Results of the 2007 NACE International Corrosion Career Survey

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When NACE International conducted its first corrosion career survey in 1998, results showed that the average annual compensation for U.S. corrosion professionals was $66,420 (salary plus bonus). Since then, that number has steadily climbed—this year, the average salary is $87,792, representing a 24% increase over the past nine years.

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

In 2002, NACE began surveying Canadian members as well. At that time, with an exchange rate of U.S. $0.64 to CAN$1, the average Canadian salary for corrosion professionals was CAN$76,330. This year, the survey revealed an average of CAN$92,594 per year in taxable income. At press time (June 2007), the exchange rate was U.S. $0.94 to CAN$1.

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

Survey Methodology

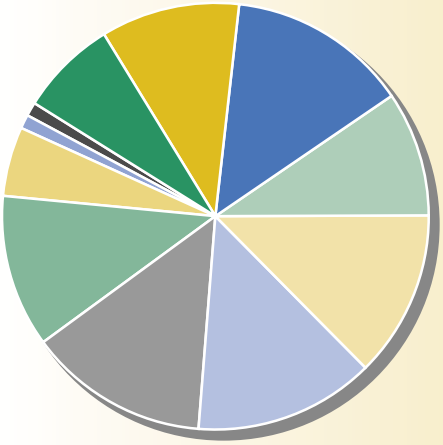
The 2007 corrosion career survey was conducted using online survey software. U.S. and Canadian members received a link to their respective surveys in an e-mail message sent in April 2007. Approximately 9,400 U.S. members received the e-mail inviting them to participate, and 1,097 submitted the survey 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 1,800 members, with 194 responding. The Canadian survey therefore had a 95% confidence level plus or minus 6.7% for error.[1]

An Experienced and Stable Workforce

The average NACE member is highly experienced in corrosion prevention and

FIGURE 1

Average Annual Compensation for U.S. Corrosion Professionals[A]

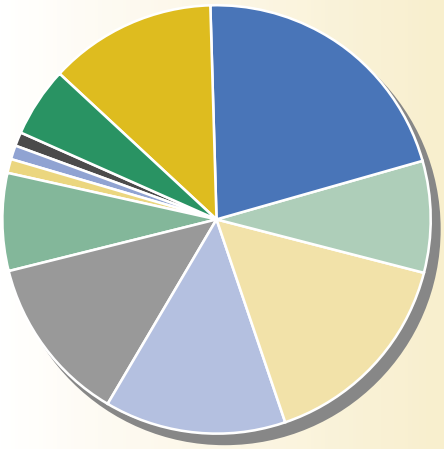


Salary Range	Percent of Respondents[B]
Less than $29,000	1%
$30,000 to $39,000	1%
$40,000 to $49,000	5%
$50,000 to $59,000	11%
$60,000 to $69,000	13%
$70,000 to $79,000	13%
$80,000 to $89,000	12%
$90,000 to $99,000	9%
$100,000 to $119,000	13%
$120,000 to $149,000	10%
$150,000+	7%

[A] Salary plus bonus.
[B] 5% of respondents did not answer question.

FIGURE 2

Average Annual Compensation for Canadian Corrosion Professionals[A]

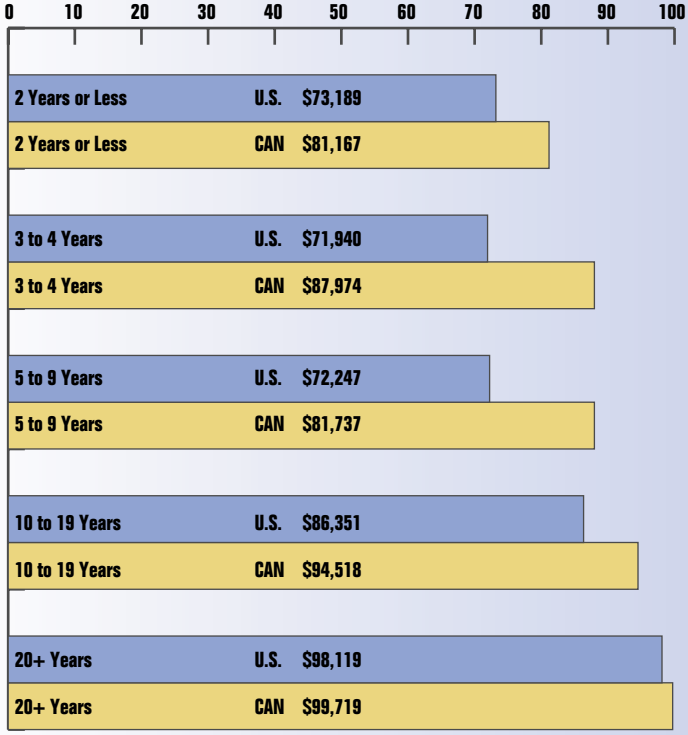


Salary Range	Percent of Respondents[B]
Less than $29,000	1%
$30,000 to $39,000	1%
$40,000 to $49,000	1%
$50,000 to $59,000	7%
$60,000 to $69,000	12%
$70,000 to $79,000	13%
$80,000 to $89,000	15%
$90,000 to $99,000	9%
$100,000 to $119,000	20%
$120,000 to $149,000	12%
$150,000+	5%

[A]Taxable income in Canadian dollars.
[B]4% of respondents did not answer question.

FIGURE 3

Average Salary by Years of Corrosion Experience



control—73% of U.S. members have 10 or more years of experience and an impressive 45% have been in the business for at least 20 years. In Canada, 62% have worked in the area of corrosion for 10 or more years and 33% have been in the field for 20+ years. Figure 3 shows how years of experience correspond to annual average salary levels.

The statistics also show that by and large, NACE members make up a committed and stable workforce: 29% of NACE members have been with their current employer for 20 years or more and 21% for 10 to 19 years. Sixteen percent of members have been at their company for five to nine years, 12% for three to four years, and 17% for two years or less. In addition, 52% of members have not changed employers in the last 10 years, 24% have changed companies once, and 10% have changed twice in that time period.

Twenty percent of Canadian members have been with their companies for 20 or more years, 18% for 10 to 19 years, 23% for five to nine years, and 17% for each of the three-to-four-year and less than two-year categories. Regarding changing companies, 42% have been with the same employer for at least 10 years, 24% have made one change, and 14% have made two.

Importance of Education and Training

The largest percentage of U.S. members have bachelor's degrees as their highest education level (32%), followed by high school diplomas (31%), associate's degrees (15%), master's degrees (11%), doctorates (4%), and post-doctorates (2%). Members also take advantage of continuing education and training programs: 83% have attended educational, course-based training over the past decade; 82% hold certifications from NACE and/or other professional organizations; and 15% are registered professional engineers.

In Canada, 33% of members have associate's degrees as their highest education level, followed by bachelor's degrees (28%), high school diplomas (27%), master's degrees (7%), doctorates (2%), and post-doctorates (1%). In this country, 26% are registered professional engineers, 83% hold other professional certifications, and

FIGURE 4

Average Salary by Highest Education Level

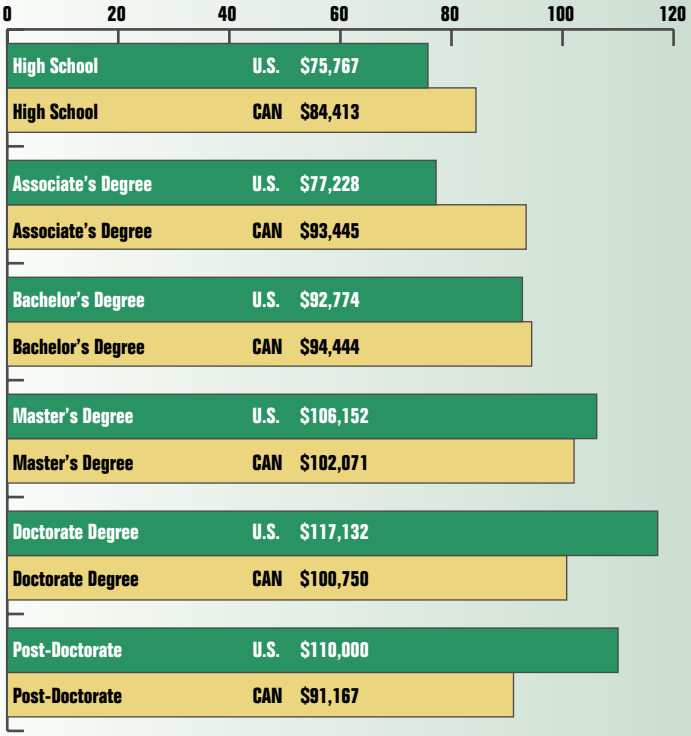
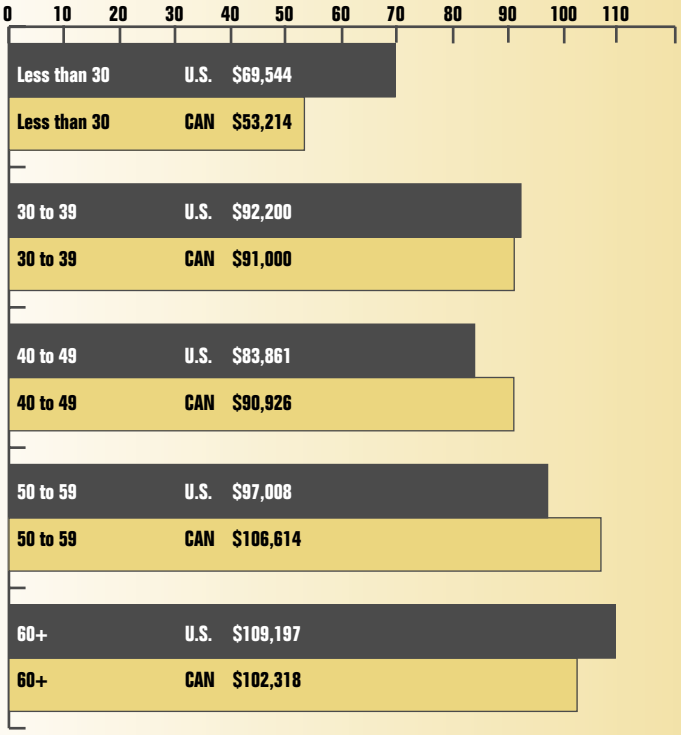


FIGURE 5

Average Salary by Hours Worked Per Week



90% have attended education and training courses over the last 10 years.

Figure 4 shows average salary by highest education level.

Company Functions and Job Types

When asked to choose the classification by industry or technology that best describes their company's function, 36% 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 for the U.S. is coatings and linings (10%), followed by oil and gas extraction (6%). In Canada, the next largest category is oil and gas extraction (17%); then coatings and linings (8%). Table 1 shows average salaries by company function.

Most U.S. members work for companies with 500 or more employees (63%) and about 8% are self-employed. In Canada, 59% work for large companies and 12% are self-employed. The largest percentage of U.S. and Canadian corrosion professionals are technicians or technologists (26% and 30%, respectively). Twenty-three percent of U.S. members are engineers compared to 18% of Canadian members. The next largest category for both countries is management (12%). Table 2 shows average salary by job type.

Hours Worked

Most corrosion professionals work between 40 to 49 hours per week—66% in the United States and 63% in Canada, followed by those working 50- to 59-hour workweeks in the U.S. (21%) and those working 30- to 39-hour weeks in Canada (15%). By and large, longer workweeks correlate to higher salaries, with a couple of exceptions this year (Figure 5). Rising salaries for corrosion professionals also correspond to length of membership in NACE (Figure 6). In the United States, 27% of respondents have been NACE members for 10 to 19 years, followed by 20 years or more (24%), five to nine years (22%), two years or less (15%), and three

to four years (10%). In Canada, most respondents have been NACE members for five to nine years (27%), followed by 10 to 19 years (25%), two years or less (17%), 20 years or more (16%), and three to four years (12%).

Salaries 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, 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; 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 in order by "improved corrosion control technologies," "improved relationship with upper management," and "better job security" (Figures 7 and 8).

When asked, "In your experience, what is the corrosion professional's greatest challenge?" the most common response by far was the need to educate upper management, clients, and the general public about the importance and value of corrosion control to protect people, assets, and the environment from the detrimental effects of corrosion, and ultimately save money.

"Our biggest challenge is convincing the right people in management that although corrosion control does not usually

FIGURE 6

Average Salary by Years in NACE

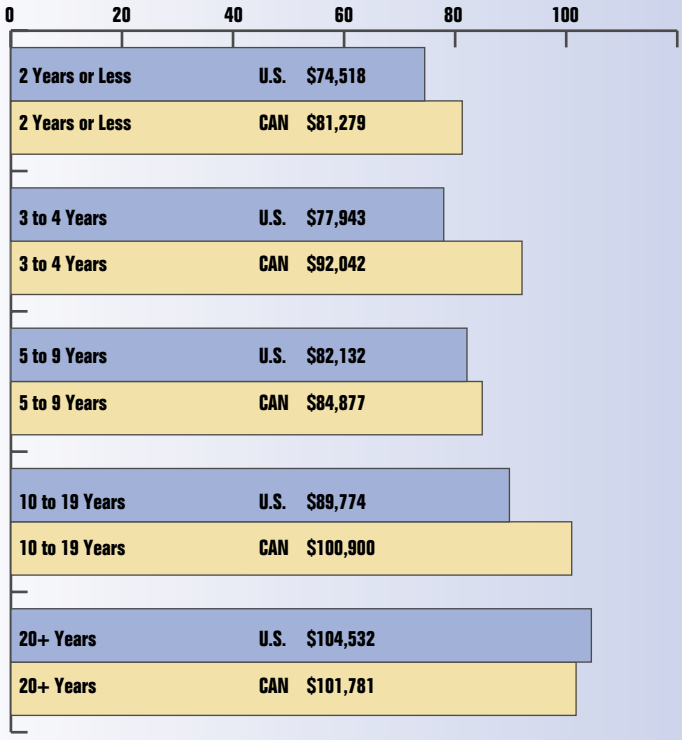


FIGURE 7

Career Priorities (United States)

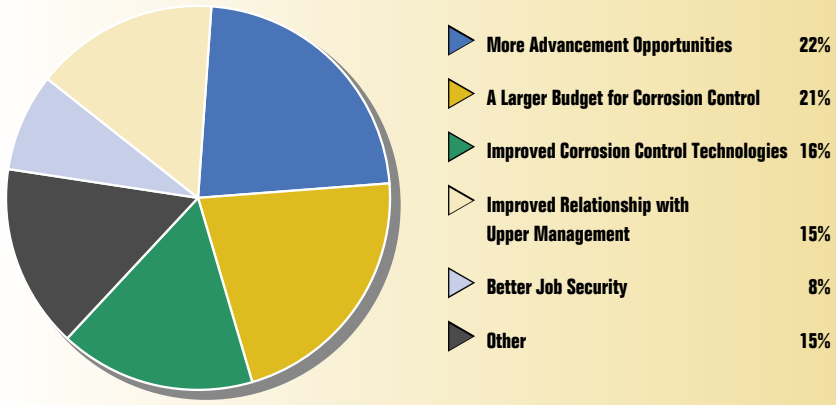
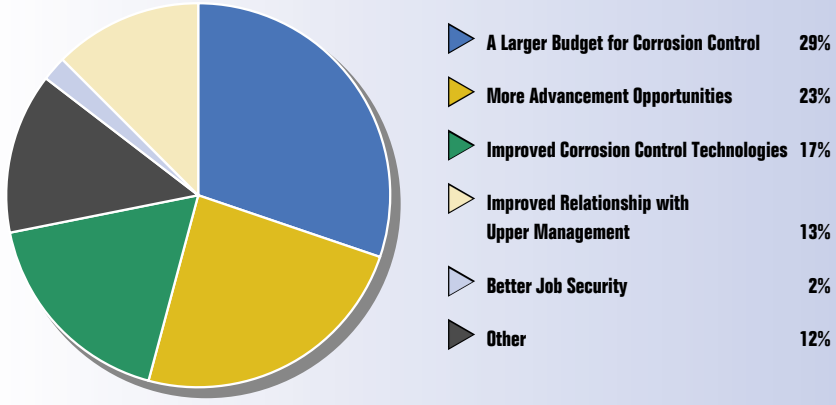


FIGURE 8

Career Priorities (Canada)



show an immediate positive impact on the bottom line, it is an essential ingredient to the long-term economic health of the organization," stated one respondent. Another concurred, "We have to convince management of the importance of spending dollars on preventative maintenance rather than waiting for a corrosion failure."

A respondent working in the coatings field stated, "The best companies I have worked for had a good plan for their coating projects and stuck to it regardless of what else was happening within the company. These clients maintained their assets on a regular basis." Added another, "We must look at corrosion control as a return on investment and not a cost."

Another challenge often mentioned was the lack of young, new professionals entering the corrosion field. "We are becoming an old society," lamented one participant. "We have to find ways to involve more young engineers in the field. In spite of the importance of corrosion control, there is a dearth of young corrosion engineers."

"I have spent a lifetime learning what I know and do," stated another member. "There are not enough young people being trained to continue the jobs I perform."

Survey participants also had the opportunity to add any other comments they had. Numerous members took the opportunity to express how much they enjoy their jobs as corrosion professionals and would not consider any other line of work. The long-term experience of most NACE members supports the fact that in spite of the challenges involved in this technically demanding field, being a corrosion professional is interesting, provides plenty of learning and growth opportunities, and is ultimately very rewarding.

Concluded a longtime member, "After 53 years of performing corrosion work, I'm still not tired of it or bored!"

NACE staff would like to thank all who responded to the 2007 corrosion career survey. Typically the most requested article in *MP*, the annual corrosion career survey is of value to NACE members and others working in all areas of corrosion control. The next survey is scheduled for April 2008.

Reference

1. The Survey System, http://www.survey-system.com/sscalc.htm. MP

TABLE 1

Average Salary by Company Function

Company Function	United States	Canada
Aerospace	$72,000	CAN$54,500[(A)]
Anodic/Cathodic Protection	$79,230	CAN$76,895
Chemical Processing	$98,520	CAN$83,786
Coatings & Linings	$93,745	CAN$83,420
Construction	$93,136	CAN$69,500[(A)]
Engineering/Architecture Consulting Firm	$100,723	CAN$112,688
Instrumentation	$88,638	CAN$84,500[(A)]
Metals & Mining	$112,125	CAN$54,500[(A)]
Oil & Gas Extraction	$96,833	CAN$107,742
Oil & Gas Pipelines/Storage Tanks	$118,068	CAN$87,931
Original Equipment Manufacturer	$77,749	CAN$114,500[(A)]
Plastics/Nonmetals	$93,429	N/A
Power Plant/Electric Utility	$95,327	CAN$92,500
Pulp & Paper	$99,667	CAN$84,500[(A)]
Refining	$107,009	CAN$112,612
Research & Development	$101,344	CAN$100,500
Ships/Marine Structures/Offshore Platforms	$82,900	CAN$68,500
Testing Services	$78,143	CAN$84,500[(A)]
Transportation	$88,000	CAN$89,500
Water Distribution/Treatment	$82,469	CAN$114,500

N/A: No respondents selected this category.

[(A)]Based on fewer than five responses.

TABLE 2

Average Salary by Job Type

Job Type	United States	Canada
Chemist	$86,722	CAN$80,750[A]
Consultant	$109,577	CAN$99,636
Contractor	$97,563	CAN$150,000[A]
Engineer	$101,367	CAN$96,147
Inspector/Quality Control	$80,033	CAN$95,190
Maintenance	$71,839	CAN$74,500[A]
Management	$101,962	CAN$111,043
Professor/Teacher	$94,615	N/A
Retired	$68,083	N/A
Sales/Marketing	$93,355	CAN$89,500
Student	$26,125	N/A
Technician/Technologist	$65,668	CAN$77,612
Other	$90,484	CAN$96,250

N/A: No respondents selected this category.

[A]Based on fewer than five responses.

TABLE 3

Average Salary by U.S. State

State	Average Salary	State	Average Salary
Alabama	$71,167	Montana	$76,625
Alaska	$130,917	Nebraska	$70,200
Arkansas	$74,500	Nevada	N/A
Arizona	$73,591	New Hampshire	$84,500[A]
California	$99,489	New Jersey	$100,682
Colorado	$88,386	New Mexico	$67,658
Connecticut	$109,500	New York	$81,266
Delaware	$100,875[A]	North Carolina	$70,520
Florida	$88,386	North Dakota	$74,500[A]
Georgia	$74,500	Ohio	$89,014
Hawaii	N/A	Oklahoma	$84,215
Idaho	$94,500	Oregon	$64,500
Illinois	$95,727	Pennsylvania	$82,518
Indiana	$91,625	Rhode Island	$89,500[A]
Iowa	$71,714	South Carolina	$100,188
Kansas	$72,500	South Dakota	$150,000
Kentucky	$77,471	Tennessee	$70,792
Louisiana	$82,885	Texas	$99,017
Maine	$74,500	Utah	$70,188
Maryland	$96,618	Virginia	$82,419
Massachusetts	$89,500[A]	Vermont	$150,000[A]
Michigan	$85,550	Washington	$93,087
Minnesota	$76,688	West Virginia	$64,235
Mississippi	$73,100	Wisconsin	$82,192
Missouri	$73,100	Wyoming	$74,958
U.S. Average			$87,792

N/A: No respondents from this state.

[A]Fewer than five respondents from this state.

TABLE 4

Average Salary by Canadian Province

Province	Average Salary
Alberta	CAN$99,788
British Columbia	CAN$82,737
Manitoba	CAN$90,417
New Brunswick	CAN$109,500[A]
Newfoundland & Labrador	CAN$86,167[A]
Nova Scotia	CAN$78,500
Northwest Territories	N/A
Nanavut	N/A
Ontario	CAN$83,917
Prince Edward Island	N/A
Quebec	CAN$72,278
Saskatchewan	CAN$92,357
Yukon	N/A
Canadian Average	CAN$92,594

N/A: No respondents from this province.

[A]Fewer than five respondents from this state.

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.