

Results of the 2008 NACE International Corrosion Career Survey

GRETCHEN A. JACOBSON, PUBLICATIONS DIRECTOR

Now in its 10th year, the annual NACE International Corrosion Career Survey revealed that average salaries in the United States and Canada are up slightly from last year, and have increased by nearly a third over the last decade. The 2008 U.S. average salary (including bonuses) for corrosion professionals is \$88,354; the average Canadian compensation in taxable income is \$94,357. This compares to last year's results of \$87,792 (U.S.) and CAN\$92,592 (Canada). At press time (June 2008), the exchange rate was U.S. \$1 to CAN\$1.0142.

Figures 1 and 2 show the average annual compensation by salary range for U.S. and Canadian members, respectively.

Survey Methodology

The 2008 Corrosion Career Survey was conducted using online survey software. U.S. and Canadian members received a link to their respective surveys in an e-mail message sent in April. (The survey is not distributed outside of North America because of the multitude of foreign currencies, making it difficult to obtain statistically significant and comparable results.) Approximately 8,000 U.S. members received the e-mail inviting them to participate, and 1,043 submitted the survey by the deadline of May 1. This represents a 95% confidence level in the survey results, plus or minus

2.8% for error. The link to the Canadian survey was sent to about 1,500 members, with 174 responding. The Canadian survey therefore has a 95% confidence level plus or minus 7% for error.¹

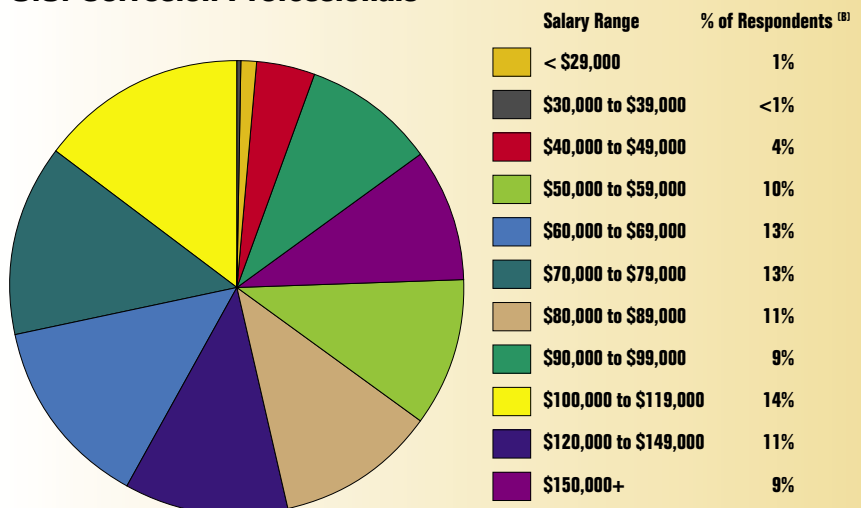
Long-Term Involvement in Corrosion

The average NACE member is highly experienced in corrosion control—69% U.S. members have 10 or more years of experience, and 42% have been in the business for at least 20 years. Of members more recently entering the workforce, 13% have been in the corrosion business for four years or fewer. In Canada, 58% have been in the industry for 10 or more years, with 30% having 20 or more years of experience. Twenty-four percent of Canadian members

NACE members in the United States and Canada participated in the 10th annual corrosion career survey to share information on their education, work experience, job duties, and annual compensation.

FIGURE 1

Average Annual Compensation for U.S. Corrosion Professionals^(A)



^(A) Salary plus bonus.

^(B) 5% of survey respondents did not answer this question.

have four or fewer years of experience. Figure 3 shows how years of experience correspond to annual average compensation levels.

Most NACE members have been with their companies on a long-term basis: in the United States, 23% have been with their current employer for 10 to 19 years and 26% for 20 years or more. In addition, 52% have not changed employers in the last 10 years, 24% have changed jobs once, and 11% twice in that time period. More than half of members work for companies with 500 or more employees, and 7% are self-employed.

Sixteen percent of Canadian members have been with their companies for 20 or more years and 17% for 10 to 19 years. In this country, the largest percentage—28%—have been with their employers for two years or less. Regarding changing employers, 35% have not made a move in the last 10 years, 26% have made one change, and 19% have moved twice. Sixty-four percent work for companies with 500 or more employees, and 16% are self-employed.

An Educated Workforce

The largest percentage of U.S. members have bachelor's degrees as their highest education level (34%), followed by high school diplomas (32%), associate's degrees (15%), master's degrees (13%), doctorates (4%), and post-doctorates (2%). Members also recognize the value of ongoing education and training to keep current in the business—84% have attended educational, course-based training in the last 10 years. Seventy-nine percent hold NACE and other specialty certifications, and 10% are registered professional engineers.

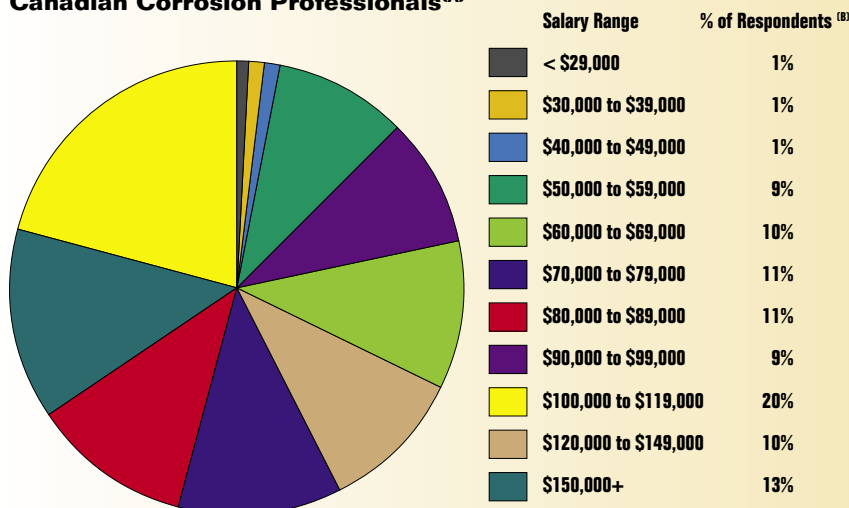
In Canada, 32% listed high school as their highest education level, followed by bachelor's degrees (29%), associate's degrees (24%), master's degrees (9%), post-doctorates (2%), and doctorates (1%). An impressive 93% have attended education courses in the last 10 years, 78% of members have specialty certifications, and 21% are registered professional engineers. Figure 4 shows average salary by highest education level.

Pipeline and Tank Work Top Company Functions

When asked to choose the classification by industry or technology that best describes their company's function, 30%

FIGURE 2

Average Annual Compensation for Canadian Corrosion Professionals^(A)



^(A) Taxable income in Canadian dollars.

^(B) 4% of survey respondents did not answer this question.

FIGURE 3

Average Salary by Years of Corrosion Experience



of U.S. respondents and 27% of Canadian respondents selected the category of oil and gas pipelines/storage tanks. The next largest company function category in the United States is coating and linings (11%), followed by oil and gas extraction (7%). In Canada, the next largest category is oil and gas extraction (13%), followed by coatings and linings (8%). Table 1 shows average

salaries by company function.

In the United States, 24% are technicians or technologists, 23% are engineers, 11% are inspectors, and another 11% are managers. The Canadian statistics follow a similar pattern, although with a higher percentage of inspectors than engineers: 23% are technicians or technologists, 19% are inspectors, 15% are engineers, and 11% are managers.

FIGURE 4**Average Salary by Highest Education Level****Working Full Time-Plus**

More than half of U.S. employees in the corrosion industry work an average of 40 to 49 hours per week, followed by 50 to 59 hours (21%), and 30 to 39 hours (14%). Sixty-six percent of Canadian members work 40 to 49-hour weeks, 22% work 50 to 59 hours, and 5% put in 60 or more hours. By and large, longer work-weeks correlate to higher salaries, with a couple of exceptions this year (Figure 5). Rising salaries also correlate with length of membership in NACE (Figure 6). In the United States, 23% have been NACE members for 20+ years, 23% for 10 to 19 years, 22% for five to nine years, 9% for three to four years, and 20% for two years or less. In contrast, the largest percentage of Canadian members have been members for two years or fewer (31%), followed by five to nine years (20%), 20+ years (16%), and 10 to 19 years (15%).

Compensation by State and Province

When computing average salaries by state and province, there are some areas with so few responses that the salaries given may not be typical. These numbers are footnoted in Tables 3 and 4. In the United States, the highest number of survey responses came from California, Florida, Louisiana, New York, Ohio, Oklahoma, Pennsylvania, and Texas. In Canada, most responses were from Alberta, British Columbia, and Ontario.

Career Satisfaction and Challenges

Survey respondents were given the opportunity to provide comments on various aspects of their careers. Many expressed great satisfaction in their work—numerous commenters simply stated, “I love my job!” However, most agreed that there are challenges that need to be addressed. When asked what single aspect of their jobs they would most like to change, U.S. and Canadian members were closely aligned. Most selected “more advancement opportunities” or “a larger budget for corrosion control,” followed by “improved access to corrosion control technologies,” and “improved relationship with upper management.” Only 8% of U.S. members and 5% of Canadian members selected “better job security” as

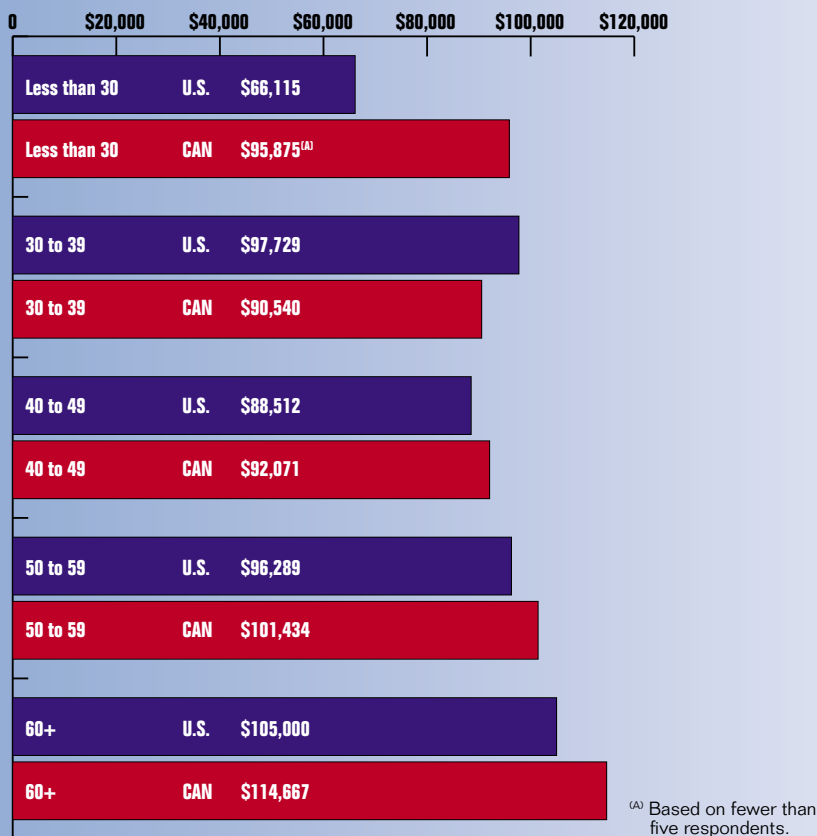
FIGURE 5**Average Salary by Hours Worked Per Week**

TABLE 1**Average Salary by Company Function**

Company Function	United States (U.S.\$)	Canada (CAN\$)
Aerospace	\$85,000	N/A
Anodic/Cathodic Protection	\$78,804	\$81,423
Chemical Processing	\$100,307	\$104,563
Coatings & Linings	\$88,250	\$91,567
Construction	\$101,800	\$73,667
Education	\$75,300	N/A
Engineering/Architecture Consulting Firm	\$102,719	\$99,667
Government	\$85,214	N/A
Inspection	\$97,500	N/A
Metals & Mining	\$127,700	\$85,750 ^(A)
Natural Gas Utility	\$70,241	\$97,000 ^(A)
Oil & Gas Extraction	\$120,000	\$107,000
Oil & Gas Pipeline/Storage Tanks	\$81,286	\$92,780
Original Equipment Manufacturer	\$102,870	\$109,500 ^(A)
Power Plant/Electric Utility	\$90,120	\$109,500 ^(A)
Pulp & Paper	\$88,667	\$94,500 ^(A)
Refining	\$112,443	\$96,200
Research & Development	\$94,095	\$82,833 ^(A)
Ships/Marine/Offshore Platforms	\$84,955	\$85,500
Testing Services	\$82,469	\$79,500 ^(A)
Transportation	\$99,327	\$64,500 ^(A)
Water Distribution/Treatment	\$88,667	\$113,700

N/A: No respondents selected this category.

^(A)Based on fewer than five responses.**TABLE 2****Average Salary by U.S. State**

State	Average Salary	State	Average Salary
Alabama	\$78,591	Montana	\$67,227
Alaska	\$126,767	Nebraska	\$72,000 ^(A)
Arizona	\$83,107	Nevada	\$79,500
Arkansas	\$72,577	New Hampshire	\$102,125 ^(A)
California	\$104,514	New Jersey	\$109,250
Colorado	\$90,792	New Mexico	\$83,808
Delaware	\$75,750 ^(A)	New York	\$85,397
District of Columbia	\$109,500 ^(A)	North Carolina	\$67,833
Florida	\$80,764	North Dakota	\$64,500 ^(A)
Georgia	\$80,231	Ohio	\$76,984
Hawaii	\$79,500 ^(A)	Oklahoma	\$92,000
Idaho	\$112,000 ^(A)	Oregon	\$86,500
Illinois	\$103,192	Pennsylvania	\$84,833
Indiana	\$86,167	Rhode Island	\$84,500 ^(A)
Iowa	\$75,409	South Carolina	\$74,500 ^(A)
Kansas	\$75,864	South Dakota	\$64,500 ^(A)
Kentucky	\$81,722	Tennessee	\$87,389
Louisiana	\$82,009	Texas	\$101,979
Maine	\$73,071	Utah	\$77,278
Maryland	\$102,500	Vermont	\$112,250 ^(A)
Massachusetts	\$112,650	Virginia	\$78,389
Michigan	\$79,262	Washington	\$92,619
Minnesota	\$76,529	West Virginia	\$72,278
Mississippi	\$85,438	Wisconsin	\$95,471
Missouri	\$84,154	Wyoming	\$95,792
U.S. Average			\$88,354

N/A: No respondents from this state.

^(A)Fewer than five respondents from this state.**TABLE 3****Average Salary by Canadian Province**

Province	Average Salary (CAN\$)
Alberta	\$101,583
British Columbia	\$91,940
Manitoba	\$150,000 ^(A)
New Brunswick	\$86,500
Newfoundland	\$76,167 ^(A)
Nova Scotia	\$62,000 ^(A)
Nanavut	\$54,500 ^(A)
Ontario	\$84,190
Quebec	\$89,500
Saskatchewan	\$90,188
Yukon	\$94,500 ^(A)
Canadian Average	\$94,357

N/A: No respondents from this province.

^(A)Fewer than five respondents from this province.**Past NACE Corrosion Career Surveys**

NACE members can access corrosion career surveys back to 1998 from the Member Access area of the NACE Web site: www.nace.org. For information on NACE membership, see the Web site or contact the FirstService Department at phone: +1 281-228-6223 or e-mail: firstservice@nace.org.

their top-rated change. Figures 7 and 8 depict career priorities.

When asked, "In your experience, what is the corrosion professional's greatest challenge?" the most common response was the need to educate upper management, clients, and the general public about the importance and value of corrosion control.

"Our biggest challenge is convincing management that the lowest life cycle costs and facility uptime are more important than low project cost," stated one respondent. Another wrote, "We have to justify the cost of long-term asset protection in the face of short-term commercial gains." One respondent touched on educating clients as well. "We need to convince potential clients that a corrosion professional can and will solve their problems and that other 'professionals' do not have the experience or knowledge to accomplish what is necessary."

Another challenge often mentioned was the lack of young, new professionals entering the corrosion field. "There is a huge gap between the ages of young and inexperienced people and experienced professionals," stated one member. "While a lot of older people are now staying in the industry as consultants, there is going to be a period in the next five to 10 years that we will lack well-grounded and skilled people in our profession." Concurred another, "The corrosion industry in my view has an aging, retiring workforce with companies not preparing effectively for its replacement."

The long-term experience of most NACE members supports the fact that in spite of the challenges involved in this technically demanding field, a career in corrosion control is highly rewarding. "I will always be in this business and wouldn't consider another line of work," concluded one survey respondent. Said another, "I would not change a thing."

MP staff would like to thank all who responded to the 2008 Corrosion Career Survey. Typically the most requested article in MP, this annual survey is conducted and summarized for NACE members and others working in all areas of corrosion control. The next survey is scheduled for April 2009.

Reference

1 The Survey System, <http://www.survey-system.com/scalc.htm>. **MP**

FIGURE 6

Average Salary by Years in NACE International



FIGURE 7

Career Priorities (U.S.)

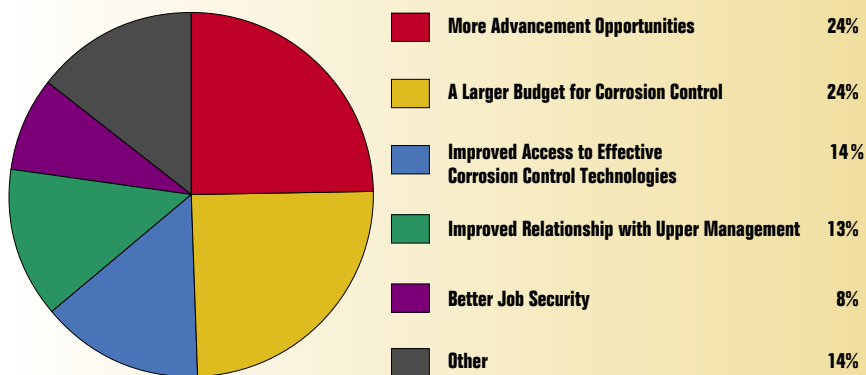


FIGURE 8

Career Priorities (Canada)

