

**Appendix 3.** Analysis results for unmerged GPS and Interview Datasets.

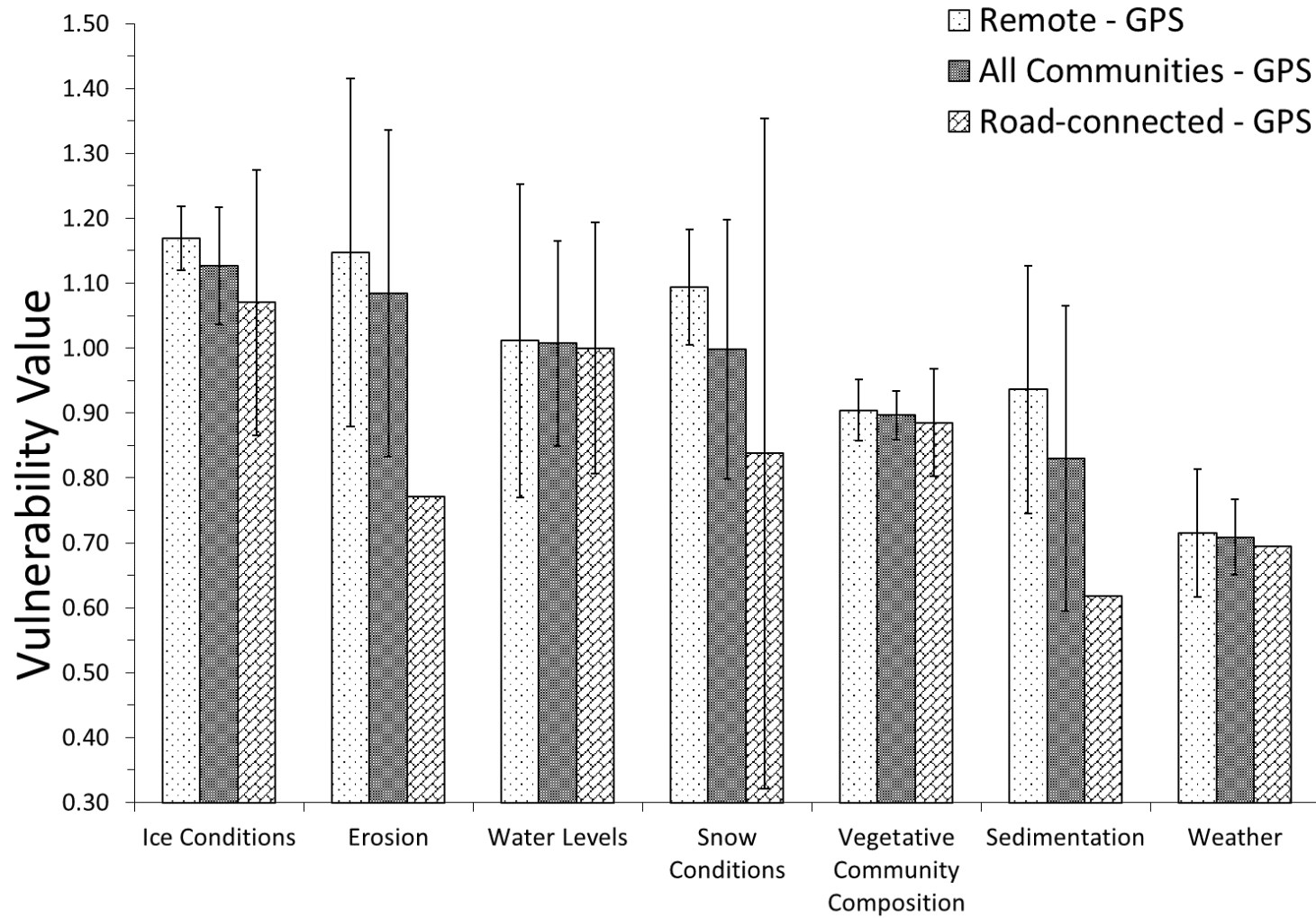


Figure A3.1. Graph comparing vulnerability values and associated margins of error for environmental conditions from GPS data among remote communities, road-connected communities and all communities combined.

Table A3.1. Mean values for vulnerability analysis of GPS data among 9 communities, 3 road-connected communities and 6 remote communities.

Condition	Analysis Level	Average Likelihood (Li)	Average Sensitivity (S)	Vulnerability (V) <sup>†</sup>	Number of Observations	Margin of Error <sup>‡</sup>	V Value Range <sup>§</sup>
Ice Conditions	All Communities	0.34	0.79	1.13	124	0.09	1.04-1.12 <sup>a</sup>
	Road-connected	0.31	0.76	1.07	39	0.20	0.87-1.27 <sup>ab</sup>
	Remote	0.36	0.81	1.17	85	0.05	1.12-1.22 <sup>a</sup>
Erosion	All Communities	0.30	0.78	1.08	63	0.25	0.83-1.33 <sup>ab</sup>
	Road-connected	0.07	0.70	0.77	5	N/A	N/A
	Remote	0.35	0.80	1.15	58	0.27	0.88-1.42 <sup>ab</sup>
Water Levels	All Communities	0.28	0.72	1.01	98	0.16	0.85-1.17 <sup>ab</sup>
	Road-connected	0.28	0.72	1.00	36	0.19	0.89-1.19 <sup>ab</sup>
	Remote	0.28	0.73	1.01	62	0.24	0.77-1.25 <sup>abc</sup>
Snow Conditions	All Communities	0.28	0.71	1.00	108	0.20	0.80-1.20 <sup>abc</sup>
	Road-connected	0.29	0.55	0.84	40	0.52	0.32-1.36 <sup>abc</sup>
	Remote	0.28	0.81	1.09	68	0.09	1.00-1.18 <sup>a</sup>
Vegetative Community Composition	All Communities	0.15	0.74	0.90	53	0.04	0.86-0.94 <sup>b</sup>
	Road-connected	0.17	0.71	0.89	15	0.08	0.81-0.97 <sup>bc</sup>
	Remote	0.14	0.76	0.90	38	0.05	0.85-0.95 <sup>b</sup>
Sedimentation	All Communities	0.12	0.71	0.83	16	0.24	0.59-1.07 <sup>abc</sup>
	Road-connected	0.12	0.50	0.62	2	N/A	N/A
	Remote	0.12	0.81	0.94	14	0.19	0.75-1.13 <sup>abc</sup>
Weather	All Communities	0.06	0.65	0.71	17	0.06	0.65-0.77 <sup>bc</sup>
	Road-connected	0.03	0.67	0.70	2	N/A	N/A
	Remote	0.07	0.64	0.72	15	0.10	0.62-0.82 <sup>c</sup>

<sup>†</sup> Vulnerability values may differ from those expected by adding Li and S values in graph due to rounding errors.

<sup>‡</sup> Values at 95% confidence level.

<sup>§</sup> V value ranges with different superscripts (<sup>a,b</sup>) denote significant differences ( $\alpha=.05$ ) from each other.

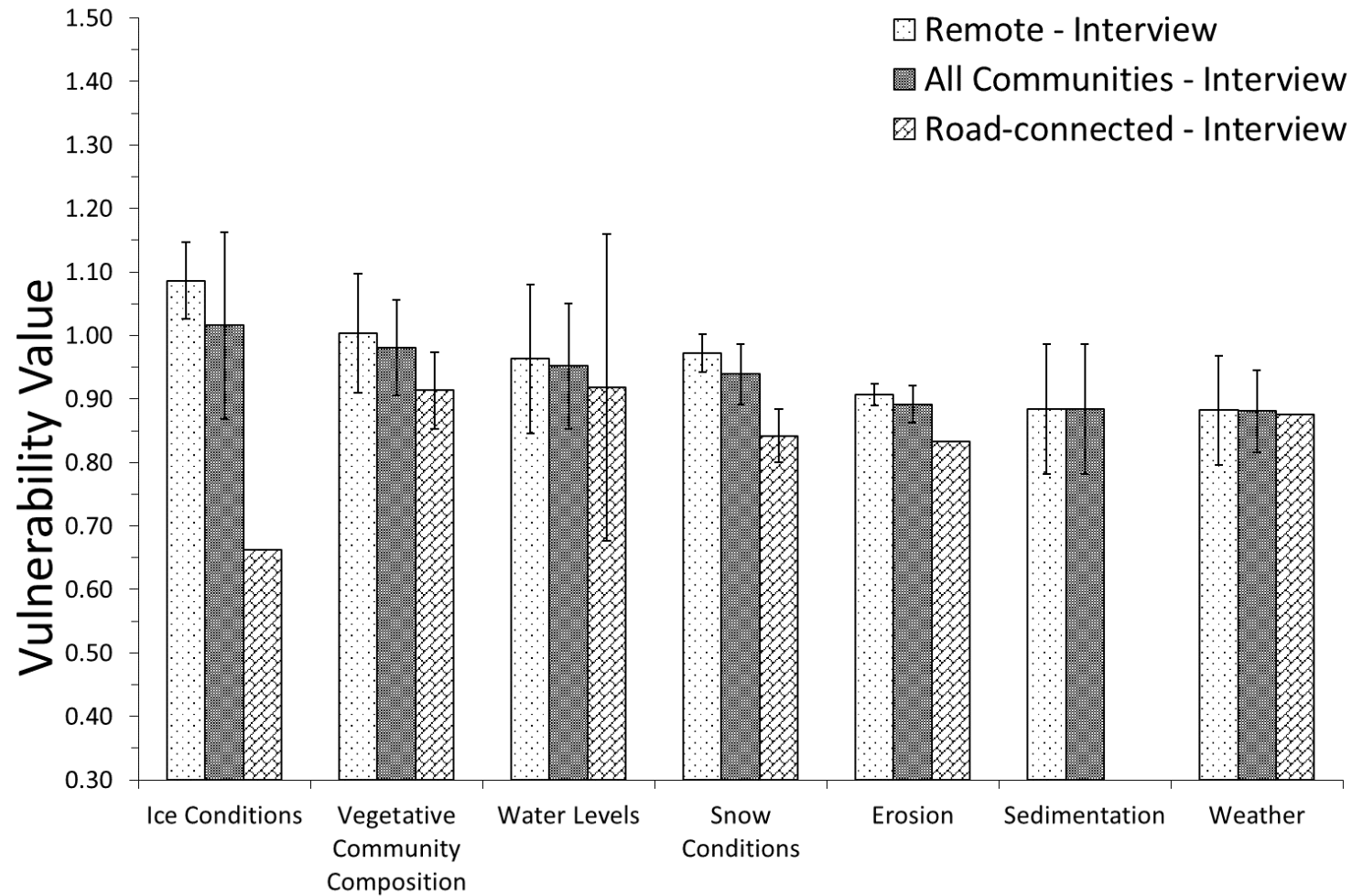


Figure A3.2. Graph comparing vulnerability values and associated margins of error for environmental conditions from interview data among remote communities, road-connected communities and all communities combined.

Table A3.2. Mean values for vulnerability analysis of interview data among 8 communities, 2 road-connected communities and 6 remote communities.

Condition	Analysis Level	Average Likelihood (Li)	Average Sensitivity (S)	Vulnerability (V) <sup>†</sup>	Number of Observations	Margin of Error <sup>‡</sup>	V Value Range <sup>§</sup>
Ice Conditions	All Communities	0.34	0.79	1.13	124	0.09	1.04-1.12 <sup>a</sup>
	Road-connected	0.31	0.76	1.07	39	0.20	0.87-1.27 <sup>ab</sup>
	Remote	0.36	0.81	1.17	85	0.05	1.12-1.22 <sup>a</sup>
Erosion	All Communities	0.30	0.78	1.08	63	0.25	0.83-1.33 <sup>ab</sup>
	Road-connected	0.07	0.70	0.77	5	N/A	N/A
	Remote	0.35	0.80	1.15	58	0.27	0.88-1.42 <sup>ab</sup>
Water Levels	All Communities	0.28	0.72	1.01	98	0.16	0.85-1.17 <sup>ab</sup>
	Road-connected	0.28	0.72	1.00	36	0.19	0.89-1.19 <sup>ab</sup>
	Remote	0.28	0.73	1.01	62	0.24	0.77-1.25 <sup>abc</sup>
Snow Conditions	All Communities	0.28	0.71	1.00	108	0.20	0.80-1.20 <sup>abc</sup>
	Road-connected	0.29	0.55	0.84	40	0.52	0.32-1.36 <sup>abc</sup>
	Remote	0.28	0.81	1.09	68	0.09	1.00-1.18 <sup>a</sup>
Vegetative Community Composition	All Communities	0.15	0.74	0.90	53	0.04	0.86-0.94 <sup>b</sup>
	Road-connected	0.17	0.71	0.89	15	0.08	0.81-0.97 <sup>bc</sup>
	Remote	0.14	0.76	0.90	38	0.05	0.85-0.95 <sup>b</sup>
Sedimentation	All Communities	0.12	0.71	0.83	16	0.24	0.59-1.07 <sup>abc</sup>
	Road-connected	0.12	0.50	0.62	2	N/A	N/A
	Remote	0.12	0.81	0.94	14	0.19	0.75-1.13 <sup>abc</sup>
Weather	All Communities	0.06	0.65	0.71	17	0.06	0.65-0.77 <sup>bc</sup>
	Road-connected	0.03	0.67	0.70	2	N/A	N/A
	Remote	0.07	0.64	0.72	15	0.10	0.62-0.82 <sup>c</sup>

<sup>†</sup> Vulnerability values may differ from those expected by adding Li and S values in graph due to rounding errors.

<sup>‡</sup> Values at 95% confidence level.

<sup>§</sup> V value ranges with different superscripts (<sup>a,b</sup>) denote significant differences ( $\alpha=.05$ ) from each other.