of the U.S (see Table 15/Chart 15: Region of Residence).

This typical respondent works for an employer who provides him with 11 to 15 days of paid vacation (see Table 16/Chart 16: Annual Paid Vacation), 1 to 5 days of paid sick leave (see Table 17/Chart 17: Annual Paid Sick Leave), partially paid life insurance (see Table 18/Chart 18: Employer Sponsored Life Insurance) and medical coverage (see Table 19/Chart 19: Employer Sponsored Medical Insurance) and partially matches his retirement plan (see Table 20/Chart 20: Employer Sponsored Retirement Plan). Furthermore the employer sponsors his technical training (see Table 21/Chart 21: Employer Sponsored Training), reimburses technical training provided by others (see Table 22/Chart 22: Employer Reimbursed Training Provided by Outside Sources) and provides time off and reimbursement of reasonable expenses for him to attend technical meetings (see Table 23/Chart 23: Employer Encouragement for Technical Meeting Attendance).

If we examine more closely the respondent data, we see that of those respondents who were members of the listed organizations (ASCET, ACI, AWS, ACIA, WACEL, ASQ, ASNT), the majority are members of ASCET. Of that majority, 72% are certified members (see Table 2/Chart 2: ASCET Membership).

Of the certifications held, 70.52% are NICET certifications (see Table 3/Chart 3: Certifications Held). This is not surprising considering that the respondent population is a subset of the total population, and was either from the NICET database or the ASCET membership database. Certifications are not required by employers for 61% of the population (see Table 5: Is Certification Required), but are recognized by 90% of the employers (see Table 6/Chart 6: Is Certification Recognized).

Demographically speaking, the majority of the respondents are between 30 and 49 years of age (63% of the population fall into these two categories: see Table 10/Chart 10: Age). The vast majority (93%) of the respondents are male (see Table 9/Chart 9: Gender). As to years of experience, most (18%) indicate they have between 5 and 9 years of experience (see Table 12/Chart 12: Years of Experience). However, 16% indicate they have either 10 to 14 years, 15 to 19 years, or 20 to 24 years of experience.

In comparing these results to those of ASCET's 2003 survey, we note that more female technicians responded (6.18% as compared to 4.38% in 2003). Survey data for female respondents indicate that females follow the same profile as the rest of the engineering technician field. However, the salary data indicate a wider and shallower range of earnings, with 65% earning between \$30,000 and \$59,999. Furthermore, 60% of female respondents hold non-supervisory positions.

Compared to the results of an earlier survey of NICET's fire protection population (see [http://www.nicet.org/about/fire\\_protection\\_industry\\_survey\\_data.pdf](http://www.nicet.org/about/fire_protection_industry_survey_data.pdf)), we can say that NICET respondents have more experience; typically more than 15 years experience vs. the present survey that indicates a mode of 5-9 years experience.

If the data from the ASCET/NICET survey are segregated by region, it becomes apparent that there are few regional differences. While the percentage of owners is less than 10%, (see Table 13/Chart 13: Current Job Classification) the Pacific Northwest and the Southwest have the most respondents in an owner role; with 9.77% and 9.21% respectively. The North Central appears to have the best benefits, with only 2.71% responding that their employer does not provide medical benefits, 4.98% having no retirement plan, only 5.88 having no employee sponsored training, and 7.17 not getting reimbursement for outside training. In the Southeast, Southwest and Western regions, more people responded that they have some college instead of the more commonly achieved associate's degree.

Less than 5% of the respondents earn no paid vacation (see Table 16/Chart 16: Annual Paid Vacation), the Pacific Northwest lead this category with 9.77% without paid vacation. The Pacific Northwest also leads in the regions that have no paid medical leave; 30.23%, when the other regions have between 17.19% and 25.08% without paid medical leave. The Southeast region may attend more meetings; only 16.8% get no encouragement from employers to attend technical meetings.

### **Conclusion:**

The career of an engineering technician is wide and varied. It's a career where advanced education is unnecessary; the majority having earned an associate's degree (see Table 11: Highest Educational Level). Furthermore, an engineering technician career compares well to the rest of the work force. The results of the ASCET/NICET survey show that the Engineering Technician community earns more benefits than those outlined in the *National Compensation Survey: Employee Benefits in Private Industry in the United States, March 2005* (published by the U.S. DOL, U.S. BLS in August, 2005). For example, paid vacations are available to 77 percent of employees in private industry but to at least 93% of Engineering Technicians (See Table 16/Chart 16: Annual Paid Vacation). Fifty-two percent of private industry employees have employee provided life insurance; 74% of the Engineering Technician community has that benefit (see Table 18/Chart 18: Employer Sponsored Life Insurance); likewise with health coverage, the 91% of the ET community receiving this benefit outweighs the private industry figure of 63% (Table 19/Chart 19: Employer Sponsored Medical Coverage).

<b>Associations</b>	<b>% Response</b>
American Society of Certified Engineering Technicians (ASCET)	32.21
American Concrete Institute (ACI)	27.65
American Welding Society (AWS)	2.09
American Construction Inspectors Association (ACIA)	1.31
Washington Area Council of Engineering Laboratories (WACEL)	Less than 1%
American Society for Quality (ASQ)	Less than 1%
American Society for Nondestructive Testing (ASNT)	Less than 1%
Society of Manufacturing Engineers (SME)	Less than 1%
National Association of Industrial Technology (NAIT)	Less than 1%
National Assn. of Radio & Telecommunications Engineers (NARTE)	Less than 1%
Canadian Council of Technicians & Technologists (CCTT)	Less than 1%
Personal Communications Industry Association (PCIA)	Less than 1%
Other	49.61

<b>Membership Category</b>	<b>% Response</b>
Associate	8.54
Certified	71.36
Registered	5.53
Regular	13.74
Retired	0.84

<b>Certification</b>	<b>% Response</b>
ACI	11.02
AWS	0.62
ETA	0.08
NICET	70.52
Registered	1.29
None	2.64
Other	11.65
No Response	2.17

<b>Level</b>	<b>% Response</b>
None held	3.57
AET	1.18
CET	6.00
SET	4.01
Level I	13.69
Level II	26.52
Level III	22.23
Level IV	16.58
Registered	1.27
Licensed	2.97
No Response	1.99

	<b>% Response</b>
Yes	37.47
No	60.55
No Response	1.98

	<b>% Response</b>
Yes	89.55
No	9.11
No Response	1.51

<b>Employer</b>	<b>% Response</b>
Architectural Firm	0.24
Engineering Company	37.33
Educational Institute	1.24
City/Country Government	3.73
State Government	6.08
Federal Government	1.18
Self-Employed	3.26
Retired	0.24
Other	44.66
No Response	2.05

Specialty Area	% Response
Architecture	0.84
Chemical	0.25
Civil	26.92
Electrical	8.67
Electronic	13.08
Environmental	2.45
Fire Protection	65.95
Geotechnical	9.41
Industrial	1.56
Mechanical	3.12
Structural	4.64
Other	10.97
No Response	1.9

Specialty Area	% Response
Architectural	1.16
Bridges	6.63
Video Security Systems	3.77
Civil	5.9
Construction	2.62
Drafting	1.46
Electrical/Electronic	13.44
Fire Protection	24.64
Installation/Maintenance	2.25
Mechanical	2.43
Management	3.04
None	3.65
Other	10.89
Structural	1.58
Transportation	16.55

Gender	% Response
Female	6.18
Male	91.66
No Response	2.15

Age	% Response
Under 20 years	0.1
20-29 years	10.96
30-39 years	28.17
40-49 years	33.98
50-59 years	20.91
60-65 years	3.33
Over 65 years	0.67
No Response	1.88

Educational Level	% Response
High School	8.20
Some College	26.42
Technical Certificate	13.92
Associate Degree	26.32
Bachelor of Engineering	5.21
B.S. Engineering Technology	5.24
Other B.A.	8.77
Some Post Graduate Work	1.85
Master's Degree	2.12
Doctorate	0.07
No Response	1.88

Years	% Response
1-4 years	6.92
5-9 years	18.05
10-14 years	16.40
15-19 years	15.66
20-24 years	15.80
25-29 years	12.37
More than 30 years	12.81
No response	1.98

Role	% Response
Owner	6.86
Supervisory	47.80
Non-Supervisory	42.52
No response	2.82

<b>Range</b>	<b>% Response</b>
Less than \$20,000	0.47
\$20,000 – \$24,999	0.74
\$25,000 – \$29,999	2.08
\$30,000 – \$34,999	4.91
\$35,000 – \$39,999	7.26
\$40,000 – \$44,999	9.14
\$45,000 – \$49,999	9.85
\$50,000 – \$54,999	11.43
\$55,000 – \$59,999	8.77
\$60,000 – \$64,999	9.18
\$65,000 – \$69,999	7.09
\$70,000 – \$74,999	6.29
\$75,000 – \$79,999	4.54
\$80,000 – \$84,999	3.93
\$85,000 – \$89,999	2.55
\$90,000 – \$94,999	2.25
\$95,000 – \$99,999	1.24
\$100,000 or more	6.02
No response	2.25

<b>No. of Days</b>	<b>% Response</b>
None	3.56
1-5 days	5.38
6-10 days	26.41
11-15 days	33.87
16 or more days	27.32
No response	3.46

<b>No. of Days</b>	<b>% Response</b>
None	22.11
1-5 days	41.16
6-10 days	18.78
11-15 days	9.44
16 or more days	5.01
No response	3.49

<b>Region</b>	<b>% Response</b>
Central (IL, IN, KY, MI, OH, WI, WV)	15.27
North Central (IA, KS, MN, MO, NE, ND, SD)	8.6
Northeastern (DE, CT, MA, MD, ME, NH, NJ, NY, PA, RI, VT, DC)	26.66
Pacific Northwest (AK, ID, MT, OR, WA, WY)	8.33
Southeastern (AL, FL, GA, MS, NC, SC, TN, VA, PR, VI)	24.45
Southwestern (AR, CO, LA, NM, OK, TX)	17.67
Western (AZ, CA, HI, NV, UT, Guam)	11.43
Other	0.62
No response	2.25

<b>Status</b>	<b>% Response</b>
None	22.68
Yes, employer pays part of the cost	40.19
Yes, employer pays all of the cost	33.43
No Response	3.7

<b>Status</b>	<b>% Response</b>
None	4.57
Employer pays partially	71.27
Employer pays fully	20.26
No response	3.9

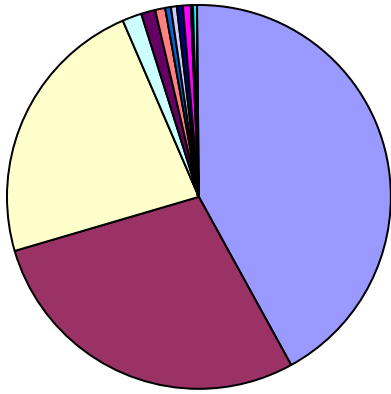
<b>Table 20: Employer Sponsored Retirement Plan</b>	
<b>Status</b>	<b>% Response</b>
None	11.69
Yes, with no matching contribution	11.86
Yes, employer provides partial match of my contribution	58.43
Yes, with full matching contribution	14.45
No Response	3.56

<b>Table 21: Employer Sponsored Training</b>	
<b>Status</b>	<b>% Response</b>
No	9.01
Yes	87.3
No Response	3.7

<b>Table 22: Employer Reimbursed Training Provided by Outside Sources</b>	
<b>Status</b>	<b>% Response</b>
No	11.46
Yes, but only partially	20.36
Yes, entirely	64.25
No Response	3.93

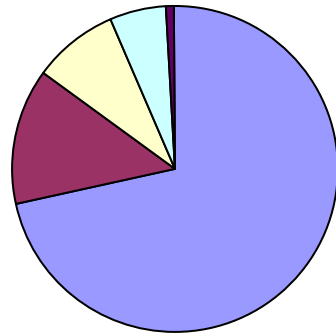
<b>Table 23: Employer Encouragement of Technical Meeting Attendance</b>	
<b>Status</b>	<b>% Response</b>
None	19.46
Provides time off and reimbursement of all reasonable expenses	54.37
Provides time off and partial expense reimbursement	12.47
Provides time off only	9.48
No response	4.23

**Chart 1: Association Membership**



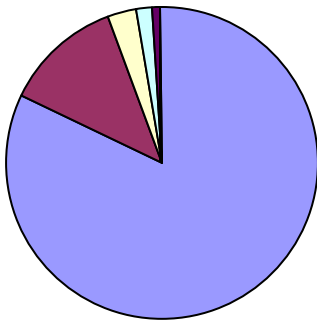
- Other
- ASCET
- ACI
- AWS
- ACIA
- WACEL
- ASQ
- ASNT
- SME
- NAIT
- NARTE
- CCTT
- PCIA

**Chart 2: ASCET Membership**



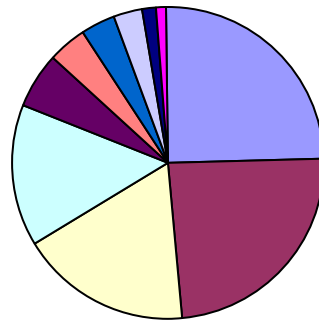
- Certified
- Regular
- Associate
- Registered
- Retired

**Chart 3: Certifications Held**



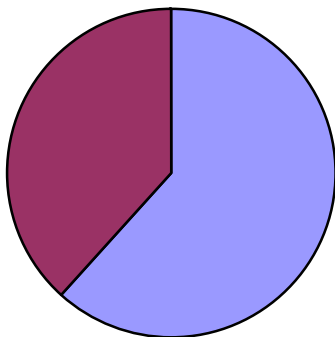
- NICET
- ACI
- NONE
- Registered
- AWS
- ETA

**Chart 4: Level of Certification Held**



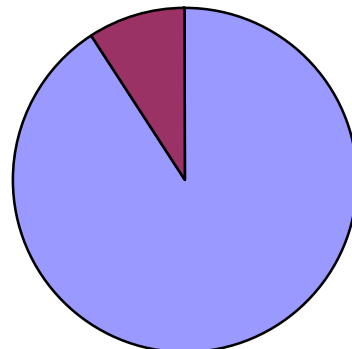
- Level III
- Level II
- Level IV
- Level I
- CET
- SET
- None
- Licensed
- Registered
- AET

**Chart 5: Is Certification Required**



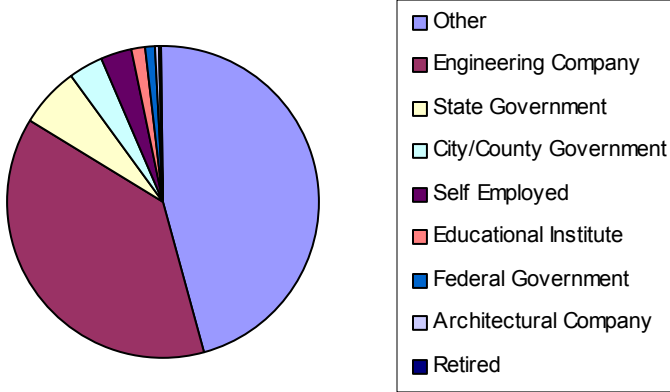
- No
- Yes

**Chart 6: Is Certification Recognized**

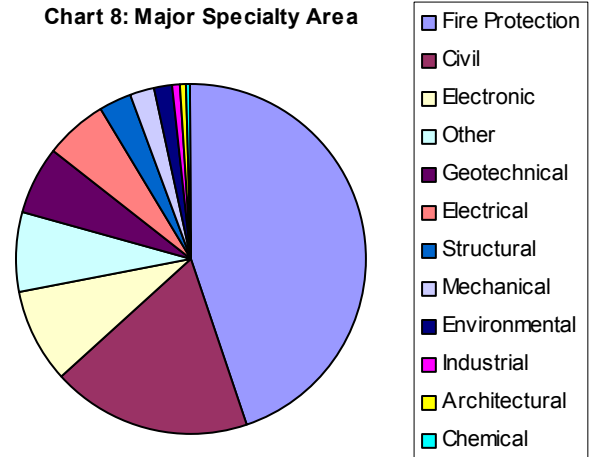


- Yes
- No

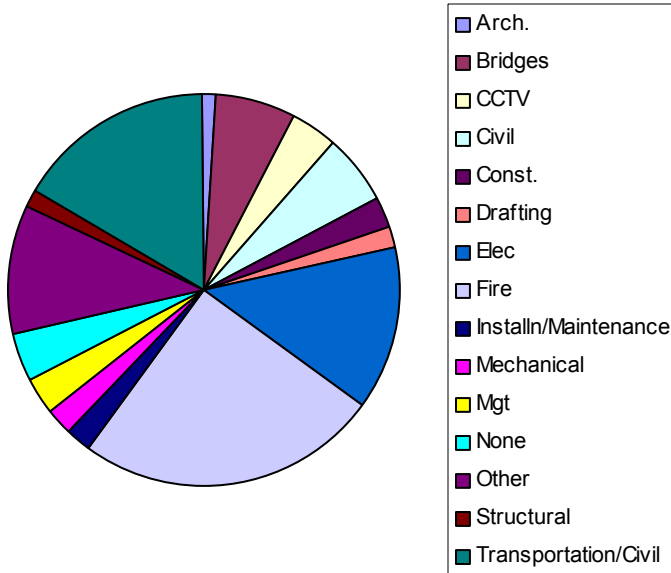
**Chart 7: Current Employer**



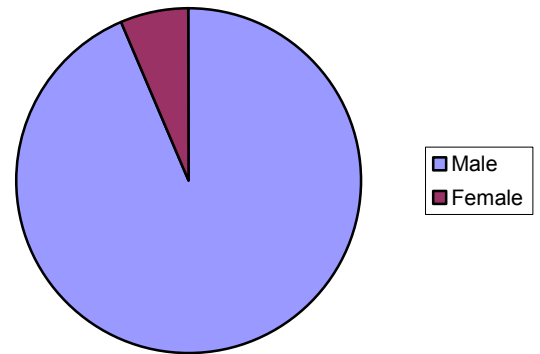
**Chart 8: Major Specialty Area**



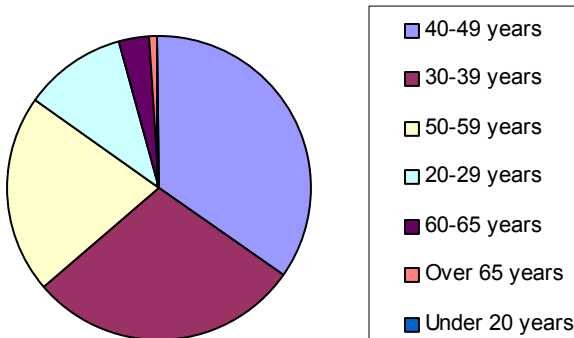
**Chart 8B: Minor Specialty Area**



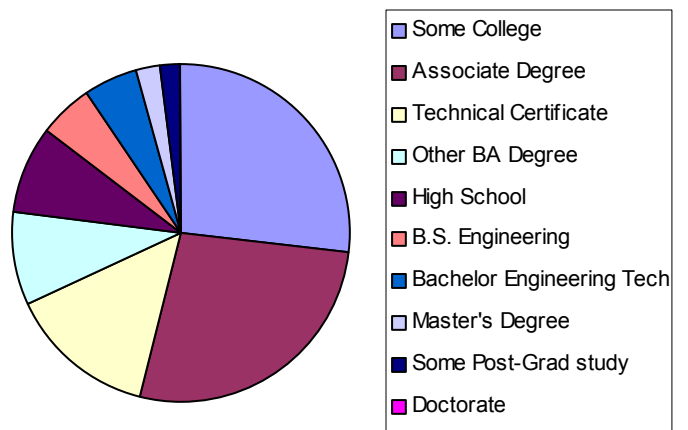
**Chart 9: Gender**



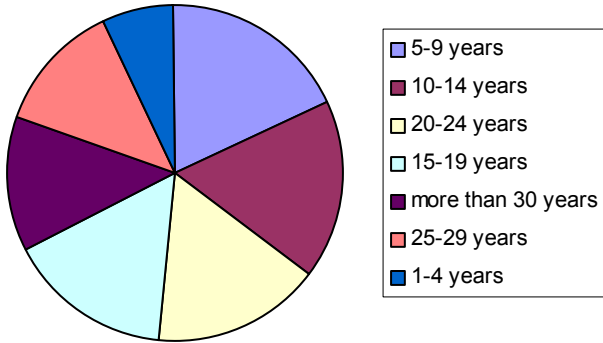
**Chart 10: Age**



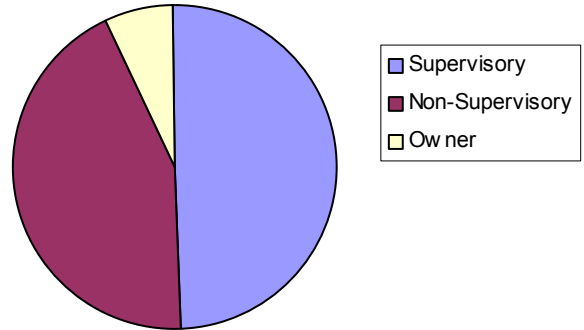
**Chart 11: Highest Educational Level**



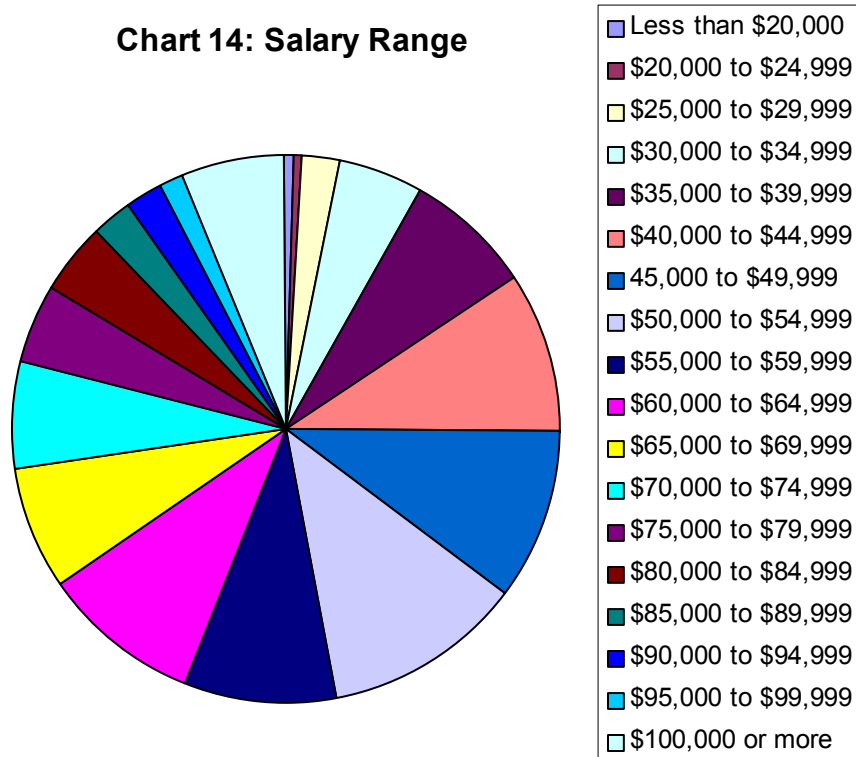
**Chart 12: Years of Experience**



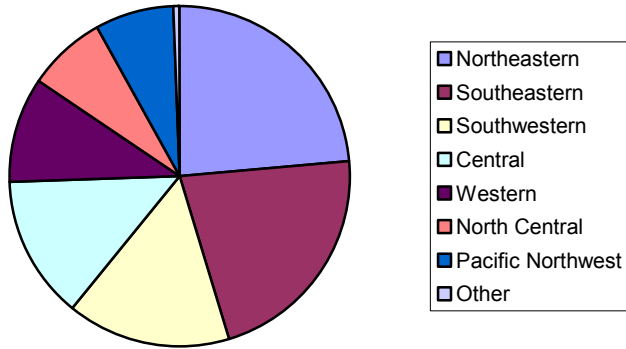
**Chart 13: Current Job Classification**



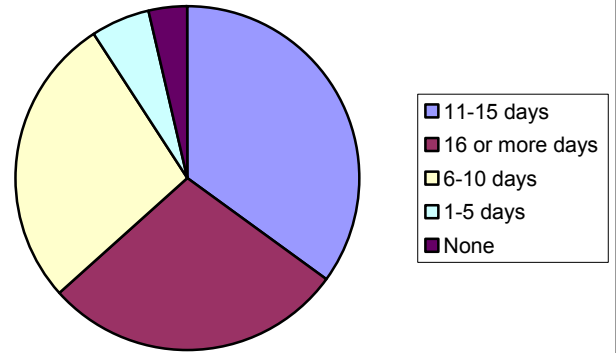
**Chart 14: Salary Range**



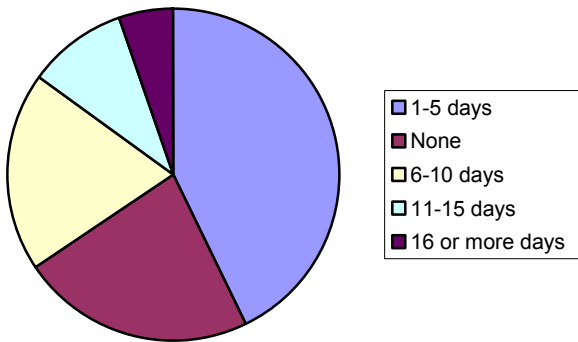
**Chart 15: Region of Residence**



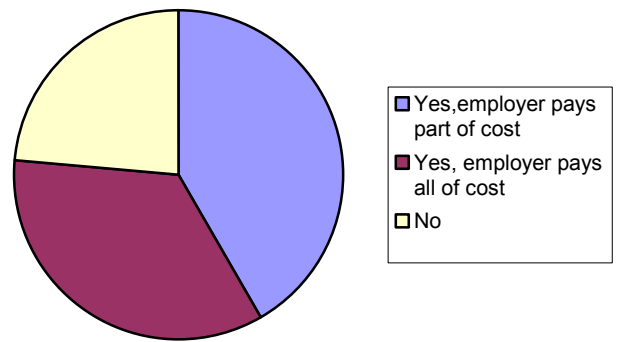
**Chart 16: Annual Paid Vacation**



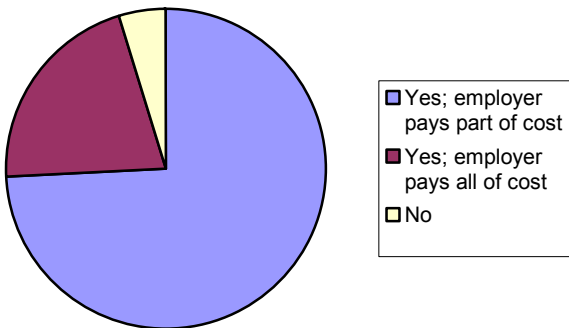
**Chart 17: Annual Paid Sick Leave**



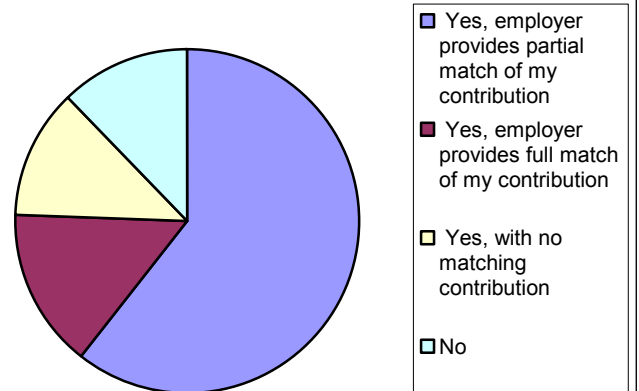
**Chart 18: Employer Sponsored Life Insurance**



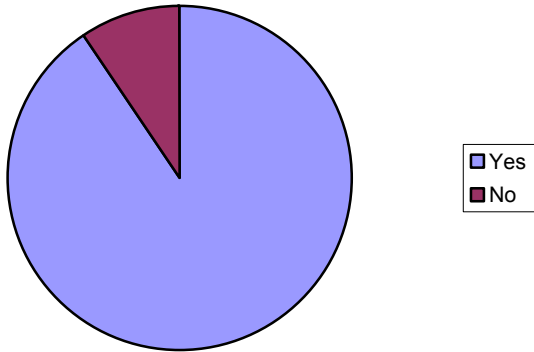
**Chart 19: Employer Sponsored Medical Coverage**



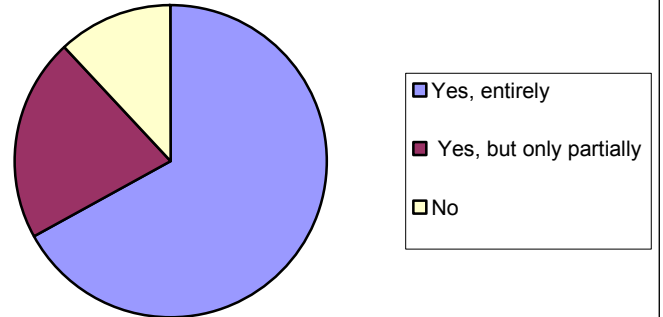
**Chart 20: Employer Sponsored Retirement Plan**



**Chart 21: Employer Sponsored Training**



**Chart 22: Employer Reimbursed Training Provided by Outside Sources**



**Chart 23: Employer Encouragement of Technical Meeting Attendance**

