Appendix 1

National Center for Charitable Statistics NTEE codes: Board members' organizational affiliations were coded using the following 23 NTEE categories: (1) Arts, (2) Education, (3) Environment, (4) Animal-related, (5) Health care, (6) Voluntary health associations, (7) Medical research, (8) Crime & Legal-related, (9) Employment, (10) Food, Agriculture, and Nutrition, (11) Housing, (12) Public safety, (13) Recreation & Sports, (14)Youth development, (15)Voluntary health associations, (16) Homeless centers, (17) Civil rights, (18) Community improvement, (19) Philanthropy, (20) Public & Societal benefit, (21) Religion, (22) Mutual & membership benefit, and (23) Unknown. (Source: http://nccsweb.urban.org)

Multi-level model estimation

Results for model 4, Table 5 are derived from a linear random intercept model with both individual- and organizational-level covariates. The functional form of the model is as follows:

$$
\begin{aligned}
y_{ij} = \; & \alpha_j + \beta_1.Coop_{ij} + \beta_2.\, Values_{ij} + \beta_3.\, Norms_{ij} + \beta_4.\, Comm_{ij} + \beta_5.\, SES_{ij} + \beta_6.\, Time_{ij} \\
& + \beta_7.\, OrgAff_{ij} + \beta_8.\, Partners\_bc_{ij} + \beta_9.Diversity_{ij} + \beta_{10}.Accredited_{ij} + \beta_{11}.County_{ij} \\
& + \beta_{12}.Capacity_{ij} + \beta_{13}.Volunteers_{ij} + \beta_{14}.Age_{ij} + \beta_{15}.[Gifts \times Volunteers]_{ij} + \delta.Z_{ij} \\
& + \zeta_j + \varepsilon_{ij},
\end{aligned}
$$

where y_{ij} is the reported mean level of land trust success for board member *i* in land trust *j*. This outcome is modeled as a function of four cognitive social capital factors (*Cooperation, Shared values, Common norms, and Communication effectiveness*), board member's human capital (*SES*), and number of years serving on the board (*Time*). The organizational affiliations of board members (*OrgAff*), and organizational partners of land trusts, weighted by the number of counties a land trust operates in (*Partners_bc*), represent the level of structural social capital. We also include a test of the hypothesis that functional network diversity (*Diversity*) is positively related to perceptions of successful land protection. *Diversity* represents a cross-level interaction (sum) of the land trusts' diversity index and board members' diversity index. Prior to inputting it in the model, the summative *Diversity* index was centered on the group (land trust) mean. Other factors identified in the open-ended survey questions as favorable to the success of a land trust are: organizational *Capacity*, number of *Volunteers*, organizational longevity (*Age)*, and a binary control measure for the number of counties a land trust operates in (*County*) (1> 6 counties; 0≤ 6 counties). The interaction effect for volunteers and public support (*Gifts*) is denoted by β_{15}. Finally, Z_{ij} represents the directly observable measures of land trusts' conservation and financial achievements. The change in total area restricted by a conservation easement and total public support were square-root transformed to correct for the left skew in the data. All level-1 covariates, including the summative *Diversity* index were centered on their sample means to allow more meaningful interpretations (Rabe-Hesketh and Skrondal 2005). Finally, the group-level variance, ζ_j, is the variance component that allows the intercept (α_j) to vary between land trusts, and ε_{ij} is the individual-level, board member-specific error component. The variance component ζ_j represents the combined effects of omitted land trust attributes or unobserved heterogeneity at the group level. The model thus can be viewed as a linear mixed-effects model with both fixed and random effects. We estimated the model with restricted maximum likelihood (REML) and maximum likelihood (ML) estimation. Because no substantively meaningful differences were found, we report the results based on ML. In addition, model results were compared against results

from an ordinal multi-level regression model, with perceived success divided into quartiles and used as an ordinal response variable. No significant differences were detected between the continuous and ordinal response models.

Statistical significance results for marginal effects shown in Fig. 3 and Fig. 4

Table A1.1 Statistical significance for the predicted values (margins) of perceived success by number of organizational partners per county and land trust organizational capacity

Covariates	Margin	Std. Error	z	P>|z|	95% CI	
Fewer than 3 partners						
Low capacity	7.61	0.56	13.65	0.00	6.52	8.71
High capacity	8.46	0.37	23.15	0.00	7.75	9.18
3 partners						
Low capacity	7.73	0.77	10.08	0.00	6.22	9.23
High capacity	8.58	0.88	9.79	0.00	6.86	10.29
4-9 partners						
Low capacity	8.25	0.32	25.52	0.00	7.61	8.88
High capacity	9.10	0.52	17.50	0.00	8.08	10.12
More than 10 partners						
Low capacity	9.15	0.77	11.82	0.00	7.63	10.66
High capacity	10.00	0.69	14.52	0.00	8.65	11.35

Predicted values based on results from model 4, Table 5, with all model variables held at their mean values. Low organizational capacity <= sample mean of 26 staff and board members; High organizational capacity>26 staff and board members.

Table A1.2 Statistical significance for predicted values (margins) of perceived success by land trusts' scale of operation (number of counties) and organizational capacity

Covariates	Margin	Std. Error	z	P>|z|	95% CI	
Fewer than 3 counties						
Low org capacity	7.77	0.75	10.42	0.00	6.31	9.24
High org capacity	8.32	0.77	10.86	0.00	6.82	9.82
3-6 counties						
Low org capacity	8.43	0.34	24.77	0.00	7.76	9.10
High org capacity	8.97	0.31	28.66	0.00	8.36	9.58
7 counties						
Low org capacity	8.49	0.40	21.46	0.00	7.72	9.27
High org capacity	9.03	0.35	25.95	0.00	8.35	9.72
More than 8 counties						
Low org capacity	8.84	0.57	15.62	0.00	7.73	9.95
High org capacity	9.38	0.58	16.17	0.00	8.24	10.52

Predicted values based on results from model 4, Table 5, with all model variables held at their mean values. Low organizational capacity <= sample mean of 26 staff and board members; High organizational capacity>26 staff and board members.

Table A1.3 Statistical significance for the predicted values (margins) of perceived success by levels of cooperation

Cooperation value	Centered value	Margin	Std. Error	z	P>|z|	95% CI	
1=Strongly disagree	-2.0	7.48	0.48	15.64	0.00	6.54	8.42
2=Disagree	-1.5	7.77	0.36	21.36	0.00	7.05	8.48
3=Somewhat disagree	-1.0	8.05	0.25	32.11	0.00	7.56	8.54
4=Neutral	-0.5	8.34	0.14	57.49	0.00	8.05	8.62
5=Somewhat agree	0.0	8.62	0.08	105.75	0.00	8.46	8.78
6=Agree	0.5	8.90	0.14	63.40	0.00	8.63	9.18

Predicted values based on results from model 4, Table 5, with all model variables held at their mean values. Centered values represent the standardized values for the cognitive social capital factor "Cooperation".

Table A1.4 Statistical significance for the predicted values (margins) of perceived success by network diversity

Network diversity value	Centered value	Margin	Std. Error	z	P>|z|	95% CI	
1.08	-1.0	8.05	0.34	24.02	0.00	7.39	8.71
1.41	-0.5	8.34	0.18	46.12	0.00	7.99	8.70
1.73	0.0	8.63	0.08	105.90	0.00	8.47	8.79
2.06	0.5	8.92	0.18	48.26	0.00	8.56	9.28
2.38	1.0	9.21	0.34	27.12	0.00	8.54	9.88
2.71	1.5	9.50	0.50	19.00	0.00	8.52	10.48

Predicted values based on results from model 4, Table 5, with all model variables held at their mean values. Centered values represent the standardized values for Diversity Index, with a sample mean of 1.73 and standard deviation of 0.65 (See Table 3).