

2003 Salary Survey for the Geospatial Sciences

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How To Calculate Survey Results

The 2003 Salary Survey was based on a companies and public agencies from all States. The results compare to average cost-of-living or 100.0 of the Chamber of Commerce ACCURA Cost-of-Living Index.

To calculate salary ranges that may be appropriate for your location you must first find the cost-of-living differential (See Addendum I. at the end of the survey). Add or subtract the percentage differential for your location for each job category.

If your company/agency is located in Baltimore, MD you should subtract 6% from the stated salary range. If your company agency is located in Flagstaff, AZ you should add 7% to each salary range.

Cost-of Living is one factor in determining competitive compensation policies for an organization. Other factors should be discussed in addition to cost-of-living.

If your company is involved in defense contracting work and you need people who possess, or are able to obtain, security clearances you should be aware that this year promises to be very competitive for prospective candidates holding clearances. This may be a factor in determining competitive compensation policies.

If your location is not represented on the list and there are no comparable cities you should call your local Chamber of Commerce for your specific cost-of-living factor or call your public library Reference Desk to obtain this data.

If you have questions regarding the survey please contact **Richard Serby** at **719-575-9100 ext 1** or email **rich@geosearch.com**

1. Production Director / Operations Manager

Directs all activities related to the analysis and determination of production methodology and projected cost for bidding new projects or existing projects. Directs implementation of prototype phase of volume production projects, and is involved in new technology development projects. This person would typically report to a CEO, COO, President, General Manager or Sr. Director. Typically requires a B.S. degree in related field and 10 years or more of related experience.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
63706	77556	93502	All
2002	88072		
2001	73707		
2000	68280		
1999	73619		

2. GIS Manager / Coordinator

Manages the GIS department; supervises GIS Specialists and Technicians; develops action plan for GIS development; acts as central communication point; acts as public information source; assists with integration of GIS into existing systems; prepares newsletters and makes presentations. Typically reports to agency Director or Operations Manager. Typically requires B.S. degree in related field and five or more years experience.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
51850	69528	81516	All
2002	65258		
2001	59575		
2000	58026		
1999	62931		

3. Technical / Production Manager

Manages and coordinates activities of technical development staff including database design and software development projects. Leads database requirements and design stages of new systems development projects. Assign, schedule and coordinate staff workloads in accordance with project requirements and priorities. Typically reports to Operations

Manager, General Manager, or Director. Typically requires B.S. Geography, Computer Science or related field and four or more years experience in the development of mapping applications.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
54987	62373	79903	All
2002	64977		
2001	62526		
2000	53422		
1999	61977		

4. Human Resources / Personnel Manager

Responsible for all areas of human resources management such as personnel administration, compensation and benefits, affirmative action, training, recruitment, etc.. Typically requires B.S./B.A. in Human Resources Development and five or more years experience in a technical/engineering/human resources environment.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
59583	63382	93184	All
2002	61157		
2001	58129		
2000	52030		
1999	56467		

5. Sales / Marketing Manager

Responsible for all sales and marketing functions within the organization. Supervise sales representatives, train and develop sales staff, identify new market opportunities.

Typically requires B.S./ B.A. degree and five or more years successful technical sales and/or management experience.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
53738	75987	93334	All
2002	96972		
2001	94824		
2000	83418		
1999	77601		

6. Photogrammetry Department Manager

Manages Photogrammetry Department. Involved in planning, cost estimation, proposal preparation, production scheduling, tracking, hiring, training and quality control. Often provides marketing and client relation's support. may be Certified Photogrammetrist or equivalent. Typically requires B.S. Photogrammetry or related degree and five or more years experience in compilation, triangulation, supervision and production/project management.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
56452	69006	84929	All
2002	61278		
2001	55760		
2000	51751		
1999	51923		

7. GIS Project Manager

GIS Specialist with technical and administrative skills necessary to manage a project from inception to completion with minimum direction from his/her supervisor. May assist in proposal preparation and presentation. May involve significant client contact during the course of the project. Responsible for technical and administrative functions. Coordinates project with various internal groups as required. Reviews all technical reports and supplementary information for correctness and format. Typically requires B.S. in GIS related field and five or more years of technical and/or management experience.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
48023	58869	75834	All
2002	61501		
2001	53305		
2000	52947		
1999	53782		

8. GPS / Survey Manager

Responsible for GPS/ Survey projects. Includes project-planning, adjustments, cost estimation, scheduling, field operations, and Blue Booking. Typically requires B.S. Survey/ Mapping or related and five or more years experience.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
50390	62994	76772	All
2002	66456		
2001	61141		
2000	59964		
1999	50046		

9. Photo Lab Manager

Responsible for the supervision and product control of the photo lab. Purchases chemicals and other necessary materials. Supervises technicians and ensures that high quality standards are met. Typically requires a high school diploma and five or more years experience as a photo lab technician working in an aerial photo lab environment.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
34300	38743	46494	All
2002	33927		
2001	46053		
2000	40201		
1999	36267		

10. Supervisory Planner

Supervises and participates in the development, analysis and completion of planning projects, or assumes project responsibility for a major special purpose study requiring initial development and management and where assignments are of creative nature. Performs other related duties as required. Typically requires a B.S. degree and specialty in areas described in Planner description.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
54526	65498	97675	All
2002	61868		
2001	65760		
2000	64214		
1999	54625		

11. Sr. Stereoplotter Operator - Analytical and Softcopy

Responsible for the compilation of topographic and planimetric information for the production of maps. This includes determining contour interval, tracing contours, planimetric features, and topographic details and transferring them to computer files. The Sr. Operator may also be called upon to perform training of less experienced personnel. Typically requires high school diploma or photogrammetry certification and five or more years of experience.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
35155	43013	47784	All
2002	44879		
2001	40511		
2000	39681		
1999	40906		

12. Stereoplotter Operator - Analytical and Softcopy

Responsible for the compilation of topographic and planimetric information for the production of maps. This includes determining contour interval, tracing contours, planimetric features, and topographic details and transferring them to computer files. Typically requires high school diploma or photogrammetry certification and one to four years of experience.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
26553	34486	41470	All
2002	34947		
2001	31281		
2000	31768		
1999	31390		

13. Jr. Stereoplotter Operator - Analytical and Softcopy

Responsible for the compilation of topographic and planimetric information for the production of maps. This includes determining contour interval, tracing contours, planimetric features, and topographic details and transferring them to computer files. Typically requires high school diploma or photogrammetry certification and less than one year of experience.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
25790	30158	34525	All
2002	28115		
2001	27800		
2000	26423		
1999	25909		

14. Sr. GIS Programmer

GIS Specialist with a strong computer science and programming background through work experience or academic training. Expert in GIS Macro languages such as AML, MDL, Avenue and others. Proficient in C/C++ and Visual Basic programming and familiar with Unix and other operating systems. Typically requires B.S. Geography, Computer Science or related and five or more years experience as a GIS programmer.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
52674	63903	75995	All
2002	66312		
2001	55907		
2000	54229		
1999	59957		

15. GIS Programmer

GIS specialist with a strong computer science and programming background through work experience or academic training. Proficient in GIS Macro languages such as AML, MDL, Avenue and others. May have training or experience in C/C++ and Visual Basic programming and familiar with Unix and other operating systems. Typically requires B.S. Geography, Computer Sciences or related and one to five years experience as a GIS programmer or GIS Specialist.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
37010	51156	61817	All
2002	46608		
2001	47466		
2000	44135		
1999	41853		

16. Sr. GIS Specialist

Involved in coding and preparation of complicated aspects of GIS projects. May act as lead technician, prepare data for conversion and editing and will have in-depth knowledge of one or more GIS package. Will be proficient in Macro languages programming. May be a specialist in cadastral, environmental, AM/FM or other applications. Typically requires a B.S. GIS, Geography or related and five or more years of experience.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
47762	57462	68255	All
2002	54764		
2001	46325		
2000	46646		
1999	43521		

17. GIS Specialist

Involved in coding and preparation of GIS projects. Prepare data for conversion and editing and will have knowledge of one or more GIS package. Will have training or experience in Macro language programming. May be a specialist in Cadastral, environmental, AM/FM or other applications. Typically requires a B.S. GIS, Geography or related and one to five years of experience.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
38765	45522	58850	All
2002	40442		
2001	35110		
2000	37164		
1999	37224		

18. GIS Technician

Involved in coding and preparation of GIS projects. Prepare data for conversion and editing and will have knowledge of one or more GIS package. Typically requires a B.S. GIS, Geography or related and entry level to three years of experience.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
31028	34801	45848	
2002	34193		
2001	32204		
2000	28915		
1999	30539		

19. GIS Database Manager

Responsible for the design and maintenance of geospatial relational database. Play leadership role in the design and implementation of GIS relational databases. Typically requires BS Geography, GIS or related and three or more years experience with geospatial database administration.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
51750	64500	74450	All
2002	61199		
2001	51615		
2000	53680		
1999	47249		

20. Sr. Graphics Workstation Operator

Responsible for using a graphics workstation to edit digital data matching database requirements. Familiar with plotting techniques to produce internal edit plots and quality hard copy plots. Translates graphics data into other digital formats and use error checking programs to solve problems. Typically requires Associates or B.S. degree and five or more years of experience with GIS software.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
40276	43546	63325	All
2002	40060		
2001	37579		
2000	35576		
1999	34990		

21. Graphics Workstation Operator

Responsible for using a graphics workstation to edit digital data matching database requirements. Familiar with plotting techniques to produce internal edit plots and quality hard copy plots. Translates graphics data into other digital formats and use error checking programs to solve problems. Typically requires Associates or B.S. degree and one to five years of experience.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
28044	34941	45699	All
2002	34606		
2001	36067		
2000	31543		
1999	30488		

22. Jr. Graphics Workstation Operator

Responsible for using a graphics workstation to edit digital data matching database requirements. Familiar with plotting techniques to produce internal edit plots and quality hard copy plots. Translates graphics data into other digital formats and use error checking programs to solve problems. Typically requires Associates or B.S. degree and entry level experience with GIS software.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
35840	41530	50020	All
2002	30428		
2001	26130		
2000	22384		
1999	25409		

23. Raster / Vector Technician

Responsible for scanning source documents for image rectification and/or vectorization. Utilizes CAD, manual vectorizing, auto vectorizing, conversion, and editing software. Typically requires Associates or Bachelors degree in Geography, GIS or related or comparable work experience or training.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
35840	41530	50020	All
2002	31468		
2001	32582		
2000	29267		
1999	29956		

24. Digital Ortho Image Technician

Responsible for using image processing tools for the production of high quality digital images. Duties include image scanning, adjustment of radiometric and geometric parameters, warping, controlling, geo-coding, mosaicking, cropping and combined with vector data for final delivery. Typically requires B.S. in Geography, GIS or related and two or more years of related experience.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
27287	34336	45268	All
2002	38908		
2001	36359		
2000	35215		
1999	30084		

25. Quality Assurance Analyst

Support and encourage constant attention to the process and work protocols to ensure full compliance to contract specifications. Verifies that changes in production protocols do not violate contract specifications, monitors and evaluates the quality of the product. Typically requires a B.S. Geography, Cartography or related and three to five years of experience in GIS, AM/FM and/or CAD map production.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
38862	49164	64487	All
2002	55594		
2001	39081		
2000	39244		
1999	41727		

26. GPS Surveyor / Technician

Responsible for GPS/ Survey field operations. Operates GPS equipment, collects data, reports data, and maintains equipment. Associates degree or higher. Entry level to five years of experience.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
29236	38171	47410	All
2002	36700		
2001	36947		
2000	30861		
1999	35472		

27. GPS Programmer

Ability to develop software for GPS. Requires programming in one of several common languages used in GPS development such as C and/or C++. Typically requires B.S. Survey Engineering, Computer Science, Geography or related and one to five years experience.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
53138	63800	74500	All
2002	51780		
2001	38590		
2000	50750		
1999	54393		

28. Pilot Commercial/ Instrument

Licensed commercial pilot with instrument rating. Two years experience in aerial photography missions.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
36032	46361	58315	All
2002	42000		
2001	36500		
2000	38355		
1999	49617		

29. Aerial Photographer

Responsible for the operation and maintenance of aerial cameras and involved in planning of aerial photo flight missions. Typically requires high school diploma and two or more years experience working with an aerial photographer.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
30347	36806	39341	All
2002	40662		
2001	35425		
2000	35500		
1999	34934		

30. Photo Lab Technician

Responsible for the processing of film from aerial photo missions. Typically requires high school diploma and one or more years experience working in a photo lab environment.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
21230	30323	36320	All
2002	26104		
2001	29665		
2000	24174		
1999	27912		

31. Systems Manager

Responsible for maintenance of specific operating system or systems such as Unix or VMS. Install, maintain, and upgrade software; Solve operating problems for users. Typically requires B.S. Computer Science, Information Systems or related and one to five years experience as a Systems Manager.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
43788	57809	77785	All
2002	60119		
2001	58144		
2000	54242		
1999	57234		

32. Sr. Programmer / Analyst

Responsible for leadership role in the design and implementation of new display and production systems and the augmentation of existing systems. Participates in overall design team activities for new projects and plays a leadership role in carrying out conceptual designs. Conduct requirements analysis, database design, testing, and prototyping. B.S. Computer Science, Geography or related and three or more years experience.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
52391	70732	79560	All
2002	73760		
2001	63323		
2000	67555		
1999	60796		

33. Programmer / Analyst

Responsible for programming in one of several commonly used languages such as C and/or C++ used in the industry. Will participate in the design and implementation of new and augmented systems. Typically requires B.S. Computer Science or related and entry level to three years experience.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
39544	51549	56779	All
2002	45802		
2001	43590		
2000	54474		
1999	46387		

34. Computer Processing Technician

Responsible for processing digitized data gathered from stereoplotters and other sources. Digitize and scan into graphical information that can be accessed by Graphic Workstation Operators to complete a mapping project. Typically requires Associates degree or higher and entry level experience.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
31135	39870	44955	All
2002	36484		
2001	32705		
2000	39153		
1999	27930		

35. Planner

Participates in the development, analysis and completion of planning projects. Specialization may be in city/urban planning, architecture, engineering, economics, sociology, public administration, photogrammetry, or cartography. Typically requires B.S. in related field and entry level to five years experience.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
39595	53009	62124	All
2002	47530		
2001	46485		
2000	43622		
1999	40325		

36. Sales Representative

Responsible for generation of sales opportunities in the mapping products/services industry. Will make direct contact with potential customers and close long-term contracts. Typically requires B.S. degree and successful sales experience in a technical products or services industry. Geography background is highly desirable.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
44252	60154	83603	All
2002	66128		
2001	60612		
2000	59576		
1999	54786		

Base salary without commissions or incentives.

37. Market Analyst/ Research Specialist

Responsible for market research in support of Sales and Marketing Department. Collect data; use GIS tools in processing and analysis of data. Write reports and make presentations regarding results and recommendations. Typically requires B.S. degree and market research experience using GIS tools.

Lowest Salary in the range by policy	Actual Average Salary	Highest Salary in the range by policy	Location
38900	44222	58300	All
2002	54222		
2001	52703		
2000	48126		
1999	44365		

Addendum I.

The following cost-of-living data is the 100% Composite Index from the 3rd Quarter, November, 2003 ACCRA Cost-of-living Index and represents the composite of all cost-of-living categories. The figure 100.0 represents the national average. Ninety-nine (99.0) represents 1% below average cost-of-living. One hundred one (101.0) represents 1% above average cost-of-living.

Montgomery, AL	93.0
Huntsville, AL	93.1
Fairbanks, AK	125.3
Juneau, AK	128.3
Flagstaff, AZ	107.0
Phoenix / Mesa, AZ	97.2
Little Rock, AR	87.7
Fayetteville, AR	94.7
Los Angeles, CA	147.4
Riverside, CA	117.0
San Diego, CA	138.0
San Francisco, CA	181.0
Boulder, CO	117.4
Colorado Springs, CO	99.0
Denver, CO	105.2
Pueblo, CO	89.1
Hartford, CT	121.5
Stamford, CT	150.1
Washington, DC Area	137.7
Fort Lauderdale, FL	121.6
Gainesville, FL	104.0
Jacksonville, FL	91.0
Orlando, FL	99.0
Tampa-St. Petersburg, FL	95.2
Atlanta, GA	96.9
Savannah, GA	96.4
Honolulu, HI	154.4
Boise City, ID	95.8
Pocatello, ID	89.1
Champaign-Urbana, IL	95.3
Chicago, IL	131.1
Springfield, IL	94.1

Indianapolis, IN	92.4
Lafayette, IN	94.4
Cedar Rapids, IA	93.6
Davenport-Moline-Rock Island	95.5
Topeka, KS	92.4
Manhattan, KS	97.3
Lexington, KY	96.1
Louisville, KY	91.3
Baton Rouge, LA	100.4
New Orleans, LA	98.5
Baltimore, MD	94.0
Bethesda, MD	127.9
Boston, MA	135.0
Worcester, MA Metro	112.2
Detroit, MI	100.3
Grand Rapids, MI	98.1
Minneapolis-St. Paul, MN	110.2
Rochester, MN	97.7
St. Cloud, MN	99.5
Biloxi - Gulfport, MS	94.4
Jackson, MS	93.9
Kansas City, MO	97.0
St. Louis, MO	103.8
Billings, MT	97.7
Missoula, MT	99.6
Lincoln, NE	97.9
Omaha, NE	93.0
Las Vegas, NV	105.6
Reno, NV	104.5
Albuquerque, NM	106.3
Santa Fe, NM	119.8
Buffalo, NY	99.4
NYC, NY	219.1
Syracuse, NY	99.3
Ashville, NC	99.3
Cary, NC	96.7
Charlotte, NC	96.3
Raleigh-Dur-Chapel Hill, NC	114.8

Bismark, ND	93.0
Grand Forks, ND	94.5
Akron, OH	94.8
Cleveland, OH	101.5
Bartlesville, OK	90.6
OKC, OK	92.0
Corvallis, OR	108.1
Eugene, OR	108.6
Portland, OR	111.9
Johnstown, PA	91.5
Philadelphia, PA	120.4
Pittsburgh, PA	97.6
Charleston, SC	97.4
Myrtle Beach, SC	96.8
Sioux Falls, SD	95.0
Chattanooga, TN	91.7
Memphis, TN	89.5
Austin, TX	93.0
Dallas, TX	96.0
Houston, TX	90.9
SLC, UT	102.7
Charlottesville, VA	106.8
Richmond, VA	100.3
DC / Northern VA	114.9
Bellingham, WA	105.9
Olympia, WA	99.1
Spokane, WA	102.1
Charleston, WV	91.6
Huntington - Ashland	93.5
Appleton, WI	94.7
Eau Claire, WI	99.0
Milwaukee, WI	101.7
Cheyenne, WY	104.0
Laramie, WY	100.8

Recruiters in the Space and Geographic Sciences

GeoSearch, Inc.

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www.geosearch.com
Jessica@geosearch.com

Services

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You may post a single position advertisement on our heavily visited website. We will contact all qualified prospective candidates from our extensive database of active resumes. Works great for entry to mid-level technical positions!

\$195.00 / 30 days. No additional placement or hiring fees. Bulk ad posting rates available.

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List up to 5 jobs!

We will build a page on our website. A description of your company / agency and logo will be included, along with as many as five position listings. Prospective candidates will apply directly on line and the resume will go to an email address that you designate.

\$498.00 per month / No additional placement fees / No limit to the number of hires

GeoAd

We will search our 45,000+ candidate database and send (email or FedEx or both) resumes of 20 qualified prospects within 48 hours. These become your initial prospect pool to contact and invite into the selection process. We will also promote your position for 30 days and forward any new resumes to your attention as they are received. A terrific tool for the Internal Recruiter who needs a prospect pool quickly!

\$1,650.00 one-time fee. No limit to the number of hires. No additional placement fees.

Retained Search – Our Full Service Option – A full-time recruiter working on your project

We do all of the up front work. We will recruit, telephone interview and forward only those candidates who meet your selection criteria, fit within the wage/salary range for the position, and have indicated an interest in the position and location. We will also arrange for any pre-interview testing that may be required for some technical positions. This is our most aggressive recruitment service for the difficult positions such as Photogrammetry, DoD / Clearances required, and positions with an uncommon skill set. Fees determined on a case-by-case basis.

Contingency Search

Fee: 25% of base annual salary.

Contract Employees – Temp to Hire

GeoSearch, Inc. becomes the 'Employer-of-Record' for the duration of your project or your Company may elect to hire people on a 1099 basis, whichever works best for you.

The Right Person ... Right Now!