

## Engineering Recruitment & Retention Survey

Thank you to all who completed this survey!

Below are the results from the Engineering Recruitment and Retention Survey. Where the answers were provided in a multiple choice format, response totals and percents are provided. Where the answer format was open, the most frequently provided responses are listed, but there are no exact totals.

The inter-agency workgroup that worked together to create this survey will now be reviewing the survey responses and determining how to best utilize this information to improve our recruitment and retention strategies.

Notes: (1) The "skipped this question" count includes approximately 200 people that accessed the survey without entering any responses at all. (2) Percentages are rounded to the nearest whole number and may not total exactly 100%. (3) Where there are no totals or percentages, the answer format was open ended and the answers given are general statements covering the most common responses.

**Respondents:** 1202 displayed, 1202 total      **Closed Date:** 06/12/2007

### 1. What agency do you currently work for?

	Response Total	Response Percent
Dept. of Administration	61	6%
Dept. of Agriculture, Trade and Consumer Protection	11	1%
Dept. of Commerce	53	6%
Dept. of Health & Family Services	21	2%
Dept. of Natural Resources	169	18%
Dept. of Transportation	613	64%
Educational Communications Board	2	0%
Public Service Commission	13	1%
UW	7	1%
Other	8	1%
Total Respondents	958	
(skipped this question)	244	

### 2. Class and/or discipline?

	Response Total	Response Percent
Agricultural Engineer	14	1%
Air Management Engineer	52	6%
Architect	20	2%
Civil Engineer	355	38%
Communications Engineer	2	0%
CADD Specialist	16	2%
Construction Representative	23	2%
Electrical Engineer	12	1%
Electronic Engineer	5	1%
Engineering Consultant - Building Systems	25	3%
Engineering Consultant - Electrical Systems	3	0%
Engineering Consultant - Fire Suppr Systems	1	0%
Engineering Consultant - HVAC	2	0%
Engineering Consultant - Plumbing Prod. Rev.	2	0%
Engineering Consultant - Refrig. Systems	1	0%

Engineering Consultant - Uniform Dwelling	5	1%
Engineering Technician	4	0%
Engineering Technician - Transportation	93	10%
Engineering Specialist	25	3%
Engineering Specialist - Transportation	135	14%
Environmental Civil Engineer	11	1%
Environmental Engineering Specialist	4	0%
Facility Designer	4	0%
Frequency Specialist	1	0%
Landscape Architect	2	0%
Mechanical Engineer	11	1%
Natural Resource Engineer	8	1%
Nuclear Engineer	9	1%
Preservation Architect	2	0%
Public Service Engineer	9	1%
Radiation Engineering Specialist	3	0%
Surveyor	5	1%
Waste Management Engineer	14	1%
Wastewater Engineer	27	3%
Water Regulation & Zoning Engineer	10	1%
Water Resources Engineer	13	1%
Water Supply Engineer	17	2%
Total Respondents	945	
(skipped this question)	257	

### 3. Are you in a management/supervisory position?

	Response Total	Response Percent
Yes	144	15%
No	800	85%
Total Respondents	944	
(skipped this question)	258	

### 4. Age Range?

	Response Total	Response Percent
<25	25	3%
26-35	141	15%
36-45	255	27%
46-55	342	36%
55+	190	20%
Total Respondents	953	
(skipped this question)	249	

## 5. Race Ethnicity?

	Response Total	Response Percent
Black (Not of Hispanic origin)	14	2%
Asian or Pacific Islander	38	4%
American Indian or Alaska Native	5	1%
Hispanic	20	2%
White (Not of Hispanic origin)	844	92%
Total Respondents	921	
(skipped this question)	281	

## 6. Gender?

	Response Total	Response Percent
Male	667	74%
Female	233	26%
Total Respondents	900	
(skipped this question)	302	

## 7. What professional registration or licensure to you have?

	Response Total	Response Percent
Engineer in training certificate	135	17%
Professional Engineer license	448	56%
Professional Land Surveyor license	14	2%
Designer's license	19	2%
Professional Architect's license	25	3%
Landscape Architect's license	3	0%
Soil Tester's license	19	2%
Engineering Technician certificate	47	6%
Professional Geologist license	7	1%
Professional Hydrologist license	4	1%
Professional Soil Scientist license	3	0%
Petroleum Operations Engineer license	0	0%
Wisconsin Interior Designer license	2	0%
Other, please specify	74	9%
Total Respondents	800	
(skipped this question)	521	

## 8. What type of degree do you have?

	Response Total	Response Percent
None	127	12%
Associates	163	17%
Bachelors	633	68%
Masters	51	4%
PhD	7	<1%
Total Respondents	981	
(skipped this question)	221	

**9. If you earned your degree within the last 10 years, where is it from?**

	Response Total	Response Percent
Madison Area Technical College	10	5%
Marquette University	16	8%
Michigan Technological University	15	7%
Mid State Technical College	7	3%
Milwaukee Area Technical College	5	2%
Northeast Wisconsin Technical College	9	4%
Other out of state school	13	6%
Other school in state	17	8%
UW - Other	7	3%
UW Madison	45	22%
UW Milwaukee	17	8%
UW Platteville	44	21%
Total Respondents	205	
(skipped this question)	997	

**10. What was your perception of the state as an employer before you started with the state?**

Job Security/Steady & stable employment		
Lower pay but good benefits		
Good place to work		
Rewarding work (public service)		
Total Respondents	783	
(skipped this question)	419	

**11. How did you hear about state job opportunities? Please be specific.**

Current state employee		
State Job Opportunities bulletin/Current opportunities bulletin		
WiscJobs website		
Newspaper ads		
Career Fair		
Total Respondents	845	
(skipped this question)	357	

**12. Why did you choose to work for the state? What attracted you? (Choose all that apply.)**

	Response Total	Response Percent
Benefits	668	81%
Job security	574	69%
Location	527	64%
Work (type of, variety)	525	63%
Retirement package	471	57%
Work life balance	400	48%
Public service	288	35%
Compensation	161	19%
Limited travel	143	17%
Other, please specify	119	14%
Total Respondents	827	
(skipped this question)	375	

**13. What factors do you consider when deciding to continue to work for the state? (Choose all that apply.)**

	Response Total	Response Percent
Benefits	698	84%
Retirement package	703	84%
Work life balance	556	67%
Work (type of, variety)	503	60%
Job security	476	57%
People/co-workers	433	52%
Challenging work	413	50%
Public service	321	38%
Compensation	321	38%
Career growth opportunities	223	27%
Limited travel	199	24%
Other, please specify	92	11%
Total Respondents	834	
(skipped this question)	368	

**14. How long have you worked for the state?**

	Response Total	Response Percent
0-5 years	90	10%
6-10 years	201	23%
11-15 years	149	17%
16-20 years	201	23%
21-25 years	122	14%
25+ years	124	14%
Total Respondents	887	
(skipped this question)	367	

**15. What three things do you like most about your job?**

Type, variety and challenge work		
Co-workers		
Flexible hours/scheduling		
Benefits		
Providing public service		
Atmosphere/work environment		
Work/life balance		
Self-directed work		
Total Respondents	805	
(skipped this question)	397	

**16. What three things do you like least about your job?**

Politics and bureaucracy	
Lack of career advancement opportunities	
Declining benefits	
Lack of understanding and respect from the public	
Less resources and budget/positions reductions/workload	
Long wait times for settled contracts	
Management	
Compensation	
Total Respondents	780
(skipped this question)	422

**17. Have you ever worked as an engineer in the private sector?**

	Response Total	Response Percent
Yes	408	46%
No	472	54%
Total Respondents	880	
(skipped this question)	322	

**18. How many years did you work in private sector?**

	Response Total	Response Percent
0-5 years	207	53%
6-10 years	89	23%
11-15 years	46	12%
16-20 years	27	7%
21-25 years	11	3%
25+ years	10	3%
Total Respondents	390	
(skipped this question)	823	

**19. What was the key reason you choose to leave the private sector for a state job?**

Benefits	
Layoffs, no work, seasonal type work	
Flexibility with public employment	
Work/life balance	
Qualify of life	
Less travel	
Providing public service	
Total Respondents	381
(skipped this question)	821

**20. Are you planning to leave your current job within the next two years?**

	Response Total	Response Percent
Yes	201	23%
No	685	77%
Total Respondents	886	
(skipped this question)	316	

**21. Where are you planning to go?**

	Response Total	Response Percent
Another position in the same agency	38	12%
Another state agency	33	10%
Private sector employment	87	27%
City Employment	24	7%
County employment	28	9%
Federal Employment	30	9%
Retirement	59	18%
Other, please specify	27	8%
Total Respondents	326	
(skipped this question)	1045	

**22. Are there things that could change that would cause you to stay?**

Compensation		
Advancement Opportunities		
Total Respondents	163	
(skipped this question)	1039	

**23. What suggestions do you have for the best way to recruit engineers to the state?**

More compensation, provide a competitive salary		
Participate in career fairs and onsite interviews at college campuses		
Make presentations at college organization and/or classrooms		
Start at high school level		
Change focus from starting pay to longer term benefits, including Deferred Compensation		
Allow for tours of state facilities and offices		
Increase advertising in both radio and print; including trade magazines		
Market the diversity of work and the variety of projects		
Highlight statistics of current engineers and seniority/longevity		
Participate in recruitment fairs in other states		
Use a mix of newer and more experienced engineers for recruitment		
Increase use of internship programs		
Share family friendly policies during recruitment		
Total Respondents	737	
(skipped this question)	465	

**24. What would make the state a more attractive employer?**

Raise the level of compensation and benefits

Stop position cuts

Advancement opportunities

Waive/reduce 6 month waiting period for healthcare benefits

Total Respondents	735
(skipped this question)	467

**25. What, if any, professional organization you are a member of and/or what professional publications you receive:**

<u>Memberships</u>	<u>Publications</u>
American Concrete Institute	Journal of Light Construction
American Geophysical Union	CE News
American Institute of Architects	Civil Engineering Magazine
American Society of Civil Engineers	ITE Journal
American Society of Civil Engineers (ASCE)	ROADS & BRIDGES Magazines.
American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE)	Transportation Management & Engineering
American Society of Landscape Architects(ASLA)	Governing
American Society of Plumbing Engineers (ASPE),	ASCE
Association of Environmental and Engineering Geologists	Landscape Architecture Magazine and e-newsletter
Association of State Conservation Engineers	Builder Magazine
Chi Epsilon	
Geological Engineering Club	
Geological Society of America	
Regional Diversity Committee	
Society of Women Engineers	
State Engineering Association	
US Green Building Council	
UW Alumni	
Volunteer with Engineers Without Borders	
Wisconsin Green Building Alliance	
Association of State Dam Safety Officials (ASDSO)	
Association of State Floodplain Managers	
Total Respondents	469
(skipped this question)	733

**26. Would you be willing to participate in a focus group?**

	Response Total	Response Percent
Yes	323	38%
No	524	62%
Total Respondents	847	
(skipped this question)	355	

**28. Would you be willing to attend career fairs or other events to help recruit engineers?**

	Response Total	Response Percent
Yes	301	35%
No	556	65%
Total Respondents	857	
(skipped this question)	345	