



# Plant Maintenance Resource Center

## 2004 Maintenance Salary Survey Results

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### Overview

The sixth annual survey of salaries in the Maintenance sector was conducted on the Plant Maintenance Resource Center website between January and March 2004. This salary survey is a regular, annual event. Results of previous Salary surveys are available at the following locations:

1999 Salary survey results	<a href="http://www.plant-maintenance.com/articles/salariesurvey99.shtml">www.plant-maintenance.com/articles/salariesurvey99.shtml</a>
2000 Salary Survey results	<a href="http://www.plant-maintenance.com/articles/salariesurvey00.shtml">www.plant-maintenance.com/articles/salariesurvey00.shtml</a>
2001 Salary Survey results	<a href="http://www.plant-maintenance.com/articles/salariesurvey01.shtml">www.plant-maintenance.com/articles/salariesurvey01.shtml</a>
2002 Salary Survey results	<a href="http://www.plant-maintenance.com/articles/salariesurvey02.shtml">www.plant-maintenance.com/articles/salariesurvey02.shtml</a>
2003 Salary Survey results	<a href="http://www.plant-maintenance.com/articles/salariesurvey03.pdf">www.plant-maintenance.com/articles/salariesurvey03.pdf</a>

The 2005 Maintenance Salary survey will open in mid-January 2005, so make a note to check back at the site then (if not before!).

### Raw Data - Overview

Voluntary (and confidential) responses were sought to the survey, and 447 valid responses were received. This was significantly higher than in previous years, giving us more confidence about the statistical validity of the results. The total number of valid responses received in previous years is tabulated below:

Year	No of Valid Responses
2004	447
2003	158
2002	180
2001	248
2000	320
1999	290

Broader publicity was sought for this year's survey, and this appears to have resulted in a higher response rate.

### Raw Data - Industries

The greatest number of responses, once again, were from individuals in the Manufacturing industries. A complete list of industries represented in the last 4 surveys is tabulated below.

Industry	2004		2003		2002		2001	
	Responses	% of Total	Responses	% of Total	Responses	% of Total	Responses	% of Total
Manufacturing: Petroleum refining, chemicals and associated products	62	13.9%	14	8.9%	26	14.4%	18	7.3%
Manufacturing: Metal products	40	8.9%	19	12.0%	22	12.2%	29	11.7%
Manufacturing: Food, beverages, tobacco	36	8.1%	14	8.9%	14	7.8%	31	12.5%

Industry	2004		2003		2002		2001	
	Responses	% of Total	Responses	% of Total	Responses	% of Total	Responses	% of Total
Manufacturing: Other	33	7.4%	4	2.5%	28	15.6%	30	12.1%
Manufacturing: Wood and paper products	30	6.7%	15	9.5%	8	4.4%	14	5.6%
Manufacturing: Machinery and equipment	26	5.8%	14	8.9%	6	3.3%	14	5.6%
Services: Property services/Building Maintenance	23	5.1%	8	5.1%	9	5.0%	14	5.6%
Oil and Gas: Oil and gas extraction	22	4.9%	3	1.9%	6	3.3%	8	3.2%
Services: Contract Maintenance/Repairs	21	4.7%	7	4.4%	5	2.8%	12	4.8%
Utilities: Electricity Generation	15	3.4%	8	5.1%	6	3.3%	13	5.2%
Services: Business Services/Consulting	15	3.4%	5	3.2%	9	5.0%	7	2.8%
Services: Education/Academia	15	3.4%	4	2.5%	3	1.7%	4	1.6%
Manufacturing: Printing, publishing, and recorded media	15	3.4%	3	1.9%	1	0.6%	1	0.4%
Mining: Metal ore	13	2.9%	4	2.5%	1	0.6%	5	2.0%
Services: Other	11	2.5%	2	1.3%	5	2.8%	5	2.0%
Other	7	1.6%	4	2.5%	3	1.7%	3	1.2%
Manufacturing: Textiles, clothing, footwear, leather	7	1.6%	2	1.3%	2	1.1%	4	1.6%
Manufacturing: Non-metallic mineral processing	6	1.3%	4	2.5%	3	1.7%	4	1.6%
Services: Healthcare	5	1.1%	4	2.5%	5	2.8%	5	2.0%
Services: Transport	5	1.1%	1	0.6%	3	1.7%	3	1.2%
Utilities: Gas supply	5	1.1%	0	0.0%	0	0.0%	2	0.8%
Mining: Other	4	0.9%	3	1.9%	2	1.1%	1	0.4%
Utilities: Water, sewerage, drainage	4	0.9%	2	1.3%	0	0.0%	2	0.8%
Trade: Retail	4	0.9%	0	0.0%	4	2.2%	1	0.4%
Services: Software Development/Sales	4	0.9%	0	0.0%	1	0.6%	1	0.4%
Mining: Services to Mining	4	0.9%	0	0.0%	0	0.0%	1	0.4%
Services: Telecommunications	3	0.7%	0	0.0%	1	0.6%	3	1.2%
Mining: Coal	2	0.4%	3	1.9%	1	0.6%	2	0.8%
Construction: General	2	0.4%	0	0.0%	0	0.0%	3	1.2%
Agriculture: Other	2	0.4%	0	0.0%	0	0.0%	1	0.4%
Services: Research & Development	1	0.2%	4	2.5%	1	0.6%	2	0.8%
Services: Defence	1	0.2%	4	2.5%	1	0.6%	1	0.4%
Utilities: Electricity Transmission and Distribution	1	0.2%	2	1.3%	1	0.6%	4	1.6%
Trade: Wholesale	1	0.2%	1	0.6%	3	1.7%	0	0.0%
Agriculture - Forestry and logging	1	0.2%	0	0.0%	0	0.0%	0	0.0%

## Raw Data - Countries

Slightly more than half of the responses received were from the USA. The next most represented country was Australia followed by Canada, the United Kingdom, India, South Africa and Indonesia as the countries with the next greatest number of responses. Responses were received from 44 countries.

Country	2004		2003		2002		2001	
	Responses	% of Total	Responses	% of Total	Responses	% of Total	Responses	% of Total
United States	246	55.0%	79	50.0%	92	51.1%	142	57.3%
Australia	44	9.8%	21	13.3%	20	11.1%	26	10.5%
Canada	31	6.9%	5	3.2%	11	6.1%	18	7.3%
United Kingdom	18	4.0%	5	3.2%	14	7.8%	6	2.4%
India	11	2.5%	5	3.2%	2	1.1%	3	1.2%
South Africa	10	2.2%	3	1.9%	5	2.8%	3	1.2%
Indonesia	6	1.3%	1	0.6%	1	0.6%	2	0.8%
France	5	1.1%	5	3.2%	3	1.7%	3	1.2%
Saudi Arabia	5	1.1%	1	0.6%	2	1.1%		
Malaysia	4	0.9%			2	1.1%	4	1.6%
Belgium	4	0.9%						
New Zealand	3	0.7%	2	1.3%			3	1.2%
Germany	3	0.7%			1	0.4%	1	0.3%
Netherlands	3	0.7%	1	0.6%	2	1.1%	5	2.0%
Romania	3	0.7%	1	0.6%				
Egypt	3	0.7%	1	0.6%				
Brazil	3	0.7%			1	0.6%	2	0.8%
Mexico	3	0.7%					2	0.8%
Singapore	2	0.4%	1	0.6%	1	0.6%		
Sweden	2	0.4%	1	0.6%			1	0.4%
Philippines	2	0.4%	1	0.6%				
Kuwait	2	0.4%			2	1.1%		
Venezuela	2	0.4%					2	0.8%
China (PRC)	2	0.4%						
Zambia	2	0.4%						
Colombia	1	0.2%	3	1.9%	1	0.6%	2	0.8%
Ireland	1	0.2%	1	0.6%			1	0.4%
Italy	1	0.2%	1	0.6%				
Zimbabwe	1	0.2%	1	0.6%				
Dominican Republic	1	0.2%	1	0.6%				
Israel	1	0.2%			2	1.1%	3	1.2%
Russia	1	0.2%			1	0.6%		
Pakistan	1	0.2%					2	0.8%
Thailand	1	0.2%						
Taiwan	1	0.2%						
Slovak Republic	1	0.2%						
Serbia	1	0.2%						
Tanzania	1	0.2%						

Country	2004		2003		2002		2001	
	Responses	% of Total	Responses	% of Total	Responses	% of Total	Responses	% of Total
Argentina	1	0.2%						
Ethiopia	1	0.2%						
Oman	1	0.2%						
Peru	1	0.2%						
Nigeria	1	0.2%						
Trinidad	1	0.2%						
Qatar			2	1.3%				
Chile			1	0.6%	1	0.6%	1	0.4%
Denmark			1	0.6%	1	0.6%		
Iran			1	0.6%				
Norway			1	0.6%				
Antarctica			1	0.6%				
Northern Mariana Islands			1	0.6%				
Turkey					1	0.6%	2	0.8%
United Arab Emirates					1	0.6%	2	0.8%
Spain					1	0.6%	1	0.4%
Korea					1	0.6%	1	0.4%
Tunisia					1	0.6%		
Hungary					1	0.6%		
Virgin Islands					1	0.6%		
Puerto Rico							2	0.8%
Other	9	2.0%	7	4.4%	8	4.4%	8	3.2%

## Raw Data - States

For the responses received from US participants, the States with the largest number of respondents were Ohio, Texas and California. This is consistent with the results of previous surveys.

State	2004		2003		2002		2001	
	Responses	% of Total	Responses	% of Total	Responses	% of Total	Responses	% of Total
Ohio	25	10.2%	7	8.9%	9	9.6%	11	7.7%
Texas	17	6.9%	5	6.3%	9	9.6%	15	10.6%
California	17	6.9%	4	5.1%	7	7.4%	9	6.3%
Indiana	11	4.5%	4	5.1%	2	2.1%	4	2.8%
New York	10	4.1%	4	5.1%			4	2.8%
Georgia	10	4.1%	3	3.8%	3	3.2%	5	3.5%
Florida	10	4.1%	1	1.3%	3	3.2%	7	4.9%
Kentucky	9	3.7%	3	3.8%			4	2.8%
Wisconsin	8	3.3%	5	6.3%	4	4.3%	5	3.5%
Illinois	8	3.3%	5	6.3%	4	4.3%	2	1.4%
North Carolina	8	3.3%	4	5.1%	5	5.3%	4	2.8%
Tennessee	8	3.3%	4	5.1%	4	4.3%	5	3.5%
Michigan	8	3.3%	2	2.5%	4	4.3%	9	6.3%
Pennsylvania	8	3.3%	1	1.3%	4	4.3%	6	4.2%

State	2004		2003		2002		2001	
	Responses	% of Total	Responses	% of Total	Responses	% of Total	Responses	% of Total
Washington	7	2.8%			2	2.1%	3	2.1%
Minnesota	6	2.4%	5	6.3%			7	4.9%
Massachusetts	6	2.4%	3	3.8%	1	1.1%	2	1.4%
Alabama	6	2.4%	3	3.8%	1	1.1%		
Arizona	5	2.0%	2	2.5%	1	1.1%	1	0.7%
Missouri	5	2.0%	2	2.5%			2	1.4%
Louisiana	5	2.0%	1	1.3%	2	2.1%	2	1.4%
Connecticut	5	2.0%	1	1.3%			1	0.7%
South Carolina	5	2.0%			2	2.1%	4	2.8%
Kansas	5	2.0%					1	0.7%
Alaska	4	1.6%	1	1.3%	1	1.1%		
Virginia	3	1.2%	4	5.1%			3	2.1%
Oklahoma	3	1.2%	2	2.5%			3	2.1%
Oregon	3	1.2%	1	1.3%	4	4.3%	3	2.1%
West Virginia	3	1.2%			3	3.2%		
Colorado	3	1.2%			2	2.1%	3	2.1%
New Jersey	2	0.8%	2	2.5%	4	4.3%	3	2.1%
Wyoming	2	0.8%	1	1.3%	1	1.1%	1	0.7%
Maryland	2	0.8%					2	1.4%
New Mexico	2	0.8%						
New Hampshire	1	0.4%	1	1.3%	2	2.1%	1	0.7%
Utah	1	0.4%	1	1.3%	1	1.1%	2	1.4%
Idaho	1	0.4%	1	1.3%			3	2.1%
Nebraska	1	0.4%			3	3.2%	2	1.4%
Montana	1	0.4%			2	2.1%		
Arkansas	1	0.4%			1	1.1%	2	1.4%
Mississippi	1	0.4%					3	2.1%
Nevada	1	0.4%						
Iowa					3	3.2%		
South Dakota							1	0.7%
North Dakota							1	0.7%
Hawaii								
Delaware								
Vermont								
Maine								
Non-USA								
Rhode Island								

## Raw Data - Job Positions

As in previous years, the positions with the greatest representation in the survey were Maintenance Managers/Superintendents, followed by Plant/Maintenance Engineers. Proportionally, there were fewer responses from Maintenance Foremen/Supervisors in this year's survey. The proportion of respondents who are Maintenance Planners appears to be increasing.

Position	2004		2003		2002		2001	
	Responses	% of Total	Responses	% of Total	Responses	% of Total	Responses	% of Total
Maintenance Manager/Superintendent	108	24.2%	46	29.1%	42	23.3%	68	27.4%
Plant/Maintenance Engineer	63	14.1%	33	20.9%	26	14.4%	43	17.3%
Maintenance Foreman/Supervisor	58	13.0%	14	8.9%	21	11.7%	36	14.5%
Maintenance Technician	56	12.5%	22	13.9%	21	11.7%	29	11.7%
Maintenance Planner	30	6.7%	17	10.8%	16	8.9%	14	5.6%
Other	26	5.8%	2	1.3%	8	4.4%	5	2.0%
Maintenance Crafts/Tradesperson	25	5.6%	8	5.1%	12	6.7%	12	4.8%
Consulting Engineer	15	3.4%			8	4.4%	7	2.8%
Process/Industrial Engineer	8	1.8%	2	1.3%	1	0.6%	5	2.0%
Management Consultant	7	1.6%	1	0.6%	3	1.7%	2	0.8%
Computer/IT Consultant	6	1.3%	1	0.6%	2	1.1%	2	0.8%
CEO/Managing Director	5	1.1%	2	1.3%	2	1.1%	1	0.4%
Maintenance Clerk	5	1.1%			1	0.6%	2	0.8%
Marketing/Business Development/Sales Manager	5	1.1%						
Product Support Professional	4	0.9%	1	0.6%	1	0.6%	1	0.4%
Maintenance Contract Manager	4	0.9%			6	3.3%	3	1.2%
Reliability Engineer	3	0.7%	2	1.3%	2	1.1%		
Maintenance Accountant	3	0.7%	1	0.6%	2	1.1%	1	0.4%
Operations/Plant Manager	3	0.7%			1	0.6%	3	1.2%
Student	3	0.7%						
Maintenance Contract Officer	2	0.4%	1	0.6%				
Research Technician	2	0.4%					1	0.4%
Teacher/Academic	2	0.4%						
Consulting Manager	1	0.2%	1	0.6%	2	1.1%	1	0.4%
Software Support Manager	1	0.2%					4	1.6%
Product Support Manager	1	0.2%					1	0.4%
Product Support Technician	1	0.2%						
Design Engineer			1	0.6%	3	1.7%		
Research Professional			1	0.6%				
Research Manager			1	0.6%				

## Raw Data - Educational Levels

The distribution of educational levels was similar to previous years.

Education	2004		2003		2002		2001	
	Responses	% of Total	Responses	% of Total	Responses	% of Total	Responses	% of Total
High School	68	15.2%	24	15.2%	21	11.7%	37	14.9%
Formal Trade Training	69	15.4%	22	13.9%	27	15.0%	39	15.7%
Certificate/Diploma/Associate Degree	126	28.2%	52	32.9%	60	33.3%	67	27.0%
Undergraduate/College (Bachelors) degree	123	27.5%	24	21.5%	52	28.9%	76	30.6%
Post Graduate (Masters) degree	59	13.2%	24	15.2%	20	11.1%	28	11.3%
Post Graduate (Doctorate) degree	2	0.4%	2	1.3%			1	0.4%

## Raw Data - Work Experience

A wide range of work experience was represented, with the distribution of experience being similar to previous years.

Experience	2004		2003		2002		2001	
	Responses	% of Total	Responses	% of Total	Responses	% of Total	Responses	% of Total
0 to 5	76	17.0%	23	14.6%	27	15.0%	38	15.3%
5 to 10	72	16.1%	25	15.8%	27	15.0%	41	16.5%
10 to 15	74	16.6%	26	16.5%	37	20.6%	50	20.2%
15 to 20	74	16.6%	22	13.9%	32	17.8%	33	13.3%
20 to 25	65	14.5%	29	18.4%	33	18.3%	56	22.6%
25 to 30	53	11.9%	22	13.9%	20	11.1%	20	8.1%
more than 30	33	7.4%	11	7.0%	4	2.2%	10	4.0%

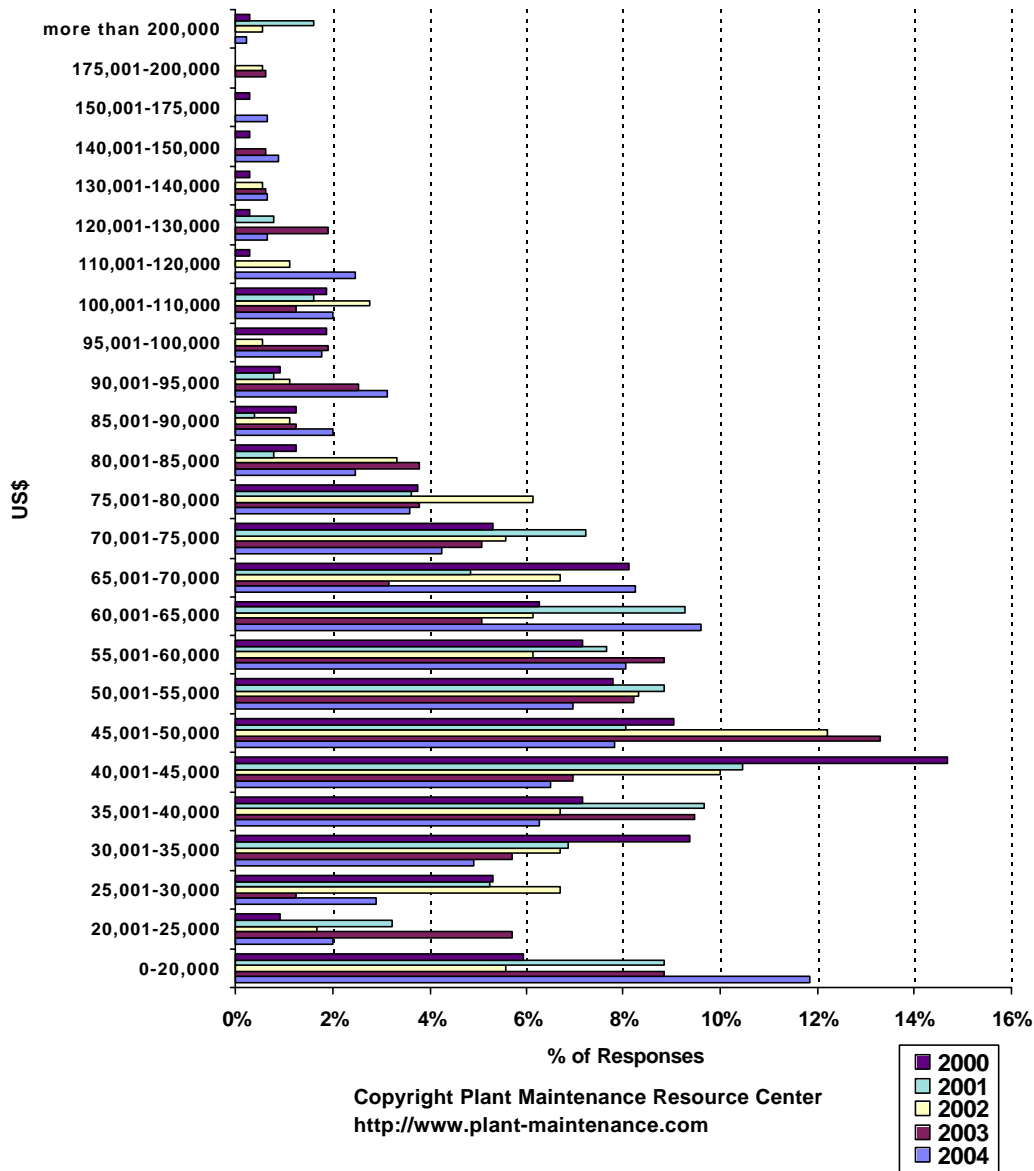
## Raw Data - Salaries

The total annual earnings, inclusive of all benefits, displayed a similar distribution to last year, with overall salaries slightly higher than previous years.

Salary Band (US\$)	2004		2003		2002		2001	
	Responses	% of Total	Responses	% of Total	Responses	% of Total	Responses	% of Total
0-20,000	53	11.9%	14	8.9%	10	5.6%	22	8.9%
20,001-25,000	9	2.0%	9	5.7%	3	1.7%	8	3.2%
25,001-30,000	13	2.9%	2	1.3%	12	6.7%	13	5.2%
30,001-35,000	22	4.9%	9	5.7%	12	6.7%	17	6.9%
35,001-40,000	28	6.3%	15	9.5%	12	6.7%	24	9.7%
40,001-45,000	29	6.5%	11	7.0%	18	10.0%	26	10.5%
45,001-50,000	35	7.8%	21	13.3%	22	12.2%	20	8.1%
50,001-55,000	31	6.9%	13	8.2%	15	8.3%	22	8.9%
55,001-60,000	36	8.1%	14	8.9%	11	6.1%	19	7.7%
60,001-65,000	43	9.6%	8	5.1%	11	6.1%	23	9.3%
65,001-70,000	37	8.3%	5	3.2%	12	6.7%	12	4.8%
70,001-75,000	19	4.3%	8	5.1%	10	5.6%	18	7.3%
75,001-80,000	16	3.6%	6	3.8%	11	6.1%	9	3.6%
80,001-85,000	11	2.5%	6	3.8%	6	3.3%	2	0.8%
85,001-90,000	9	2.0%	2	1.3%	2	1.1%	1	0.4%
90,001-95,000	14	3.1%	4	2.5%	2	1.1%	2	0.8%
95,001-100,000	8	1.8%	3	1.9%	1	0.6%	0	0.0%
100,001-110,000	9	2.0%	2	1.3%	4	1.6%	6	1.9%
110,001-120,000	11	2.5%	0	0.0%	2	1.1%	0	0.0%
120,001-130,000	3	0.7%	3	1.9%	0	0.0%	2	0.8%
130,001-140,000	3	0.7%	1	0.6%	1	0.6%	0	0.0%
140,001-150,000	4	0.9%	1	0.6%	0	0.0%	0	0.0%
150,001-175,000	3	0.7%	0	0.0%	0	0.0%	0	0.0%
175,001-200,000	0	0.0%	1	0.6%	1	0.6%	0	0.0%
more than 200,000	1	0.2%	0	0.0%	1	0.6%	4	1.6%



### Salary Distribution



### Overall Results

The median salary band for the 2004 survey was US\$55,001-\$60,000. This is a significant increase on previous years (see the table below). Assuming the average salary for each band is the midpoint of each band, the mean salary in 2004 is US\$56,577. This represents an increase of 5.9% on last year's survey result. Comparisons with previous years are shown in the following table.

Year	Median Salary Band	Approximate Mean Salary
2004	US\$55,001-\$60,000	US\$56,577
2003	US\$45,001-\$50,000	US\$53,623
2002	US\$50,001-\$55,000	US\$54,917
2001	US\$45,001-\$50,000	US\$51,290
2000	US\$45,001-\$50,000	US\$52,523
1999	US\$50,001-\$55,000	US\$53,521

The changing mix of respondents, plus variations in currency exchange rates could explain some of the variations in the above table, rather than any underlying trend in salary movements.

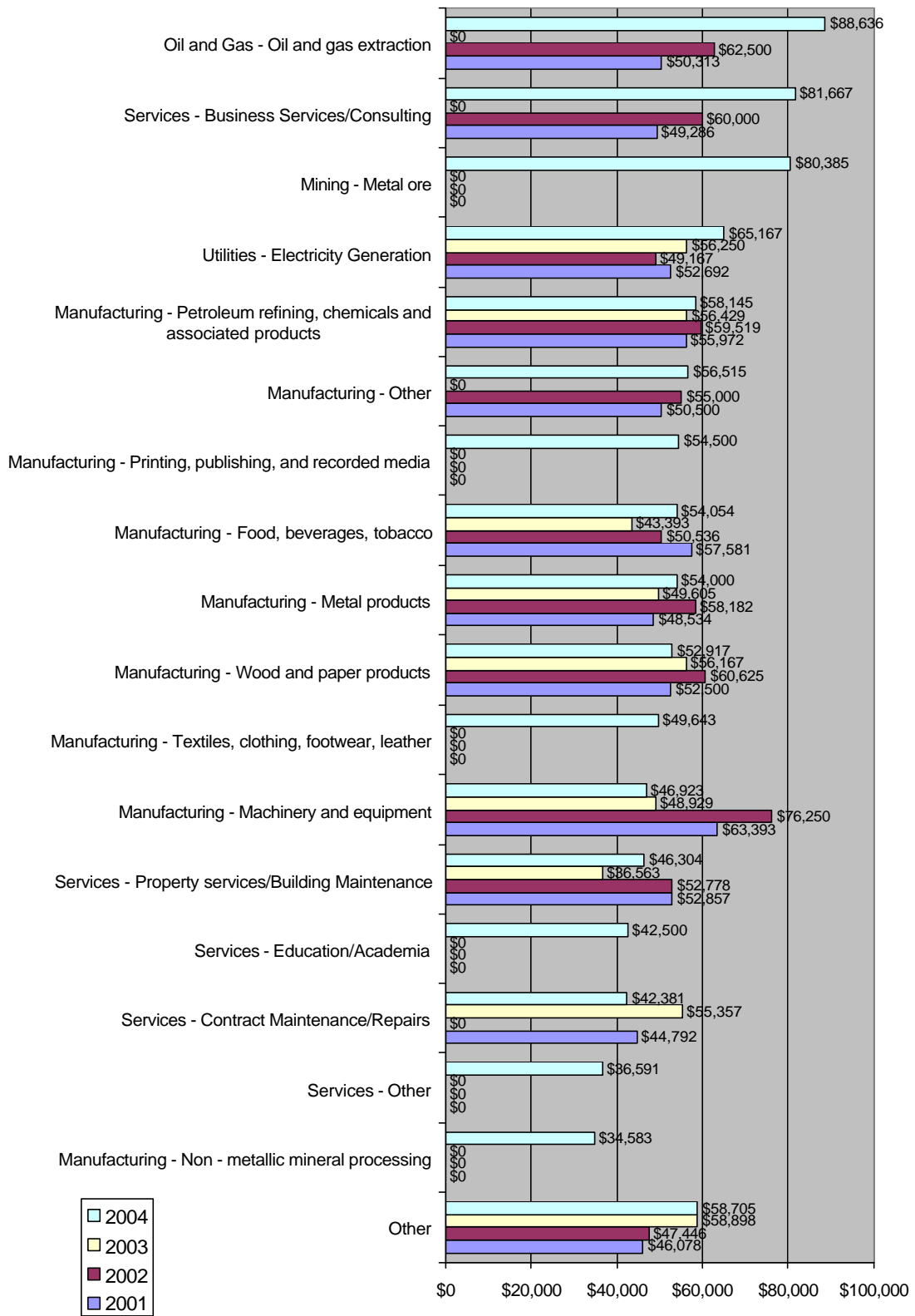
## Salary by Industry

An analysis of salaries by industry (for those industries with 5 or more responses) indicated that the industry paying the highest salaries in 2004 was Oil and Gas - Oil and gas extraction. This industry has typically been among the highest paying in previous surveys. Utilities - Electricity Generation showed a large increase in average salary, but this may be due to the relatively small sample sizes being used in this survey. Consultants also appear to be relatively well paid.

Industry	2004	2003	2002	2001
Oil and Gas - Oil and gas extraction	\$88,636		\$62,500	\$50,313
Services - Business Services/Consulting	\$81,667		\$60,000	\$49,286
Mining - Metal ore	\$80,385			
Utilities - Electricity Generation	\$65,167	\$56,250	\$49,167	\$52,692
Other	\$58,705	\$58,898	\$47,446	\$46,078
Manufacturing - Petroleum refining, chemicals and associated products	\$58,145	\$56,429	\$59,519	\$55,972
Manufacturing - Other	\$56,515		\$55,000	\$50,500
Manufacturing - Printing, publishing, and recorded media	\$54,500			
Manufacturing - Food, beverages, tobacco	\$54,054	\$43,393	\$50,536	\$57,581
Manufacturing - Metal products	\$54,000	\$49,605	\$58,182	\$48,534
Manufacturing - Wood and paper products	\$52,917	\$56,167	\$60,625	\$52,500
Manufacturing - Textiles, clothing, footwear, leather	\$49,643			
Manufacturing - Machinery and equipment	\$46,923	\$48,929	\$76,250	\$63,393
Services - Property services/Building Maintenance	\$46,304	\$36,563	\$52,778	\$52,857
Services - Education/Academia	\$42,500			
Services - Contract Maintenance/Repairs	\$42,381	\$55,357		\$44,792
Services - Other	\$36,591			
Manufacturing - Non - metallic mineral processing	\$34,583			

Note that, for the purpose of this analysis, only industries containing 5 or more respondents were included. The overall result is shown graphically on the following page.

### Average Salary by Industry



## Salaries by Country

Once again, only countries with 5 or more respondents were included in this analysis, which showed that the highest salaries were to be obtained in Australia, followed by the USA, Canada, and the United Kingdom.

Country	2004	2003	2002	2001
Australia	\$69,886	\$52,262	\$49,750	\$50,481
United States	\$62,215	\$62,880	\$61,005	\$54,278
Canada	\$59,032	\$56,000	\$52,955	\$67,500
United Kingdom	\$53,889	\$47,500	\$58,929	\$31,250
Saudi Arabia	\$46,000			
France	\$41,500	\$63,500		
South Africa	\$41,250		\$28,000	
Other	\$38,768	\$40,066	\$45,526	\$41,027
Indonesia	\$32,500			
India	\$28,409	\$10,000		

Australian salaries appear to have undergone a remarkable increase, but this may be due more to the varying mix of respondents from this country. It is also possible that the declining value of the US\$ has also affected the comparisons between countries. For example, the following were the exchange rates in place at the midpoints of each of the last 4 surveys.

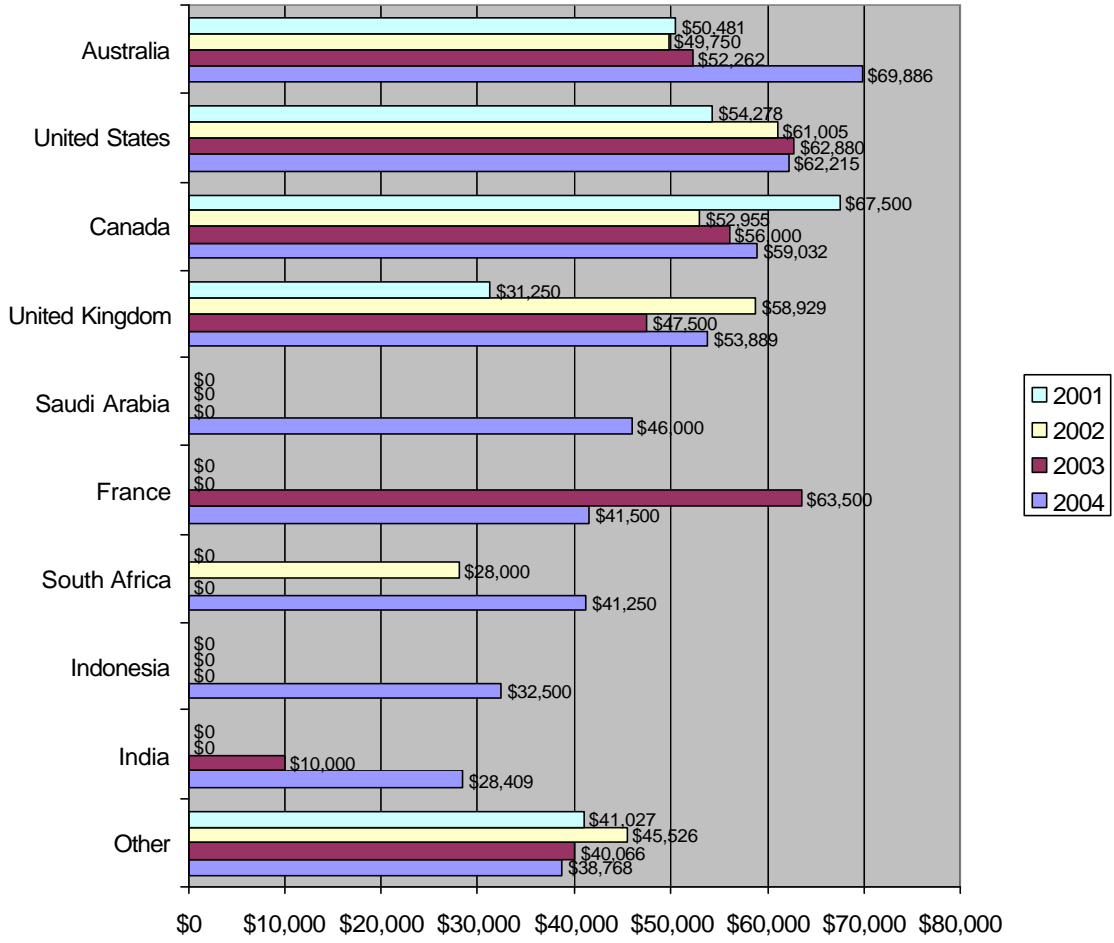
Currency	1 USD =			
	2004	2003	2002	2001
Australia (AUD)	1.26	1.69	1.94	1.91
Canada (CAD)	1.32	1.52	1.59	1.53
United Kingdom (GBP)	0.529	0.620	0.699	0.690
Saudi Arabia (SAR)	3.75			
France (FRF)	5.12	6.08		
South Africa (ZAR)	6.57		11.41	
Indonesia (IDR)	8413			
India (INR)	45.26	47.84		

To take the Australian salary results as an example, in US\$ terms, the average Australian salary has increased by 41% - however, the Australian dollar has increased in value (in comparison with the US\$) by 54% over this same period. This emphasizes the fact that direct comparisons of salaries between countries should be treated cautiously. Comparisons, year on year, between non-US countries should also be treated cautiously, for the same reasons.

Finally, it should also be noted that tax rates will differ between countries, as will the cost of living, so a larger salary in one country does not necessarily translate to a better lifestyle.

A graphical comparison of salaries between countries, and trends over the last 4 years is illustrated on the following page.

### Average Salary by Country

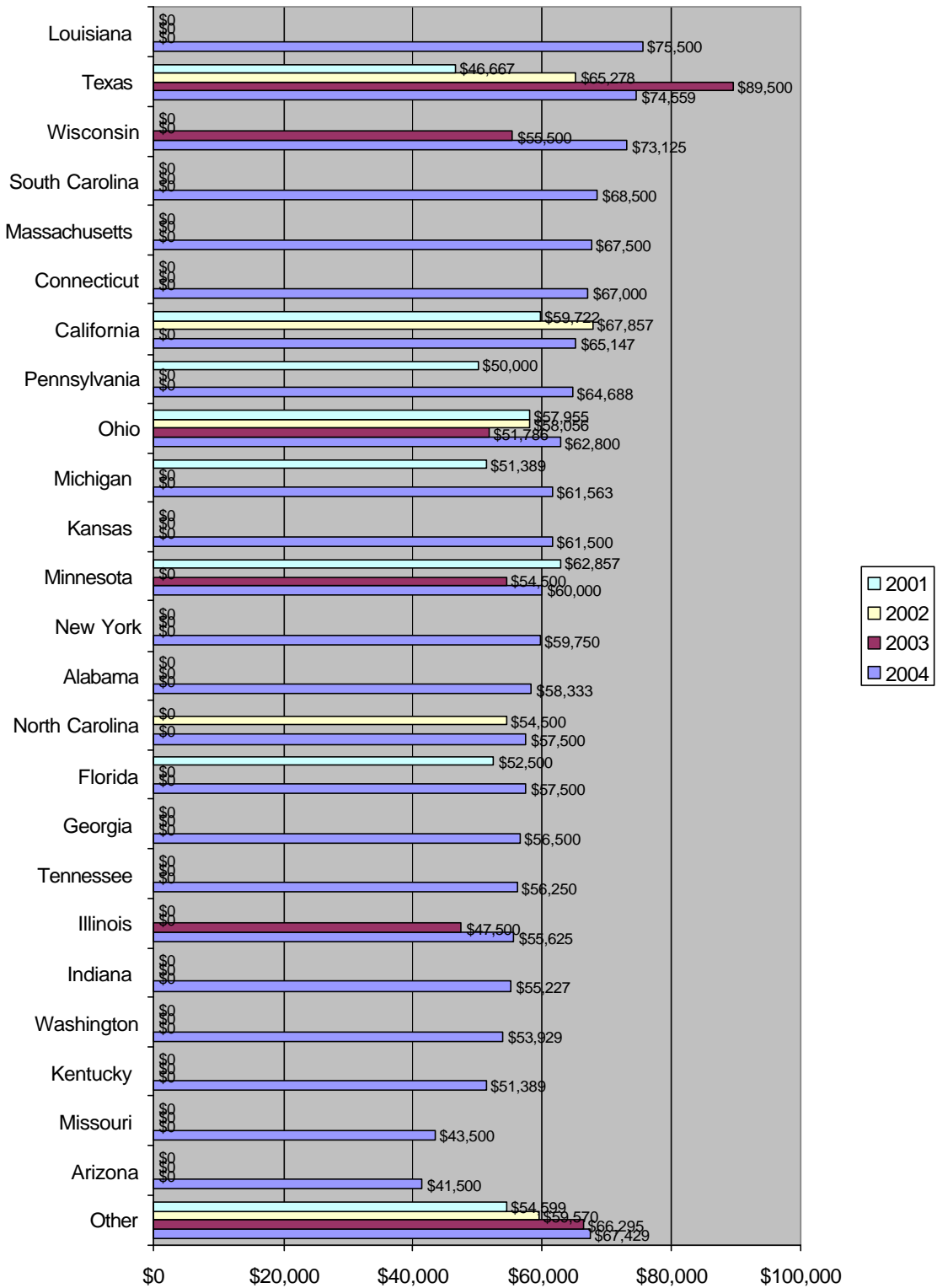


## Salaries by State

Average salaries are given for those states with more than 5 responses in the following table and chart. However, given the low number of results for each state, meaningful comparison between states is almost impossible. It is interesting to note, however, that the traditional "Oil & Gas" states, Louisiana and Texas, top the list – this correlates well with the earlier finding that those working in Oil & Gas had the highest average salaries.

State	2004	2003	2002	2001
Louisiana	\$75,500			
Texas	\$74,559	\$89,500	\$65,278	\$46,667
Wisconsin	\$73,125	\$55,500		
South Carolina	\$68,500			
Massachusetts	\$67,500			
Connecticut	\$67,000			
California	\$65,147		\$67,857	\$59,722
Pennsylvania	\$64,688			\$50,000
Ohio	\$62,800	\$51,786	\$58,056	\$57,955
Michigan	\$61,563			\$51,389
Kansas	\$61,500			
Minnesota	\$60,000	\$54,500		\$62,857
New York	\$59,750			
Alabama	\$58,333			
Florida	\$57,500			\$52,500
North Carolina	\$57,500		\$54,500	
Georgia	\$56,500			
Tennessee	\$56,250			
Illinois	\$55,625	\$47,500		
Indiana	\$55,227			
Washington	\$53,929			
Kentucky	\$51,389			
Missouri	\$43,500			
Arizona	\$41,500			
Other	\$67,429	\$66,295	\$59,570	\$54,599

### Average Salary by State



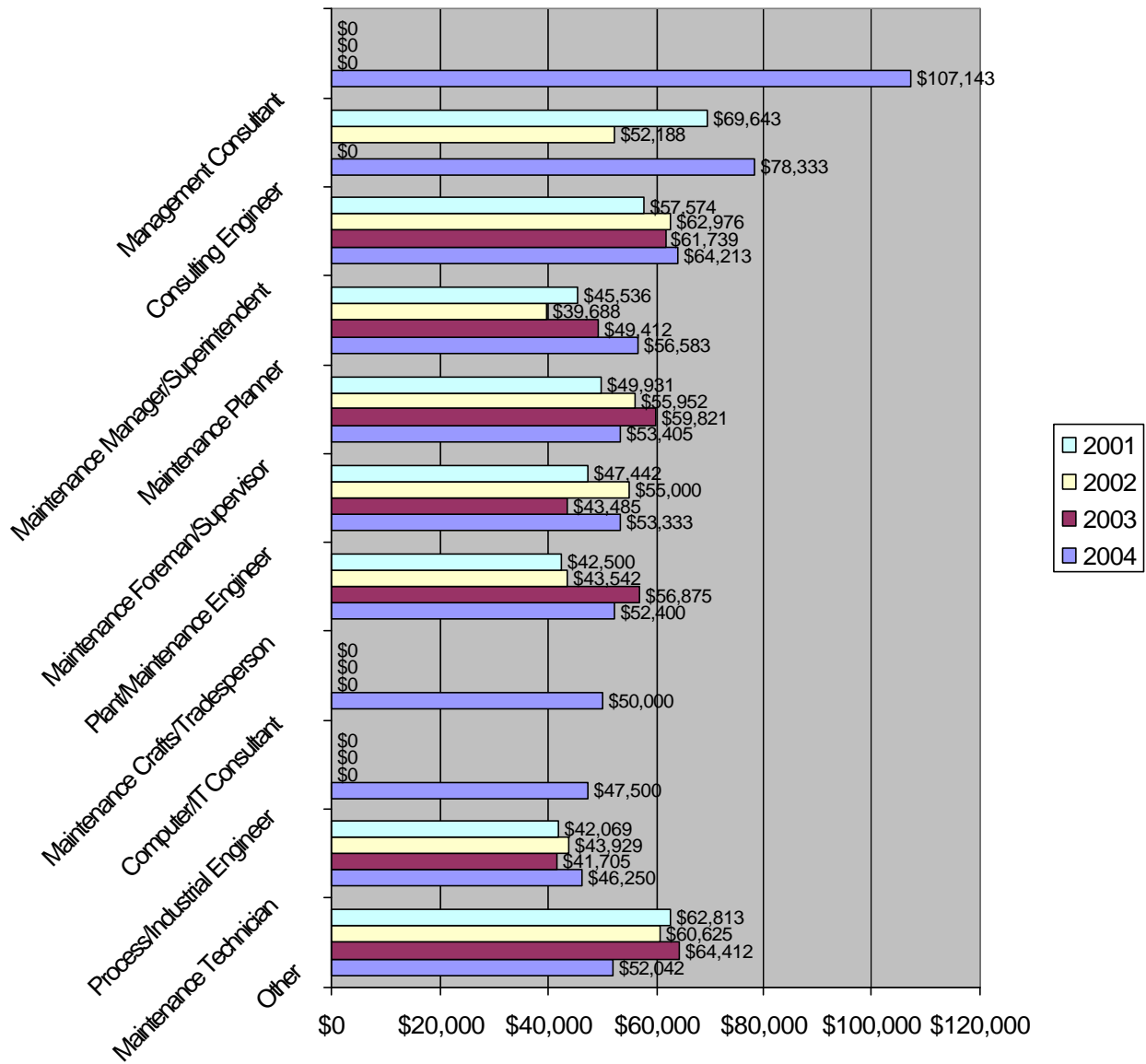
## Salaries by Position

Yet again, only positions with more than 5 respondents were included in this analysis. For the first time, Management consultants made it onto the list, and jumped straight into the highest salary position. Consulting Engineers reappeared after a year's absence, and showed a surprising increase in salary. Both of these results may be influenced heavily by the relatively small number of respondents in these categories. Once again, not unsurprisingly, Maintenance Managers/Superintendents were among the highest paid positions, followed by Maintenance Planners and Maintenance Supervisors/Foremen. Maintenance Planners have shown a substantially higher salary in this year's results. In previous years, Planners were paid less than Maintenance Crafts/Tradespeople and Supervisors, which appeared to greatly undervalue their contribution at most businesses.

Position	2004	2003	2002	2001
Management Consultant	\$107,143			
Consulting Engineer	\$78,333		\$52,188	\$69,643
Maintenance Manager/Superintendent	\$64,213	\$61,739	\$62,976	\$57,574
Maintenance Planner	\$56,583	\$49,412	\$39,688	\$45,536
Maintenance Foreman/Supervisor	\$53,405	\$59,821	\$55,952	\$49,931
Plant/Maintenance Engineer	\$53,333	\$43,485	\$55,000	\$47,442
Maintenance Crafts/Tradesperson	\$52,400	\$56,875	\$43,542	\$42,500
Computer/IT Consultant	\$50,000			
Process/Industrial Engineer	\$47,500			
Maintenance Technician	\$46,250	\$41,705	\$43,929	\$42,069
Other	\$52,042	\$64,412	\$60,625	\$62,813



### Average Salary by Position

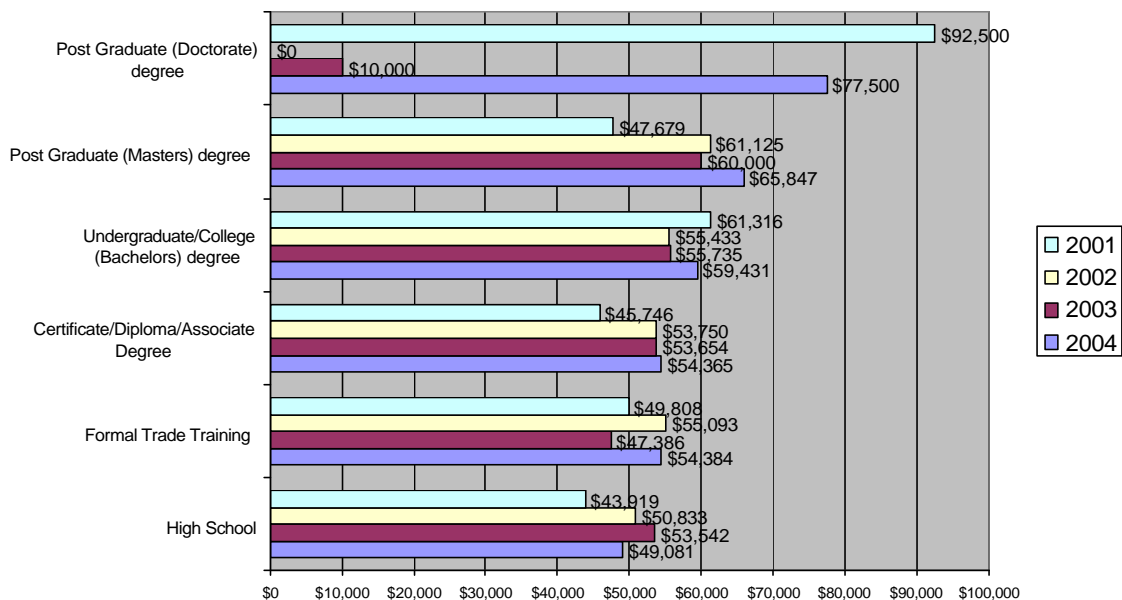


## Salary by Education

Again, not unsurprisingly, it appears that increasing levels of formal educational qualifications generally lead to increasing salaries. The small number of responses obtained for those with Doctorate level qualifications (only two this year, and one last year) effectively mean that the statistics for this educational level can be ignored.

Educational Level	2004	2003	2002	2001
High School	\$49,081	\$53,542	\$50,833	\$43,919
Formal Trade Training	\$54,384	\$47,386	\$55,093	\$49,808
Certificate/Diploma/Associate Degree	\$54,365	\$53,654	\$53,750	\$45,746
Undergraduate/College (Bachelors) degree	\$59,431	\$55,735	\$55,433	\$61,316
Post Graduate (Masters) degree	\$65,847	\$60,000	\$61,125	\$47,679
Post Graduate (Doctorate) degree	\$77,500	\$10,000		\$92,500

### Average Salary by Education Level

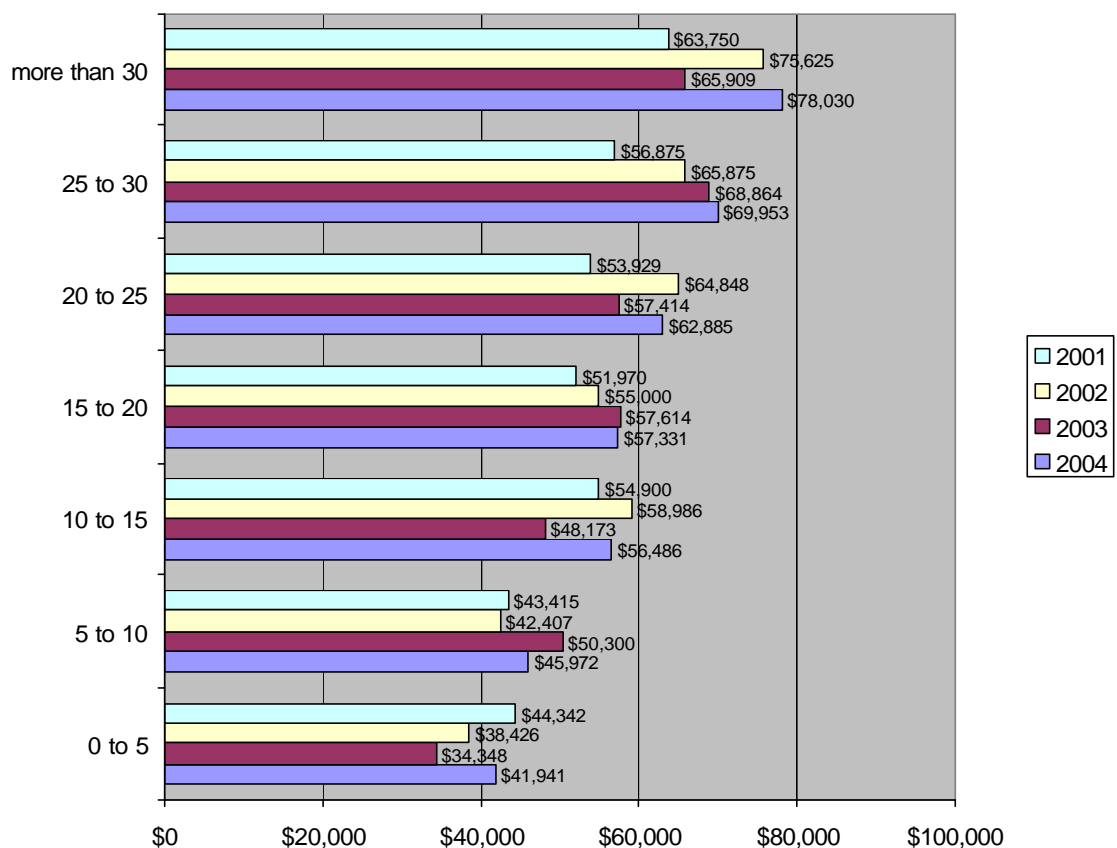


## Salary by Experience

Once again, this survey highlights that experience is an important factor in generating additional salary.

Years Experience	2004	2003	2002	2001
0 to 5	\$41,941	\$34,348	\$38,426	\$44,342
5 to 10	\$45,972	\$50,300	\$42,407	\$43,415
10 to 15	\$56,486	\$48,173	\$58,986	\$54,900
15 to 20	\$57,331	\$57,614	\$55,000	\$51,970
20 to 25	\$62,885	\$57,414	\$64,848	\$53,929
25 to 30	\$69,953	\$68,864	\$65,875	\$56,875
more than 30	\$78,030	\$65,909	\$75,625	\$63,750

### Average Salary by Experience

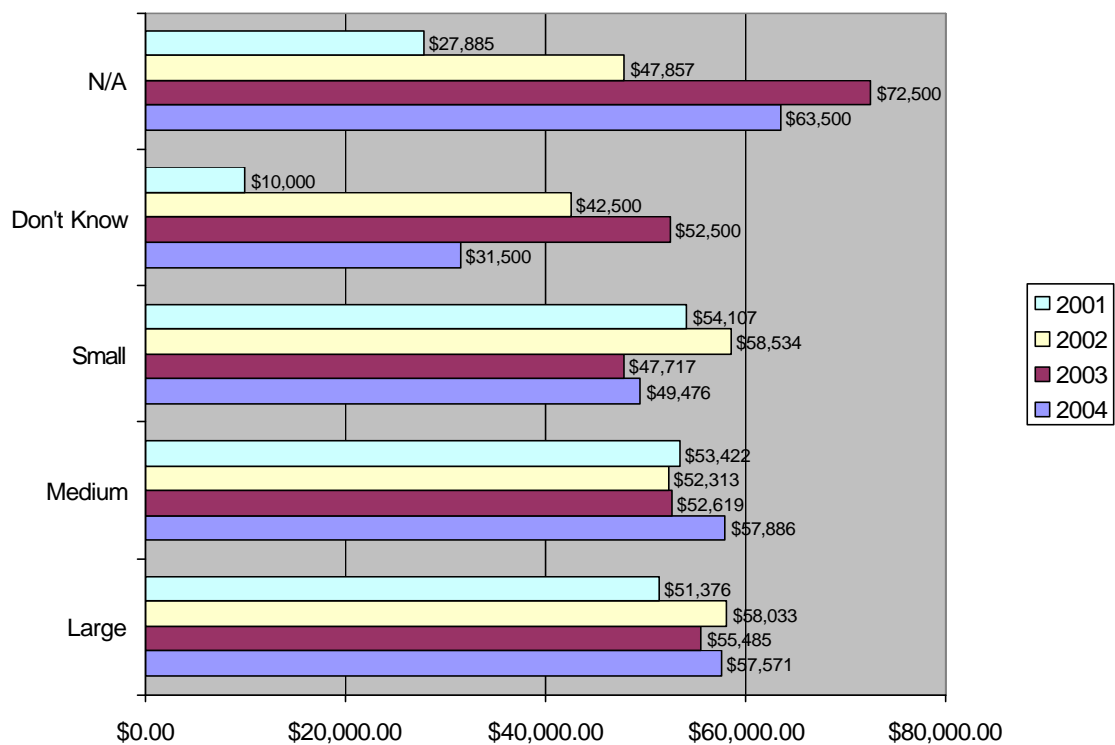


## Salary by Company Size

This year's results show that the smaller the organization, the lower the average pay. This is the exact opposite of the results from 2001. Could smaller organizations be continuing to suffer more than larger organizations in the current economic environment?

ITEM7	2004	2003	2002	2001
Large	\$57,571	\$55,485	\$58,033	\$51,376
Medium	\$57,886	\$52,619	\$52,313	\$53,422
Small	\$49,476	\$47,717	\$58,534	\$54,107
Don't Know	\$31,500	\$52,500	\$42,500	\$10,000
N/A	\$63,500	\$72,500	\$47,857	\$27,885

**Average Salary by Company Size**



## Conclusion

In summary, the main conclusions from this survey are:

- Overall, salaries seem to have increased by a significant amount, in \$US terms. However, most of this is due to the recent drop in the value of the US\$ in comparison with other currencies. In the US, salaries appear to have shown little change from last year's survey.
- In US\$ terms, the best paid countries for Maintenance workers are Australia, the US and Canada. However, differences in taxation rates, and cost of living make comparison between countries a somewhat meaningless exercise.
- Experience and Education continue to have a significant impact on salaries in the Maintenance sector. The more you have of each of these, the greater your salary is likely to be.
- Management Consultants and Consulting Engineers appear to be paid more highly than Maintenance Managers and Superintendents. Maintenance Planners appear to have shown a sharp increase in salaries in comparison with previous years.
- Larger organizations appear to be paying better, at present, than smaller organizations.
- This year's survey indicated that the highest paid industries were
  - Oil and Gas - Oil and gas extraction
  - Services - Business Services/Consulting
  - Mining - Metal ore.

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