Questionnaire

Which country do you live in?

		Response Percent	Response Count
Canada		3.4%	11
United States		**72.7%**	234
-------------		0.0%	0
Afghanistan		0.0%	0
Albania		0.0%	0
Algeria		0.0%	0
American Samoa		0.0%	0
Andorra		0.0%	0
Angola		0.0%	0
Anguilla		0.0%	0
Antarctica		0.0%	0
Antigua		0.0%	0
Argentina		0.0%	0
Armenia		0.0%	0
Aruba		0.0%	0
Australia		1.9%	6
Austria		1.2%	4
Azerbaijan		0.0%	0
Bahamas		0.0%	0
Bahrain		0.0%	0
Bangladesh		0.0%	0
Barbados		0.0%	0
Belarus		0.0%	0
Belgium		0.0%	0
Belize		0.0%	0
Benin		0.0%	0

Country		%	Count
Bermuda		0.0%	0
Bhutan		0.0%	0
Bolivia		0.0%	0
Bosnia and Herzegovina		0.0%	0
Botswana		0.0%	0
Brazil		0.0%	0
British Virgin Islands		0.0%	0
Brunei		0.0%	0
Bulgaria		0.3%	1
Burkina Faso		0.0%	0
Burma		0.0%	0
Burundi		0.0%	0
Cambodia		0.0%	0
Cameroon		0.0%	0
Cape Verde		0.0%	0
Central African Republic		0.0%	0
Chad		0.0%	0
Chile		0.0%	0
China		0.0%	0
Colombia		0.0%	0
Comoros		0.0%	0
Congo (Zaire)		0.0%	0
Congo		0.0%	0
Cook Islands		0.0%	0
Costa Rica		0.0%	0
Cote d'Ivoire (Ivory Coast)		0.0%	0
Croatia		5.0%	16
Cuba		0.0%	0
Cyprus		0.0%	0
Czech Republic		0.0%	0
Denmark		0.0%	0

Djibouti		0.0%	0
Dominica		0.0%	0
Dominican Republic		0.0%	0
Ecuador		0.0%	0
Egypt		0.0%	0
El Salvador		0.0%	0
Equatorial Guinea		0.0%	0
Eritrea		0.0%	0
Estonia		0.0%	0
Ethiopia		0.0%	0
Falkland Islands		0.0%	0
Fiji		0.0%	0
Finland		0.0%	0
France		0.0%	0
French Guiana		0.0%	0
French Polynesia		0.0%	0
Gabon		0.0%	0
The Gambia		0.0%	0
Gaza Strip and West Bank		0.0%	0
Georgia		0.0%	0
Germany		1.2%	4
Ghana		0.0%	0
Gibraltar		0.0%	0
Greece		0.0%	0
Greenland		0.0%	0
Grenada		0.0%	0
Guadeloupe		0.0%	0
Guam		0.0%	0
Guatemala		0.0%	0
Guinea		0.0%	0

Guinea-Bissau		0.0%	0
Guyana		0.0%	0
Haiti		0.0%	0
The Holy See		0.0%	0
Honduras		0.0%	0
Hong Kong	▌	0.3%	1
Hungary	▌	0.3%	1
Iceland		0.0%	0
India		0.0%	0
Indonesia		0.0%	0
Iran		0.0%	0
Iraq		0.0%	0
Ireland		0.0%	0
Israel		0.0%	0
Italy	▌	0.3%	1
Jamaica		0.0%	0
Japan	▌	0.3%	1
Jordan		0.0%	0
Kazakhstan		0.0%	0
Kenya		0.0%	0
Kiribati		0.0%	0
Kuwait		0.0%	0
Kyrgyzstan		0.0%	0
Laos		0.0%	0
Latvia		0.0%	0
Lebanon		0.0%	0
Lesotho		0.0%	0
Liberia		0.0%	0
Libya		0.0%	0
Liechtenstein		0.0%	0
Lithuania		0.0%	0

Questionnaire

Luxembourg		0.0%	0
Macau		0.0%	0
Macedonia		0.0%	0
Madagascar		0.0%	0
Malawi		0.0%	0
Malaysia		0.0%	0
Maldives		0.0%	0
Mali		0.0%	0
Malta		0.0%	0
Marshall Islands		0.0%	0
Martinique		0.0%	0
Mauritania		0.0%	0
Mauritius		0.0%	0
Mayotte		0.0%	0
Mexico		0.0%	0
Federated States of Micronesia		0.0%	0
Moldova		0.0%	0
Monaco		0.0%	0
Mongolia		0.0%	0
Montserrat		0.0%	0
Morocco		0.0%	0
Mozambique		0.0%	0
Namibia		0.0%	0
Nauru		0.0%	0
Nepal		0.0%	0
Netherlands		1.2%	4
Netherlands Antilles		0.0%	0
New Caledonia		0.0%	0
New Zealand		0.9%	3
Nicaragua		0.0%	0

Niger		0.0%	0
Nigeria		0.0%	0
North Korea		0.0%	0
Northern Mariana Islands		0.0%	0
Norway		0.3%	1
Oman		0.0%	0
Pakistan		0.0%	0
Palau		0.0%	0
Panama		0.0%	0
Papua New Guinea		0.0%	0
Paraguay		0.0%	0
Peru		0.0%	0
Philippines		0.0%	0
Pitcairn Islands		0.0%	0
Poland		0.6%	2
Portugal		0.3%	1
Puerto Rico		0.0%	0
Qatar		0.0%	0
Reunion		0.0%	0
Romania		0.3%	1
Russia		0.0%	0
Rwanda		0.0%	0
Saint Kitts and Nevis		0.0%	0
Saint Lucia		0.0%	0
Saint Pierre and Miquelon		0.0%	0
Saint Vincent and the Grenadines		0.0%	0
Samoa		0.0%	0
San Marino		0.0%	0
Sao Tome and Principe		0.0%	0
Saudi Arabia		0.3%	1
Senegal		0.0%	0

Serbia and Montenegro (Yugoslavia)		0.0%	0
Seychelles		0.0%	0
Sierra Leone		0.0%	0
Singapore		0.0%	0
Slovakia		0.0%	0
Slovenia		1.9%	6
Solomon Islands		0.0%	0
Somalia		0.0%	0
South Africa		0.0%	0
South Korea		0.0%	0
Spain		0.3%	1
Sri Lanka		0.0%	0
Sudan		0.0%	0
Suriname		0.0%	0
Swaziland		0.0%	0
Sweden		0.0%	0
Switzerland		2.5%	8
Syria		0.0%	0
Taiwan		0.0%	0
Tajikistan		0.0%	0
Tanzania		0.0%	0
Thailand		0.0%	0
Togo		0.0%	0
Tonga		0.0%	0
Trinidad and Tobago		0.0%	0
Tunisia		0.0%	0
Turkey		0.3%	1
Turkmenistan		0.0%	0
Turks and Caicos Islands		0.0%	0
Tuvalu		0.0%	0

Questionnaire

		Response Percent	Response Count
Uganda		0.0%	0
Ukraine		0.0%	0
United Arab Emirates		0.0%	0
United Kingdom		3.4%	11
United States Virgin Islands		0.6%	2
Uruguay		0.0%	0
Uzbekistan		0.0%	0
Vanuatu		0.0%	0
Venezuela		0.0%	0
Vietnam		0.0%	0
West Bank and Gaza Strip		0.0%	0
Western Sahara		0.0%	0
Yemen		0.0%	0
Zambia		0.0%	0
Zimbabwe		0.0%	0
	answered question		322
	skipped question		1

Gender:

		Response Percent	Response Count
Female		27.9%	90
Male		**72.1%**	233
	answered question		323
	skipped question		0

Questionnaire

Age:

		Response Percent	Response Count
Under 19		0.9%	3
20 to 29		26.3%	84
30 to 39		**33.5%**	107
40 to 49		22.9%	73
50 to 59		11.9%	38
60 to 69		4.1%	13
Over 70		0.3%	1
		answered question	**319**
		skipped question	**4**

What is your primary involvement with maps?

		Response Percent	Response Count
Cartographer		**35.1%**	113
GIS specialist		28.0%	90
Software developer		2.8%	9
Data developer		1.2%	4
Professor		4.7%	15
Educator		4.7%	15
Researcher		4.7%	15
Student		10.3%	33
Map librarian		1.6%	5
Map collector		1.2%	4
Map dealer		0.3%	1
Map enthusiast		1.6%	5
------------------		0.0%	0
Other		4.0%	13
Not applicable		0.0%	0

		answered question	322
		skipped question	1

For how many years have you been professionally involved with maps?

		Response Percent	Response Count
0 to 4		22.1%	71
5 to 9		25.2%	81
10 to 19		**30.4%**	98
20 to 29		14.0%	45
More than 30		6.2%	20
-------------		0.0%	0
Not applicable		2.2%	7
		answered question	322
		skipped question	1

In general, how do you rate the design of maps made today?

		Response Percent	Response Count
Very bad		0.3%	1
Bad		14.0%	41
Adequate		**46.1%**	135
Good		36.5%	107
Very Good		3.1%	9
		answered question	293
		skipped question	30

Questionnaire

Compared to manual maps made twenty or thirty years ago, how do you rate the design of digital maps today?

		Response Percent	Response Count
Much worse		3.8%	11
Worse		32.2%	94
About the same		19.2%	56
Better		**33.2%**	97
Much better		11.6%	34
		answered question	**292**
		skipped question	**31**

Do you think map design will generally get worse or better in the next 10 to 20 years?

		Response Percent	Response Count
Get worse		13.7%	40
Stay the same		20.6%	60
Get better		**65.8%**	192
		answered question	**292**
		skipped question	**31**

For much of the twentieth century, maps designed in North America and Europe often looked different from each other. Is this still the case today?

		Response Percent	Response Count
Yes		28.0%	77
Yes, but not so much		**63.6%**	175
No		8.4%	23
		answered question	**275**
		skipped question	**48**

Questionnaire

According to a popular definition, cartography is a discipline that combines art and science. Looking broadly at the profession today, how would you rate this balance?

		Response Percent	Response Count
Entirely art		0.0%	0
More art		14.4%	42
Equal art and science		29.1%	85
More science		**55.5%**	162
Entirely science		1.0%	3
		answered question	**292**
		skipped question	**31**

In your experience, how unusual is it for a cartographer to have both design and technical ability?

		Response Percent	Response Count
Very rare		5.5%	16
Rare		24.7%	72
Sometimes		**36.4%**	106
Common		27.8%	81
Very common		5.5%	16
		answered question	**291**
		skipped question	**32**

Nature vs. nurture: both natural aptitude and education are factors determining whether a person is good at map design. Which do you consider most important?

		Response Percent	Response Count
Entirely aptitude		0.0%	0
More aptitude		**37.2%**	109
Equal aptitude and education		35.2%	103
More education		26.6%	78
Entirely education		1.0%	3
		answered question	**293**
		skipped question	**30**

If you *HAD* to hire someone to design custom maps for a magazine like *National Geographic* and the choice was between a GIS specialist with no graphical experience and a graphic designer with no GIS experience, whom would you choose?

		Response Percent	Response Count
GIS specialist		27.8%	81
Graphic designer		**72.2%**	210
		answered question	**291**
		skipped question	**32**

Is map design a mature field with little room for innovation or do new design techniques still await discovery? Rate the likelihood for future map design innovation:

		Response Percent	Response Count
Very unlikely		1.4%	4
Unlikely		6.8%	20
Likely		**57.3%**	168
Very likely		34.5%	101
		answered question	**293**
		skipped question	**30**

Questionnaire

Do you make maps?

		Response Percent	Response Count
Yes		**93.9%**	275
No		6.1%	18
	answered question		293
	skipped question		30

How do you rate yourself as a map designer?

		Response Percent	Response Count
Bad		0.4%	1
Not so good		2.8%	7
Average		33.5%	84
Pretty good		**53.8%**	135
Excellent		9.6%	24
	answered question		251
	skipped question		72

Questionnaire

What has influenced your development as a map designer?					
	Not important	Somewhat important	Important	Rating Average	Response Count
Cartography classes	12.5% (33)	28.3% (75)	**59.2% (157)**	2.47	265
GIS classes	27.7% (73)	**41.7% (110)**	30.7% (81)	2.03	264
Art/Design classes	31.2% (81)	**38.1% (99)**	30.8% (80)	2.00	260
Self taught	3.7% (10)	33.3% (89)	**62.9% (168)**	2.59	267
Internship/apprenticeship	28.8% (74)	**36.2% (93)**	35.0% (90)	2.06	257
A mentor	24.0% (63)	32.4% (85)	**43.5% (114)**	2.19	262
Work experience	3.4% (9)	15.0% (40)	**81.6% (218)**	2.78	267
Professional outreach (conferences, online forums, etc.)	14.8% (39)	**50.4% (133)**	34.8% (92)	2.20	264
				answered question	**269**
				skipped question	**54**

Do you seek advice from others when designing maps?			
		Response Percent	Response Count
Never	▌	0.7%	2
Not often	▭	14.9%	40
Sometimes	▭▭▭▭	**40.2%**	108
Very often	▭▭▭	34.2%	92
Always	▭	10.0%	27
		answered question	**269**
		skipped question	**54**

Have you ever submitted a map to a design contest?

		Response Percent	Response Count
No		**63.7%**	170
Yes		13.9%	37
Yes, and won an award		22.5%	60
	answered question		267
	skipped question		56

Looking beyond maps, how do you rate your ability in the broader field of graphic design?

		Response Percent	Response Count
Bad		0.4%	1
Not so good		9.7%	26
Average		41.6%	112
Pretty good		**44.2%**	119
Excellent		4.1%	11
	answered question		269
	skipped question		54

When making a map, how closely does your initial concept (minds-eye view) match the final design?

		Response Percent	Response Count
Never		0.8%	2
Not often		8.3%	22
Sometimes		32.7%	87
Very often		**55.3%**	147
Always		3.0%	8
	answered question		266
	skipped question		57

On a typical map project, about what percentage of the total project time do you devote to map design?

		Response Percent	Response Count
Little or none		0.0%	0
5 percent		3.0%	8
10 percent		8.7%	23
20 percent		18.1%	48
30 percent		**19.2%**	51
40 percent		9.8%	26
50 percent		13.5%	36
60 percent		7.9%	21
70 percent		10.5%	28
80 percent		6.8%	18
90 percent		1.9%	5
100 percent		0.8%	2
	answered question		266
	skipped question		57

When making a map, to what extent do you integrate design with other mapping tasks such as research, compilation, and production?

		Response Percent	Response Count
Completely integrated		18.4%	49
Mostly integrated		**39.7%**	106
Sometimes integrated, sometimes separate		32.2%	86
Mostly separate		9.7%	26
Completely separate		0.0%	0
	answered question		267
	skipped question		56

Looking at one of your typical map projects from start to finish, when does most design effort occur?

		Response Percent	Response Count
Beginning		11.3%	30
Middle		5.6%	15
End		15.4%	41
Beginning and end		19.9%	53
Throughout the project		**47.7%**	127
	answered question		**266**
	skipped question		**57**

Of the maps you make, how many are custom designed versus made to already existing design standards or from default software settings?

		Response Percent	Response Count
Entirely custom		22.4%	60
Mostly custom		32.5%	87
Both custom and standardized		**33.2%**	89
Mostly standardized		11.2%	30
Entirely standardized		0.8%	2
	answered question		**268**
	skipped question		**55**

Does software influence map design?

		Response Percent	Response Count
Not often		9.3%	25
Sometimes		41.4%	111
Very much		**49.3%**	132
	answered question		**268**
	skipped question		**55**

Not every map can be a design masterpiece. What factors *LIMIT* the quality of maps you design?

	Infrequent	Sometimes	Frequent	Rating Average	Response Count
Not enough time	3.4% (9)	42.5% (114)	**54.1% (145)**	2.51	268
Not enough funding	25.0% (67)	**38.4% (103)**	36.6% (98)	2.12	268
Pre-existing map design standards	31.1% (83)	**52.4% (140)**	16.5% (44)	1.85	267
Strict supervisor or client control	**45.7% (121)**	37.7% (100)	16.6% (44)	1.71	265
Lack of manual/artistic skill	**51.7% (138)**	38.6% (103)	9.7% (26)	1.58	267
Inadequate software	**43.7% (117)**	39.6% (106)	16.8% (45)	1.73	268
Data problems	20.9% (56)	**50.7% (136)**	28.4% (76)	2.07	268
Just feeling lazy	**62.3% (167)**	32.8% (88)	4.9% (13)	1.43	268
				answered question	**269**
				skipped question	**54**