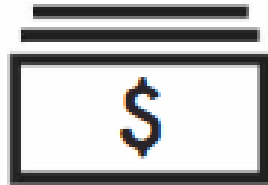




# MAGIP

Montana Association of Geographic Information Professionals



## 2021 Salary Survey Results

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## **Introduction**

In 2021 the Montana Association of Geographic Information Professionals (MAGIP) conducted a salary survey to collect a snapshot of the current state of GIS salaries in Montana. The survey was sent out to the MAGIP ListServe, an email list that is free for anyone interested in GIS in Montana. The survey had 169 respondents and asked a variety of questions about the workplace and compensation where they are employed.

## **Background**

MAGIP first performed a salary survey in 2018. These surveys were performed in order to fill a need in the Montana GIS community. The 2018 survey was largely influenced by previous URISA Salary Surveys that were performed on a larger regional scale. Realizing that larger regional results didn't capture the unique characteristics of GIS professionals in Montana a state-wide survey was created. This is the second Montana GIS salary survey and efforts we made to try and make as many questions comparable year-to-year as possible. However, some of the questions evolved to fit the current trends in the professional arena.

## **Survey Results**

This survey was an improvement from the 2018 survey with more people completing the survey in 2021. Generally speaking, we have seen an increase in compensation since 2018 as well as growth in the government sector. The average salary of the respondents was \$59,615/yr and most respondents received at least health insurance and paid time off (PTO) as benefits. The responses also indicated increasing numbers of GIS analysts and GIS managers since 2018, perhaps indicating increasing maturity of the GIS field.

## Executive Summary

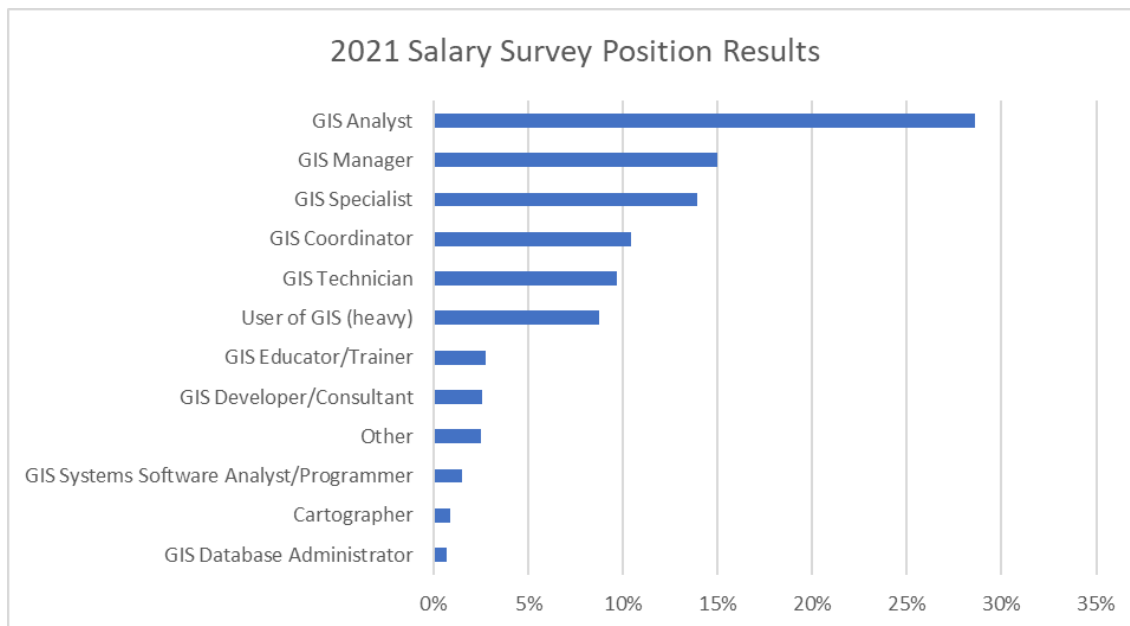
This survey captured the current state of GIS positions, salaries, demographics, and benefits in Montana. The following are a few takeaways to summarize the results that will go into more detail in the subsequent pages.

- State Government made up the largest group of responses for organization type (25%), followed by county government, private sector, and city government. NGO/Non-profits and Tribal agencies had the fewest respondents to the survey.
- GIS Analyst strongly represented as the largest position category (29%). GIS Manager (15%) and GIS Specialist (14%) rounded out the top three position categories from the survey. GIS Database Administrator, Cartographer and GIS Systems Analyst/Programmer were the fewest position categories from the survey.
- There was clear balance of GIS experience with a blend of lesser experience GIS professionals with more experienced. The top four experience ranges made up 78% of the total response and only 5 percentage points separated the response group, with 11-15 years receiving the most by only a few votes (22%), 2-5 years (21%), 6-10 years (18%) & >20 years (17%).
- GIS staff sizes are on the rise, a trend identified in this survey. From the 2018 to 2021, two response groups saw an increase, 7+ staff increased from 25% to 32% and 3-4 increased from 19% to 22%. Additionally, the survey indicated 51% of respondents are employed by an organization that saw an increase in the number of GIS positions (since 2018).
- There was a wide range of average salary amongst respondents as the survey was broken into \$5,000 salary range groups. With the response data being so clustered together when it came to salary there was not much take away from evaluating the salary ranges independently. Many of the salary ranges varied by position where the ranges could more easily be distinguished from one another. The GIS Developer/Consultant position earns the highest amount of average salary (\$75,833) followed by GIS Manager (\$73,333), GIS System Analyst/Programmer (\$67,500), GIS Database Administrator (\$62,500), GIS Educator/Trainer (\$61,250), GIS Analyst (59,880), GIS Coordinator (\$57,343), and the remaining five position categories earn under \$57,000 of an average salary per year.
- An uptick in the number of benefits offer their employees, as more individuals responded saying their employer offers 401K (51%, up 2%), paid training (80.1, up 13%) and tuition reimbursement (19.9%, up 4%) in addition to the two most popular benefits offers health insurance (98%) and paid time off (94%).
- The usage of ArcGIS Pro increased significantly from the period of 2018 to 2021, 43% to 87%, an increase of 44%.

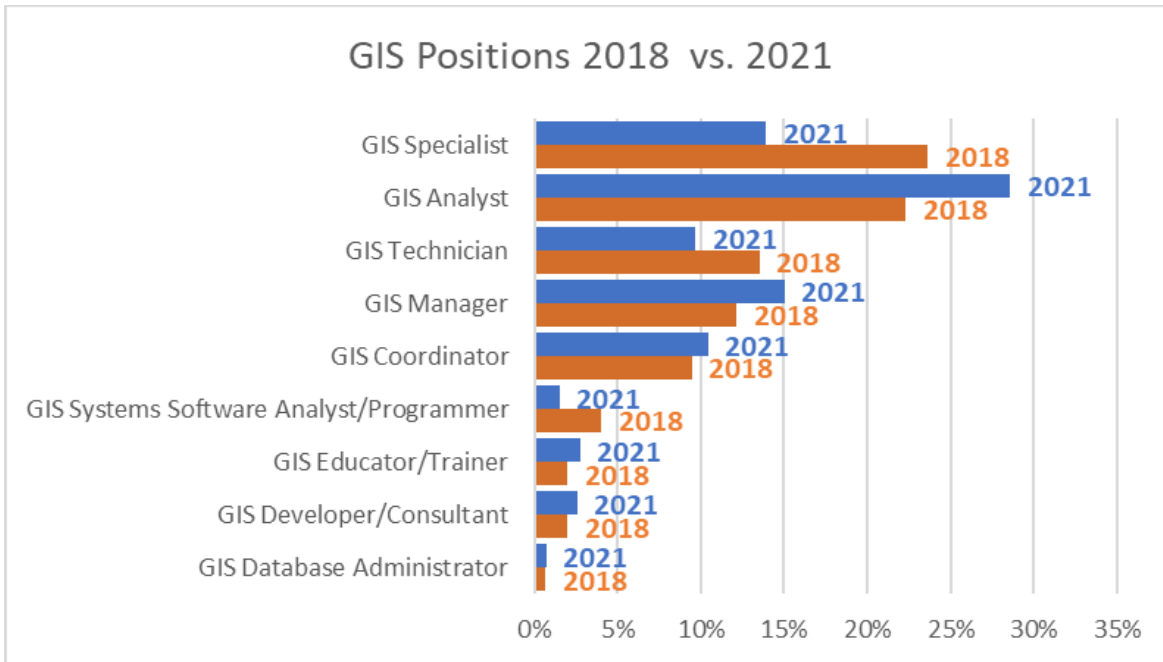
## GIS Positions

Q1: Which of the following job positions most closely describes your employment situation?

Position	% Respondents	Average of Salary
GIS Developer/Consultant	3%	\$ 75,833.33
GIS Manager	15%	\$ 73,333.33
GIS Systems Analyst/Programmer	2%	\$ 67,500.00
GIS Database Administrator	1%	\$ 62,500.00
GIS Educator/Trainer	3%	\$ 61,250.00
GIS Analyst	29%	\$ 59,880.95
GIS Coordinator	10%	\$ 57,343.75
Other (please specify)	3%	\$ 55,625.00
User of GIS (heavy)	9%	\$ 54,821.43
GIS Specialist	14%	\$ 53,260.87
GIS Technician	10%	\$ 44,868.42
Cartographer	1%	\$ 40,000.00



Survey respondents in 2021 were strongly represented by GIS Analysts (29% of respondents). GIS Managers and Specialists were around 15% of the respondents. There are clearly fewer GIS education and programming type positions in survey respondents, while the majority of respondents fell into relatively “typical” positions, with only 3% of the respondents chose “Other”.



A comparison of 2021 GIS Positions and 2018 GIS Positions show relatively few differences in respondents with a couple exceptions. In 2018 GIS Specialists were the dominant GIS position in Montana. By 2021 GIS Specialists were the 3rd most common position, usurped by GIS Analysts and Managers. It is unclear what caused this change, but three potential reasons may be: job role changes for different employers (i.e. reclassify Specialists to Analyst), shifts in GIS needs within the state, or as the industry grows there is a greater need for GIS Managers and Analysts.



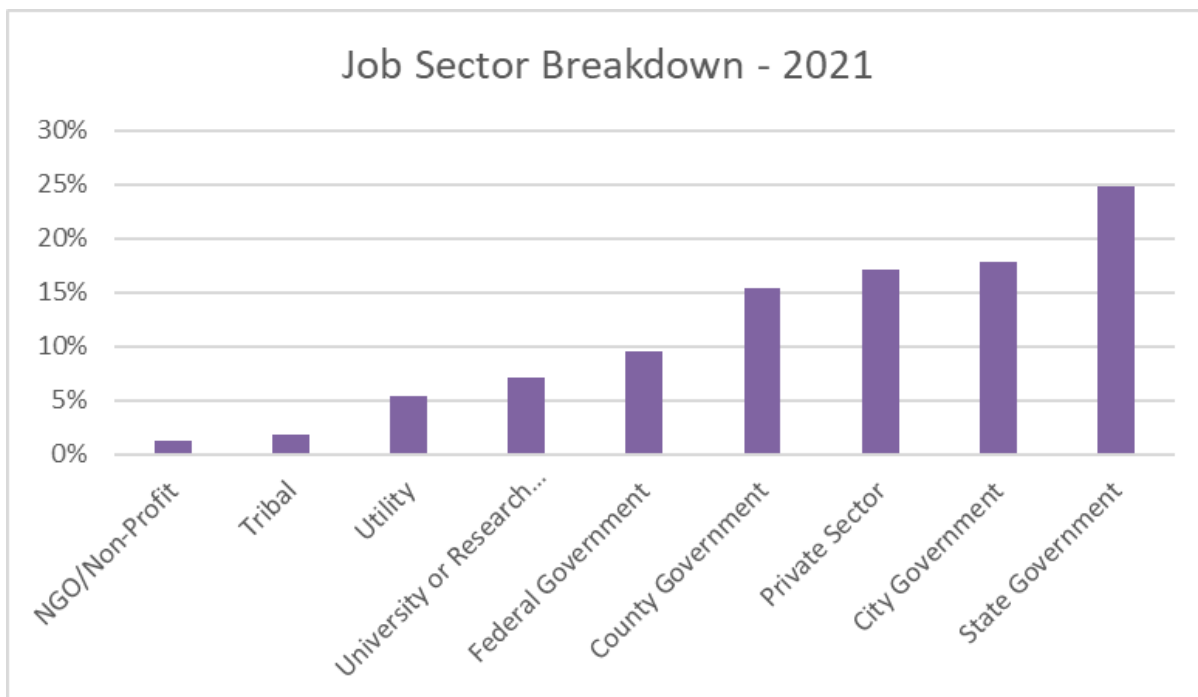
Looking at average salary by position, we don't see many surprises. As expected, GIS developers/consultants earned the highest salary, followed closely by GIS Managers. On the opposite side of the spectrum, we see cartographers and GIS technicians making lower salaries. These differences are likely a result of less training

and experience for GIS technicians. There were very few cartographer respondents which likely is skewing the cartographic salary lower. Cartographic positions may also have fewer GIS requirements to focus more on graphic design of maps.

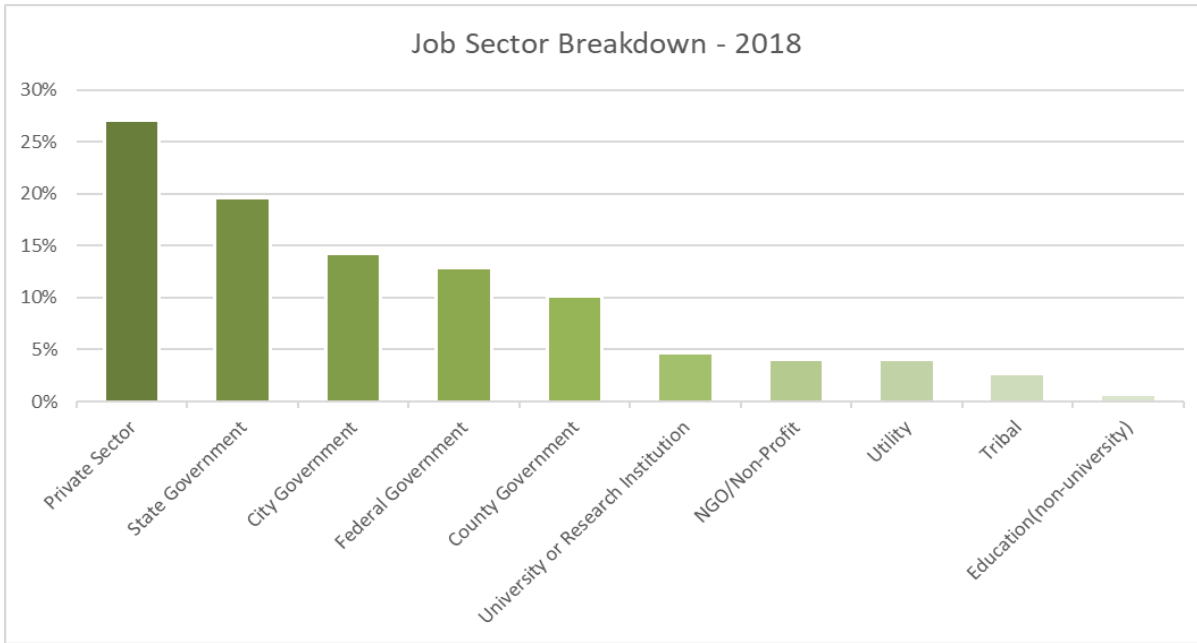
## Organization Type

**Q2: What category best describes the type of organization where you are employed?**

Organization Type	% Respondents
NGO/Non-Profit	1%
Tribal	2%
Utility	5%
University or Research Institution	7%
Federal Government	9%
County Government	15%
Private Sector	17%
City Government	18%
State Government	25%



State government employees were the largest group to respond to the survey. This is likely because the State employs a large amount of GIS professionals and may be the largest GIS employer. City/County Government and the Private sector followed State Government workers with the next most respondents. NGO/Non-profits and Tribal agencies had the fewest respondents to the survey.



Comparing 2018 to 2021, the results show a 10% decrease in the number of Private Sector responses (27% in 2018 vs. 17% in 2021). However, the State and Local government respondents increased. This suggests a potential shift in GIS employment in Montana, with professionals moving out of the private sector and into local and state governments.

Organization Type	Average Salary
Federal Government	\$ 79,687.50
NGO/Non-Profit	\$ 68,750.00
Utility	\$ 65,000.00
Private Sector	\$ 62,068.97
State Government	\$ 60,833.33
City Government	\$ 54,083.33
University or Research Institution	\$ 53,333.33
County Government	\$ 51,057.69
Tribal	\$ 44,166.67

Looking at average salary by organization, we see that Federal employees have the highest approximate salary average. Tribal and County organizations have the lowest average pay for GIS staff, while the State government holds the median salary rate.

## Department

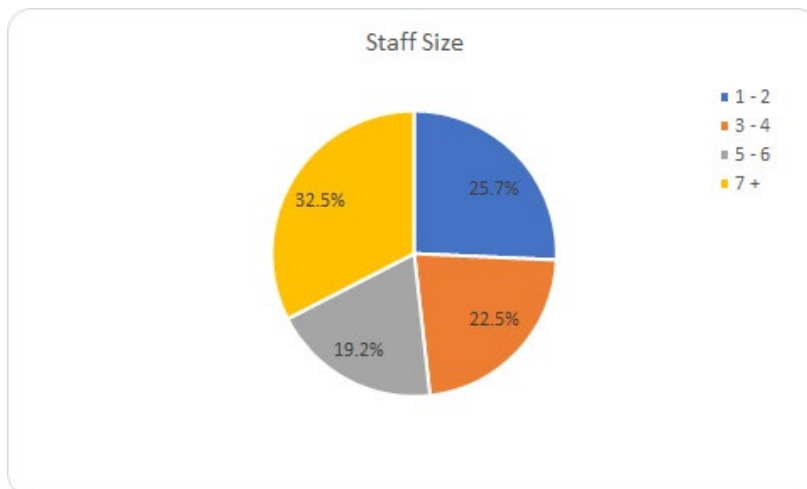
### Q3: What department do you work under?

What department do you work under?	% Respondents
GIS	29.14%
Natural Resources	17.22%
IT	13.25%
Other (please specify)	11.92%
Planning	7.95%
Engineering	4.64%
Environmental	3.31%
Public Works	3.31%
Assessor's Office	2.65%
Community Development	1.99%
No department designation	1.99%
Transportation	1.99%
Finance/Administration	0.66%

Nearly 1/3 of respondents work in a designated GIS department. Natural resources and IT were the two other most common departments respondents were most likely to work under. "Other" departments were the fourth most common department to work under, which may indicate that we need to provide more options for departments.

## Staff Size

### Q4: How many GIS staff members are in your organization?



Staff Size	2018	2021
1 - 2	35.1%	25.7%
3 - 4	19.6%	22.5%
5 - 6	19.6%	19.2%
7 +	25.7%	32.5%

The breakdown of responders who indicate how many work in GIS within their organization is relatively even and is broken up by four general categories: 1-2, 3-4, 5-6, and 7+ GIS staffers. As shown above, the categories with the greatest response amount come from either extreme, from a large GIS staffed organizations or organizations of only one or two staffers. Those two leading categories represent 58.2 percent of the total.



## Staff Trends

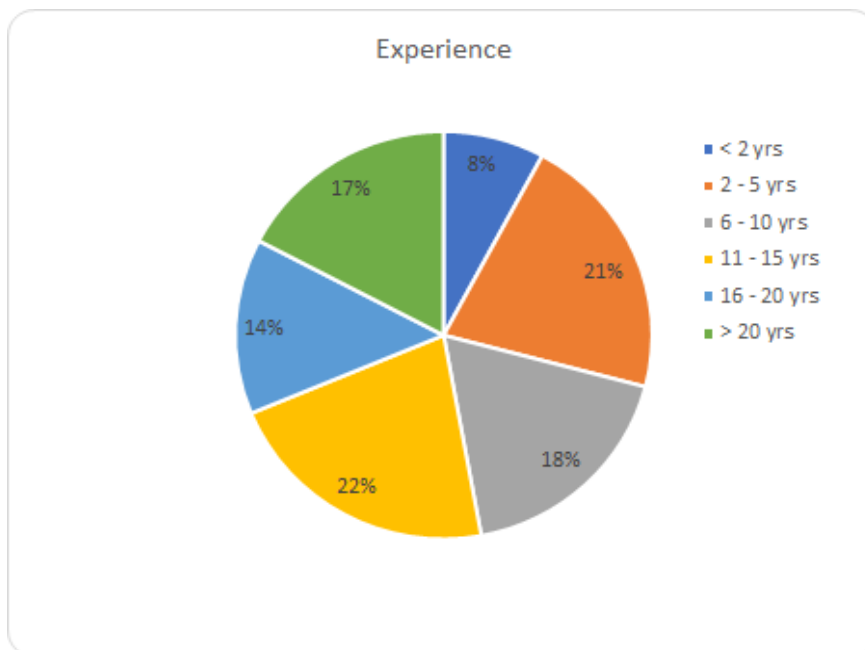
Q5: Since the beginning of 2018, has your organization increased or decreased the total number of GIS staff members?

GIS Staff since 2018	Number Responses
Decreased	12
Increased	75
Stayed the same	60

The vast majority of respondents saw their GIS staff increase or stay the same since 2018. This indicates a stable or growing GIS industry in Montana from 2018 to 2021.

## Experience

Q6: How many years of professional GIS experience do you have?

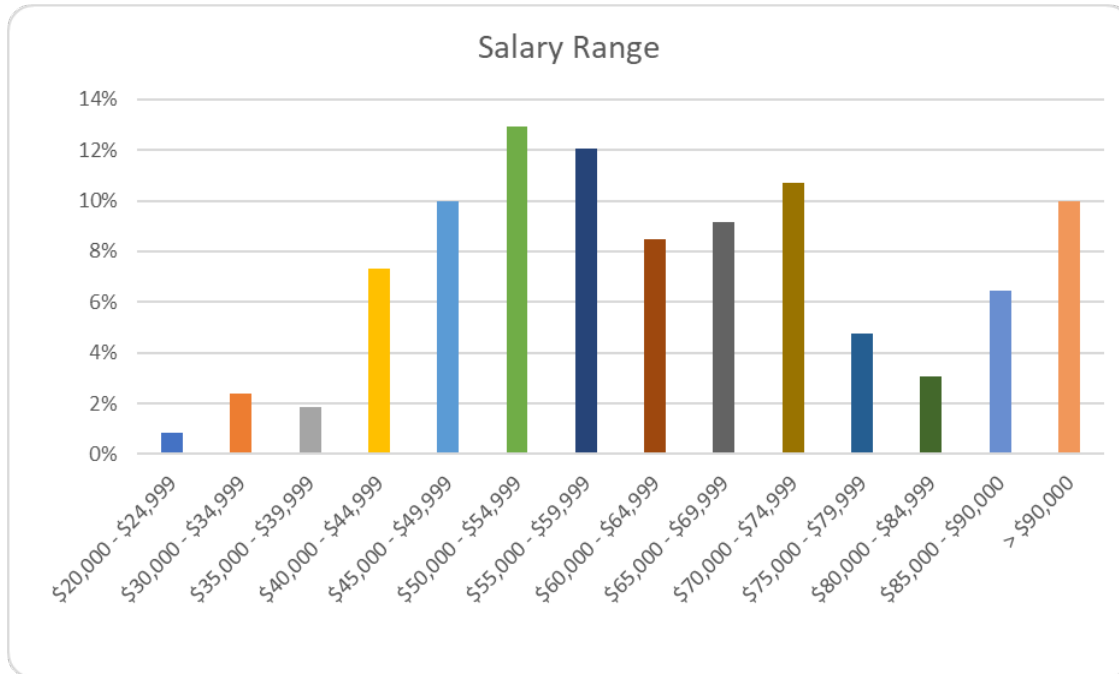


There is a balance between nearly all of the experience year ranges amongst those surveyed, with the exception of less than 2 years. With only a few votes separating the top two groups of 2-5 years and 11-15 years, garnering 22 & 21% of the response, this survey indicates that the industry metric of experience is still fairly young.

Though the response ranges are laid out differently for the 2018 survey results making it more difficult to make a lateral comparison, the 11-20 years of experience had a very similar comparison garnering 33% of respondents in 2018 compared to 2021 results, the 11-20 years of GIS experience (combining two response categories together) garnered 35% of the response.

## Salary Range

Q7: In which range does your current annual salary fall within?

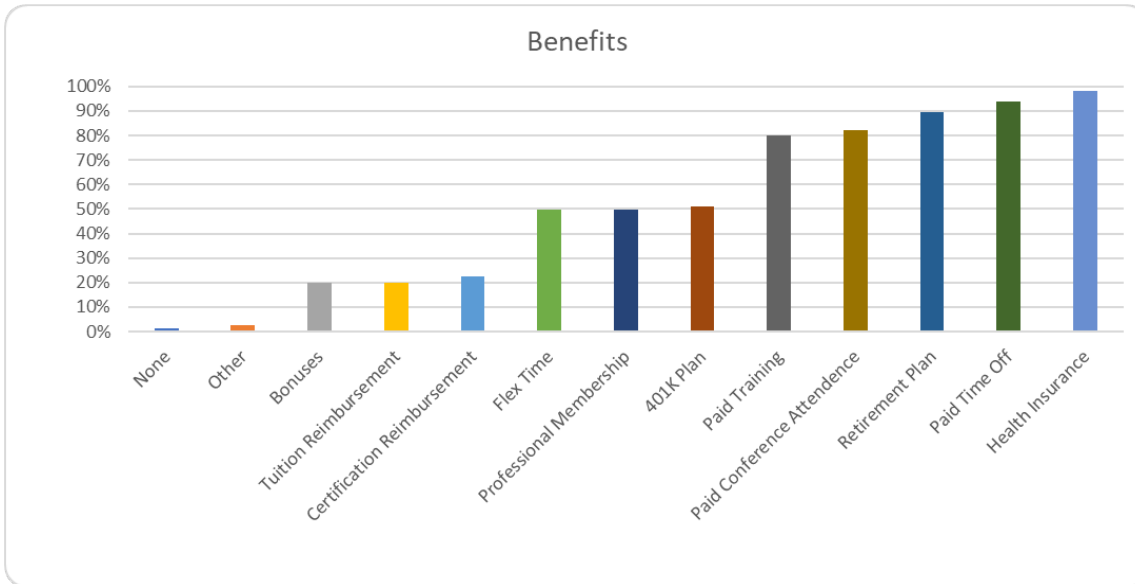


Salary Range	% Respondents
\$20,000 - \$24,999	0.83%
\$30,000 - \$34,999	2.40%
\$35,000 - \$39,999	1.85%
\$40,000 - \$44,999	7.33%
\$45,000 - \$49,999	9.95%
\$50,000 - \$54,999	12.94%
\$55,000 - \$59,999	12.05%
\$60,000 - \$64,999	8.47%
\$65,000 - \$69,999	9.15%
\$70,000 - \$74,999	10.72%
\$75,000 - \$79,999	4.78%
\$80,000 - \$84,999	3.05%
\$85,000 - \$90,000	6.47%
> \$90,000	9.98%
<b>Grand Total</b>	<b>100.00%</b>

Looking at the results, nearly 10% of respondents reported a salary of over \$90,000 annually, which is a considerable increase from the 2018 survey with only 8% of respondents reporting over \$75,000 annually. This reporting indicates the pay bands for GIS professionals are increasing and that the next iteration of the survey will need to account for this. Most respondents fall within the range of \$45,000 - \$60,000 annually. Overall, we believe this data is indicative of a positive upward trend for GIS salaries.

## Benefits

### Q8: What types of benefits does your employer provide?

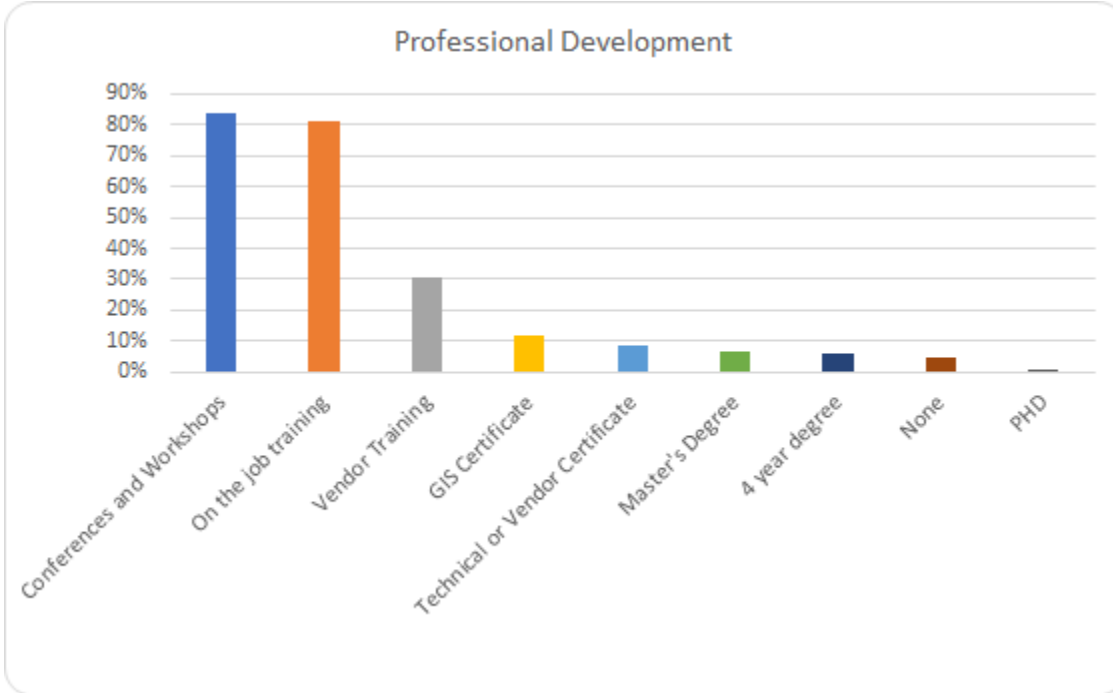


Benefit	% Respondents Reported Benefit
None	1.3%
Other	2.6%
Bonuses	19.9%
Tuition Reimbursement	19.9%
Certification Reimbursement	22.5%
Flex Time	49.7%
Professional Membership	49.7%
401K Plan	51.0%
Paid Training	80.1%
Paid Conference Attendance	82.1%
Retirement Plan	89.4%
Paid Time Off	94.0%
Health Insurance	98.0%

Looking at the results, core benefit staples like Health Insurance and Paid Time Off remain prominent in the industry. Minor upticks from the 2018 survey in the category responses for 401K, Paid Training, and Tuition reimbursement. These increases are minor but does show a trend in which employers are providing a wider array of benefits and flexibility.

## Professional Development

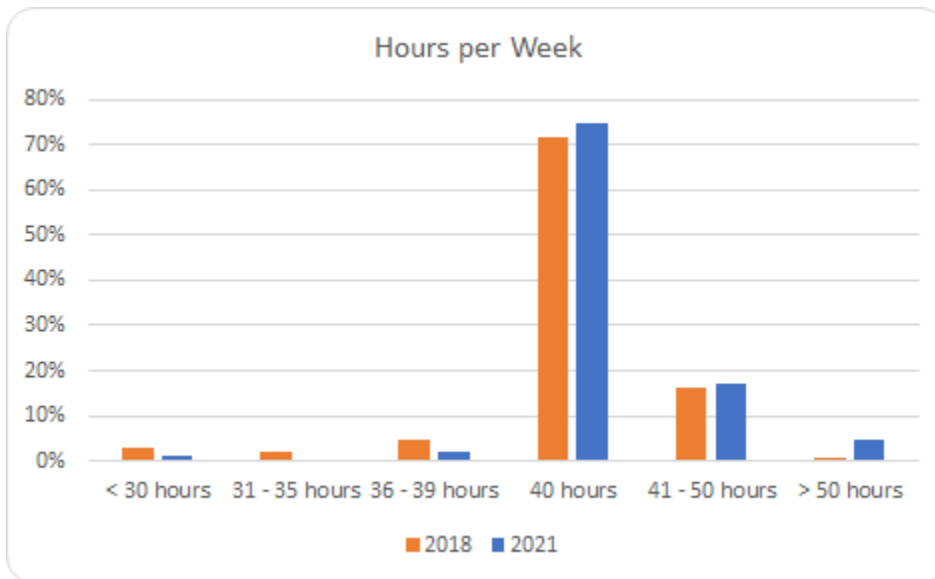
Q9: In the past 3 years, what types of continuing education and professional development have you acquired?



There is a clear trend within this year's results that over 80% of the respondents have acquired some of professional developments at conferences & workshops (83%) and on the job training (81%). Both of these two response categories are up from the 2018 survey, 78% and 74% respectively. Respondents that acquired either a GIS certificate (12%) or a master's degree (7%) are up from the 2018 survey, 8% and 6% respectively.

## Hours per Week

Q10: On average, how many hours do you work in a typical week?

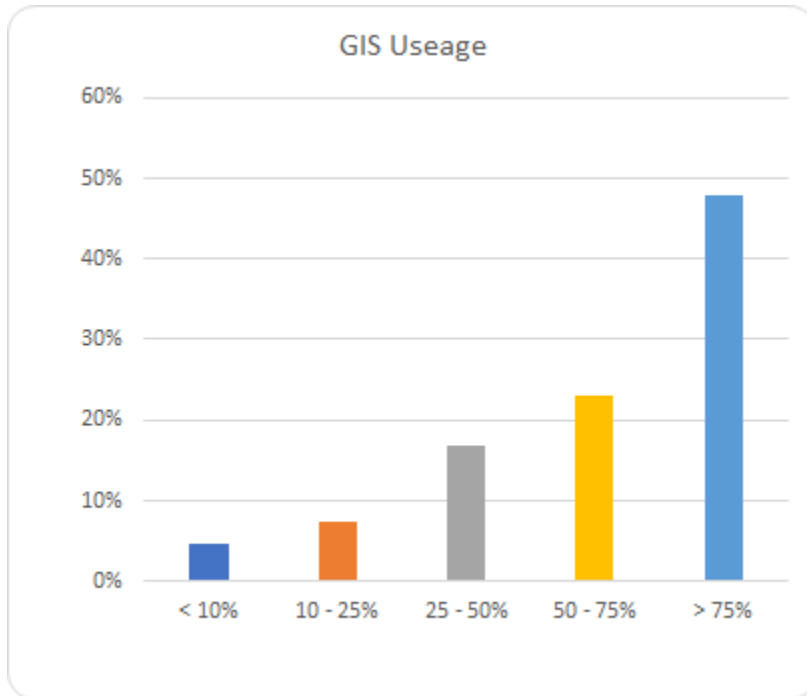


Hours per Week	2018	2021
< 30 hours	2.7%	1.3%
31 - 35 hours	2.0%	0.0%
36 - 39 hours	4.7%	2.2%
40 hours	71.6%	74.7%
41 - 50 hours	16.2%	17.0%
> 50 hours	0.7%	4.8%

It is clear that the vast majority of respondents work on average a 40-hour work week, while 21.8% work over a 40-hour work week. Compare these very same numbers to the 2018 results, both categories, mentioned previously, have increased. Two things that can be drawn from these results (1) there are more part-time positions being funded now as full-time GIS positions in Montana and (2) a 1/5th of GIS positions work over 40-hour work weeks due. Why does 1/5th of GIS positions work over 40-hours in a given week? I will let the readers hypothesize for themselves, the reason as to why.

## GIS Usage

Q11: On average, what percentage of your time involves the use of GIS?

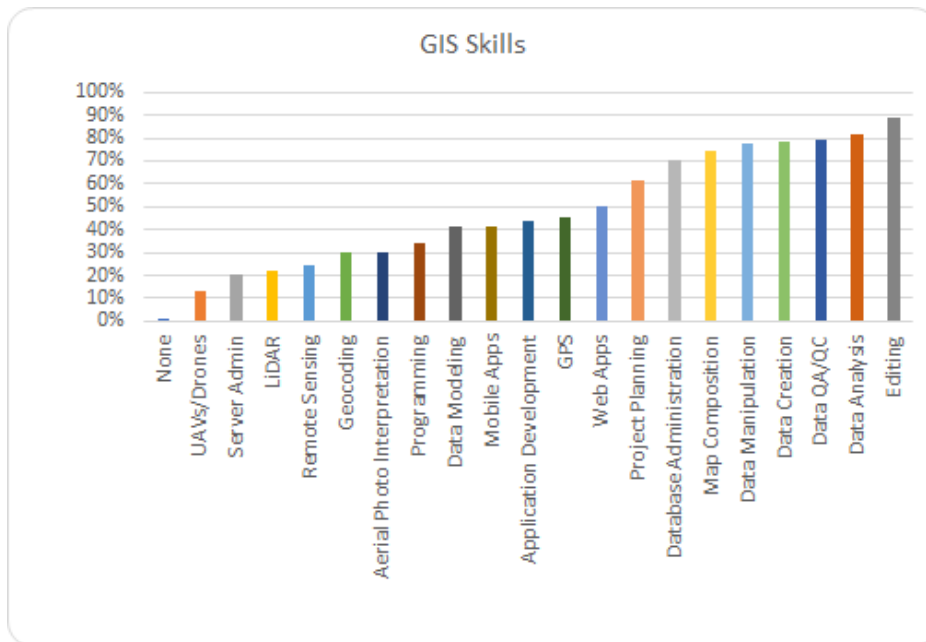


GIS Use	% Respondents	Average of Salary
< 10%	4.7%	\$40,000
10 - 25%	7.4%	\$67,045
25 - 50%	16.9%	\$57,800
50 - 75%	23.0%	\$62,206
> 75%	48.0%	\$57,289

The results indicate that nearly 50% of respondents use GIS on average over 75% of the time. The two other top three categories (25-50% & 50-75%) were over 25% less than 23% & 16.9%. An additional analysis of an average salary overlay indicates that neither of the top three categories earn the highest average salary but the second lowest category (10-25%) receiving only 7.4% of the survey response. This more than likely indicates that those within leadership positions in the GIS industry are much less active within the GIS suite of software than lower hierarchy GIS positions.

## GIS Skills

### Q12: What GIS skills are required for your job?

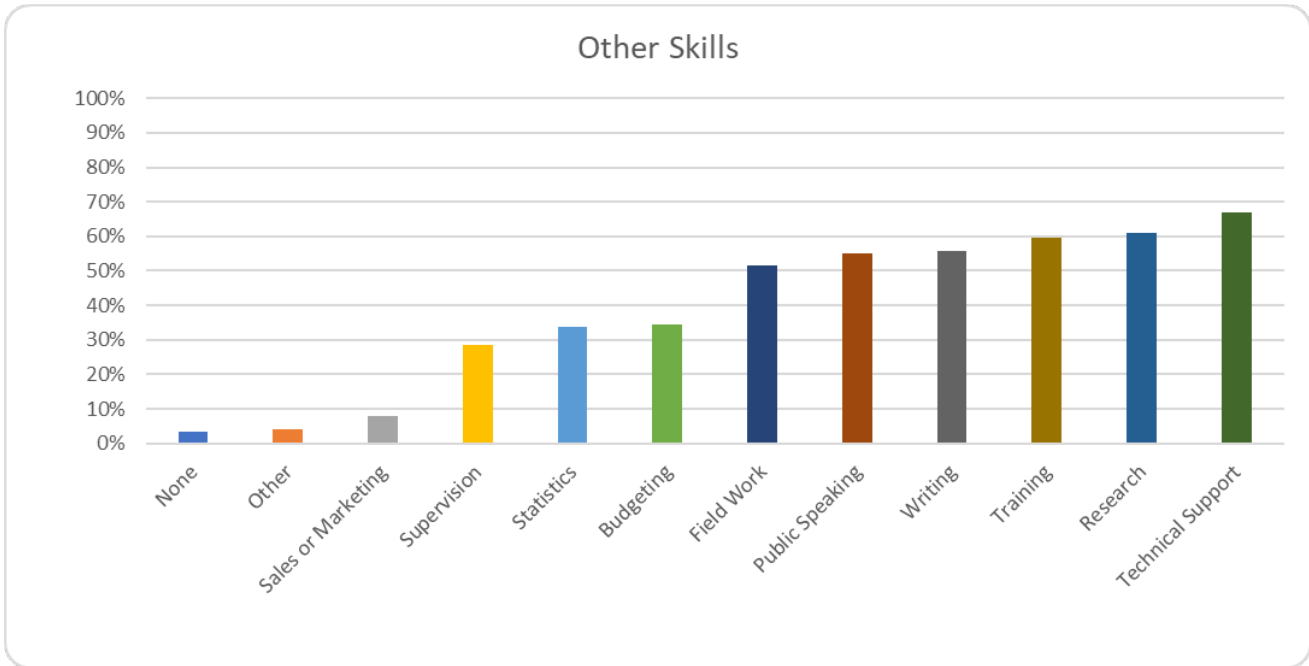


Skill	% Respondents
Editing	88.7%
Data Analysis	81.5%
Data QA/QC	79.5%
Data Creation	78.1%
Data Manipulation	77.5%
Map Composition	74.2%
Database Administration	70.2%
Project Planning	61.6%
Web Apps	50.3%
GPS	45.7%
Application Development	43.7%
Data Modeling	41.7%
Mobile Apps	41.7%
Programming	33.8%
Geocoding	29.8%
Aerial Photo Interpretation	29.8%
Remote Sensing	24.5%
LiDAR	21.9%
Server Administration	20.5%
UAVs/Drones	13.2%
None	1.3%

Results indicate that the vast majority of respondents are required to be skilled in editing, data analysis, data QA/QC, data creation, data manipulation, map composition and database administration; the mentioned skills garnered over 70% of responses. There were no major changes in responses from the 2018 to 2021 survey results. These sets of skills are well known as industry standards but more modern skills are becoming increasingly popular such as skills pertaining to LiDAR and UAV/Drones.

## Other Skills

Q13: What additional skills are required for your job?



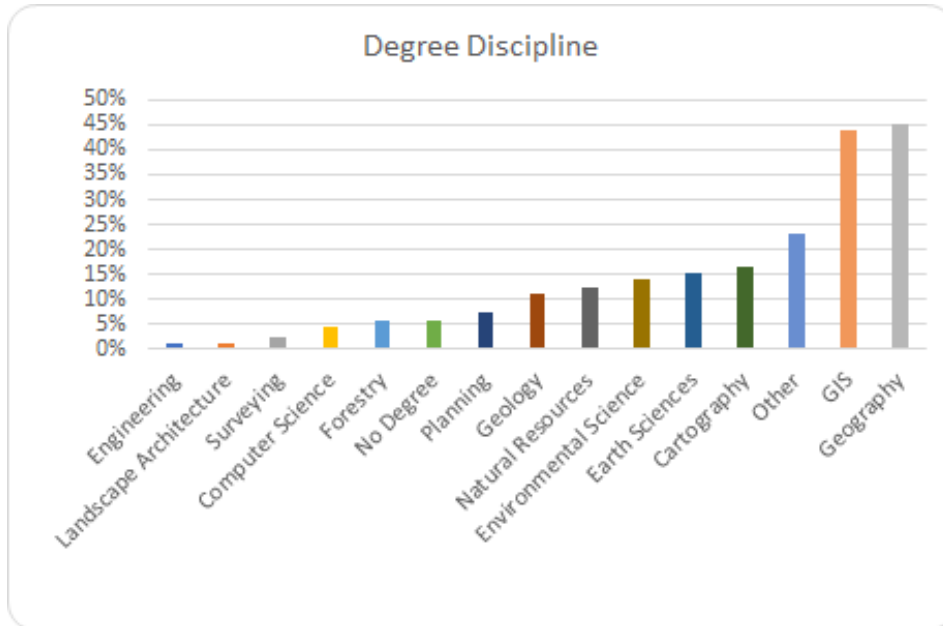
Other Skills	% Respondents Reported Skill
None	3.3%
Other	4.0%
Sales or Marketing	7.9%
Supervision	28.5%
Statistics	33.8%
Budgeting	34.4%
Field Work	51.7%
Public Speaking	55.0%
Writing	55.6%
Training	59.6%
Research	60.9%
Technical Support	66.9%

Results indicate that many of the respondents also provide overarching technical support for their organizations in addition to their main duties. Ability to train staff on GIS and technology also is a key skill. One skill with surprising results is sales and marketing. As the GIS industry continues to become a core piece of business processes GIS professionals will need to have the ability to sell GIS to internal and external clients.



## Degree Discipline

Q14: In what discipline did you receive your educational degree?



Degree Discipline	% Respondents
Geography	45.0%
GIS	43.7%
Other	23.2%
Cartography	16.6%
Earth Sciences	15.2%
Environmental Science	13.9%
Natural Resources	12.6%
Geology	11.3%
Planning	7.3%
Forestry	6.0%
No Degree	6.0%
Computer Science	4.6%
Surveying	2.6%
Engineering	1.3%
Landscape Architecture	1.3%
<b>Notable Other Responses:</b>	
Biology 4%, Mathematics 4%, Business 3.3%, Public Admin 1.3%, Environmental Policy 1.3%, Education 1.3%, Music 1.3%, Anthropology 1.3%	

Geography and GIS degree disciplines were the two highest surveyed categories (45% & 43.7%). Though many of these disciplines are either integrated together or are common discipline aliases. While analyzing these results, the “Other” option was the third highest category at 23.2%. Among those other disciplines listed (the notable ones are listed in the above table) biology, mathematics and business-related degrees received the highest total votes. It is interesting that the wide variety of degree disciplines spreads much wider than degrees associated or linked with GIS.

## GISP

### Q15: Are you currently a certified GIS Professional (GISP)?

GISP	% Respondents	Average Salary
No	78.1%	\$56,701.68
Previously was, but did not renew	6.0%	\$65,312.50
Yes	15.9%	\$65,476.19

These results also include average salary to provide insight on if the GISP can impact monetary compensation for employers. The numbers suggest that those with or who used to possess a GISP do have a slightly higher average salary. However, with less than 16% of respondents indicating that they currently possess a GISP shows that many professionals still do not see a need for the added certification on top of their education.

### Q16: If you selected "no" for question #15, do you plan on applying in the next three years?

GISP in the next three years?	% Respondents
No	27.95%
Undecided	11.68%
Unsure	25.02%
Yes	14.21%
(blank)	21.14%

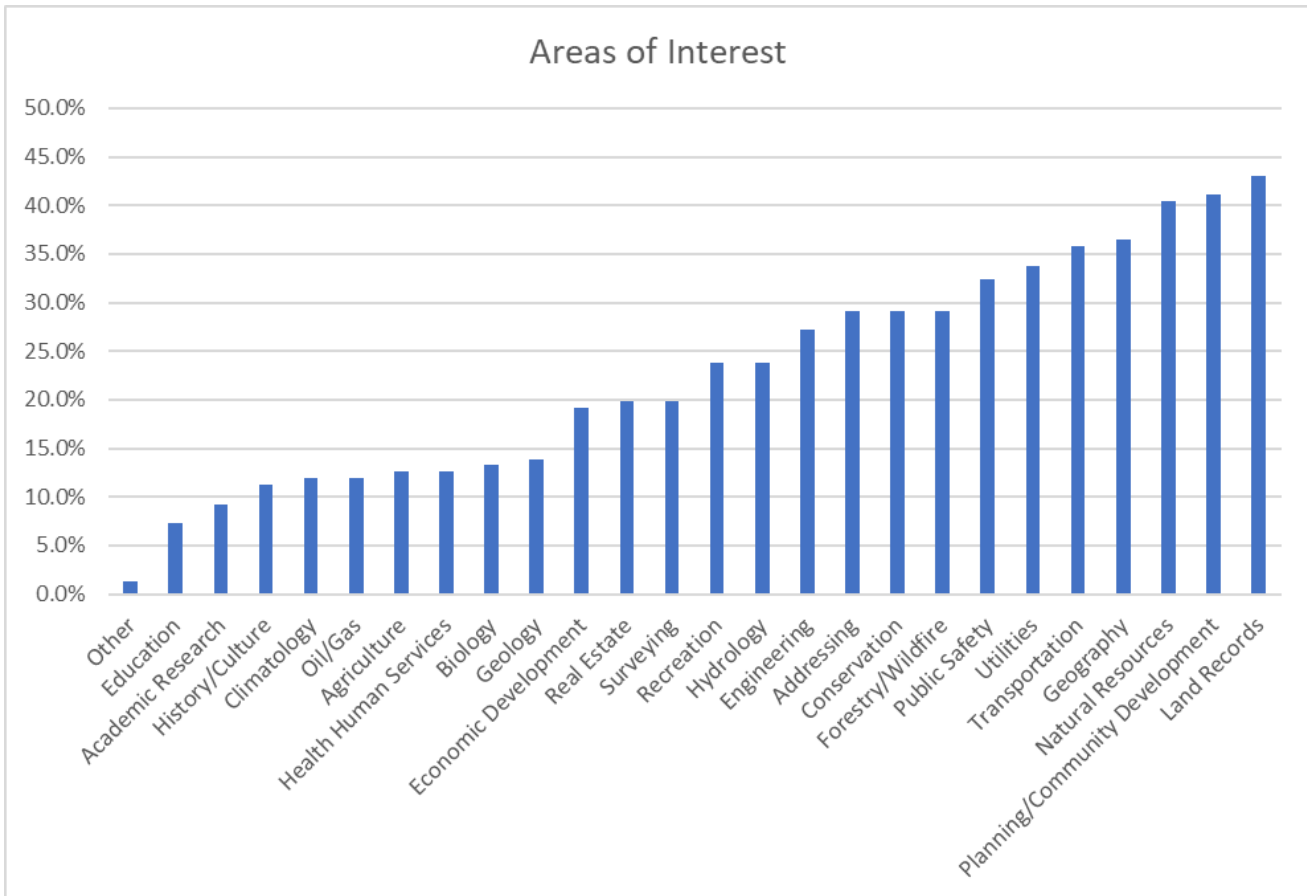
With a low percentage of respondents indicating that they will pursue the GISP certification, outreach and education on the benefits of the certification may be needed.

### Q17: If you selected "yes" for question #15, do you plan to renew your GISP when it expires?

GISP Renewal?	% Respondents
If no, what is your reason why (please s	0.28%
No	0.68%
Undecided	6.69%
Yes	18.71%
(blank)	73.65%

## Areas of Interest

Q18: What areas of interest does your job relate to?



A slightly different slant on work is the segmented 'Areas of Interest' where multiple answers could be selected by poll takers. One could extrapolate that the majority of subjects were based in local government and environmental science based employment with high percentage concentration on subjects such as Land Records and Planning, with Geography, Forestry and Conservation getting a lot of attention.

Compared to the 2018 Salary Survey there is very little difference between responses. A small uptick in Public Safety, Addressing and Health and Human Services.

## ESRI Software

### Q19: What ESRI software does your job use?

ESRI Product	% Respondents
ArcGIS Pro	87%
ArcGIS Online	80%
ArcMap/ArcCatalog	78%
Collector/ Field Maps / Workforce	57%
Spatial Analyst	48%
Survey123	46%
Dashboards	41%
Enterprise	33%
Modelbuilder	33%
Portal	31%
3D Analyst	28%
Hub/Sites	28%
Network Analyst	21%
ArcGIS API	14%
Legacy Esri software	11%
ArcGIS Developer	8%
ArcReader	8%
Insights	4%
Drone2Map	3%
Other	3%

87% of the respondents use ArcGIS Pro in their job. 80% of the respondents use ArcGIS Online, showing that the majority of GIS professionals who use ESRI software have made the switch to ArcGIS Pro and ArcGIS Online. There is still considerable overlap with ArcMap/ArcCatalog indicating that ESRI software users are using both ArcMap/Catalog and ArcGIS Pro. GIS professionals could be using both types of software because of missing functionality in ArcGIS Pro, integration with 3rd Party Software, familiarity with ArcMap GUI, customization, etc. These results also show there is a substantial field component in the GIS profession in Montana. Over half of the respondents use ESRI field mapping software such as Collector, Field Maps, or Workforce.

Our results also suggest that Drone mapping is nascent or users are relying on other software vendors for Drone mapping purposes. There is also low use of ESRI Insights, which may be a result of this software extension being fairly new and specific.

Compared to the 2018 Salary Survey, the usage of ArcGIS Pro increased significantly from 43% to 87%, an increase of 44%.

## Other Software

### Q20: What other non-ESRI software does your job use?

Software	% Respondents
Python	51.0%
DBMS	35.1%
Google Earth Engine	25.2%
Drafting Software	23.2%
Asset Management	20.5%
QGIS	17.2%
Remote Sensing	15.2%
Drone Deployment	11.9%
Planning Software	10.6%
FME	10.6%
Utility Infrastructure	10.6%
MSAG	9.3%
GNSS Mobile	7.9%
Open Street Maps	7.9%
Other	7.3%
None	6.6%
LEO/Dispatch Software	6.0%
GNSS Desktop	6.0%
GRASS GIS	4.6%
Global Mapper	4.0%
OpenLayers	1.3%

Asset management and Google Earth Engine software were the most heavily used non-Esri based tools compared to the 2018 report. For the 2021 survey these two selections became actual options rather than being manually entered and placed under the 'other' category as was done in the 2018 report. Cityworks is an example of one popular Asset Management software used especially within small government and utility organizations.

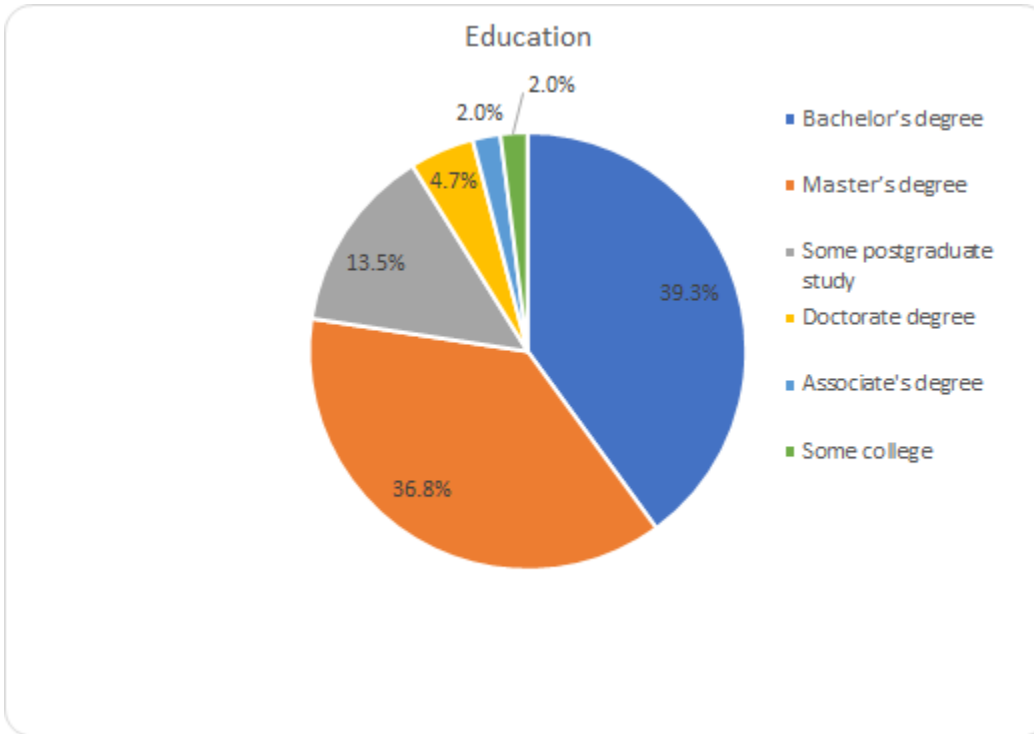
Another new option for the Non-Esri Software category selection is Python. Though, more of a high-level coding language than a stand-alone software and integrated in many other software including Esri's ArcGIS Desktop, this came out the largest and overwhelmingly utilized among the GIS community. Even in 2018 this was a common mention within the 'Other' software category.

The ETL (Extract, Transform, and Load) software, FME, by Safe Software Inc, saw a significant rise in respondents saying they use this proprietary software at a rate from 6% in 2018 to 16%.

DBMS was the second largest non-Esri based product reported, though it is not known the predominant flavor of database most used. Though for GIS use these would typically need to be relational databases, where the following are common among users: Microsoft's SQL Server, Oracle, IBM's DB2 and the open source options PostgreSQL (PostGIS), MariaDB and MySQL.

## Education

Q21: What is the highest level of education you earned?



Education	% Respondents	Average Salary
Bachelor's degree	39.3%	\$55,738
Master's degree	36.8%	\$63,650
Some postgraduate study	13.5%	\$58,500
Doctorate degree	4.7%	\$81,500
Associate's degree	2.0%	\$43,750
Some college	2.0%	\$42,500
High school	1.6%	\$35,000

The results indicate that a bachelor's degree is the highest surveyed category (39.3%), closely followed by a master's degree (36.8%). Compared to the 2018 results, both bachelor's and master's degrees were fairly similar. The 'some postgraduate studies' category did receive an increase from 9% to 13.5%. This could indicate that an increase in surveyed individuals that are currently enrolled in a graduate program. It will be interesting with the next survey results if we see an increase in master's degrees as a result.

## GIS Certificate

**Q22: Have you completed a GIS certificate program as part of a degree at an accredited university?**

GIS Certificate	% Respondents	Average of Salary
No	66%	\$ 59,484.54
Yes as part of a Bachelor’s degree	22%	\$ 55,156.25
Yes as part of a Master’s degree or PhD	9%	\$ 65,178.57
Yes as part of an Associate’s degree	3%	\$ 39,500.00

The majority of survey respondents did not have a GIS certificate from an educational institution. In these results it’s difficult to glean if salaries are more reflective of education rather than having the certificate.

## Office Location

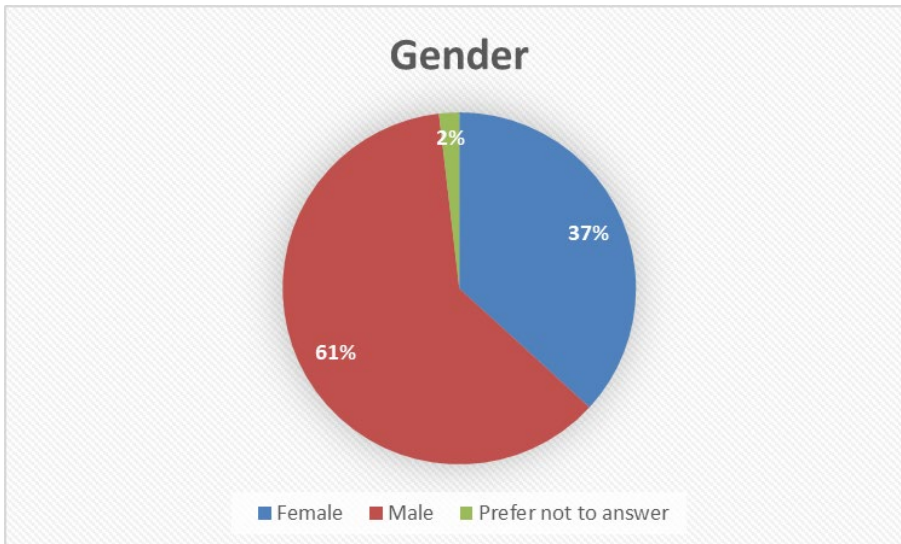
**Q23: What county is your office located in?**

County	Count
Lewis & Clark	36
Missoula	31
Gallatin	24
Yellowstone	14
Flathead	11
Cascade	6
Lake	5
Silver Bow	3
Blaine	2
Custer	2
Ravalli	2
Beaverhead	1
Carbon	1
Madison	1
McCone	1
Park	1
Pondera	1
Sanders	1
Stillwater	1
Teton	1
(blank)	6

Office location described by county and the majority of respondents are located where the top 7 most populous cities in the state are within – but not necessarily in order. Lewis and Clark County, containing the state's Capitol, Helena, draws numerous GIS workers in the public sector and has seen growth within response from the 2018 survey where the number went from 28 to 36 responses. Most other counties stayed relatively the same.

## Gender

Q24: What is your gender?



Gender	Average Salary
Female	\$ 53,915.09
Male	\$ 60,944.44

One trend from the results in the 2021 survey is a disparity between male and female GIS professionals. One aspect shows more men than women are reporting as GIS professionals and in another the survey shows on average men make nearly \$7,000 more than women.

## Age

Q25: What is your age?

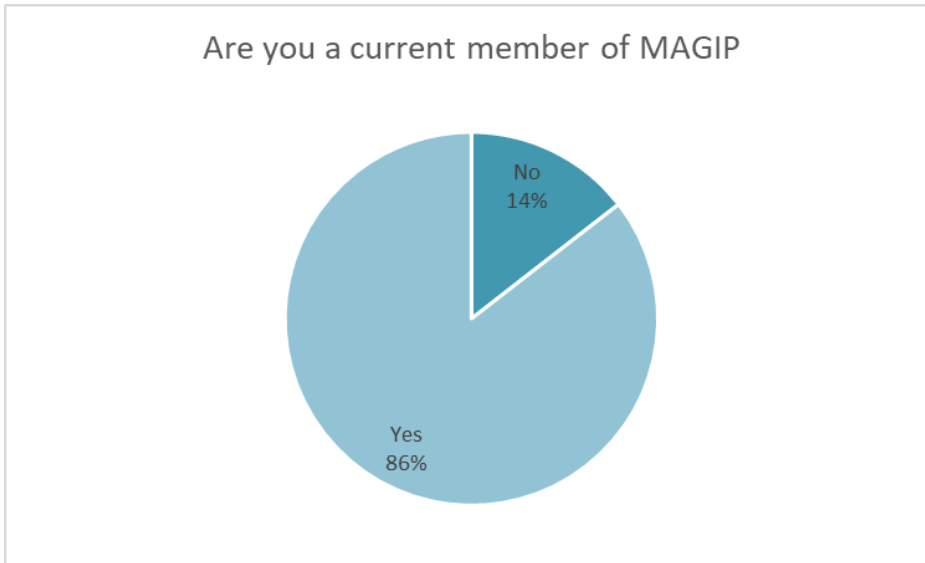
Age	%
25 - 34	29%
35 - 44	33%
45 - 54	24%
55 - 64	11%
65 or older	1%
Prefer not to answer	1%
Under 25	1%

The GIS professionals' age shows many GIS users trend toward middle age. However, younger GIS users are reporting in, even beyond what was polled in 2018. We also see that wages slightly stagnate between respondents ages 35-54, before dropping steeply off as respondents approach retirement. It may also indicate those in the workforce longer are not being compensated as well as newer, younger hires.



## **MAGIP Membership**

### **Q26: Are you a current member of MAGIP?**



The vast majority of survey respondents are current members of MAGIP. There is a small group of respondents who are not members of MAGIP and likely received the survey from the MAGIP ListServe or a work colleague. It may be in the interest of future MAGIP boards to monitor this ratio to ensure MAGIP both grows as a professional organization as well as ensuring non-MAGIP members are aware of MAGIP and its mission.

## **Conclusion**

The MAGIP Board of Directors would like to thank the GIS community that helped contribute to the 2021 salary survey. This data captures a snapshot in time of GIS positions, salaries, demographic and employment benefits. The Board hopes it can help justify or leverage salary raises or acquire additional benefits for those in certain situations with their employer. The Board would like to thank the Member Development Committee for analyzing and assembling this report to distribute to the GIS Community. The committee hopes to conduct a survey every three or four years and distribute a report in a more timely matter.