

Attribute	Attribute Values	Source	Notes
<b>REGION - For each region, the following data will be collected and used to control for regional differences</b>			
Region type	Urban Suburban Semi-rural Rural	Census	
Total area		County Websites	
Total population		Census	
Total working-age population		QCEW	
Total R&D workforce		QCEW	Data available only for private organizations with R&D NAICS code and faculty at degree-granting universities.
Number of research institutions		IPEDS, Key Informants	IPEDS data available only for institutions that have students that receive Title IV funding, or NSF/NIH grants.
Patent activity (number of applications, number granted)		USPTO	
IP/Patent attorney workforce		USPTO	
Research workforce average wage		QCEW	Data available only for private organizations with R&D NAICS code and faculty at degree-granting universities.
Number of S&T (STEM) graduates (all levels)		IPEDS	
Number of students enrolled in S&T (STEM) majors		IPEDS	
Number of SBIR/STTR awards granted		SBA	
Number of licenses executed		AUTM	Data available only for universities that are AUTM members.
Total amount of VC investment		VentureXpert	
Number of VC deals		VentureXpert	
Number of informal/formal boundary-spanning networks		Web Search, Key Informants	

Attribute	Attribute Values	Source	Notes
<b>RESEARCH INSTITUTION - For each research institution (universities and non-universities), the following data will be collected and used to control for regional differences</b>			
Year founded		Website	
Industry		Website	
Average physical distance from other research institutions in respective region		Research Team's Program	
Number of licenses executed		AUTM	Relevant for universities only.
Cumulative number of active licenses		AUTM	Relevant for universities only.
Cumulative number of patent applications		AUTM	

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<b>BOUNDARY-SPANNING NETWORK - The following data will be collected for each boundary-spanning network in order to quantify our independent variable</b>			
Industry		Interview	
Event attendance diversity		Interview	
Informal/Formal	Informal/Formal	Interview	
Host company		Interview	Relevant for boundary-spanning <i>activities</i> only.
Event location(s)		Interview	
Event venue(s)		Interview	
Year founded		Interview	
Membership type	Open/Closed	Interview	
Number of active members		Interview	Relevant for boundary-spanning <i>organizations</i> only.
Number of participants		Interview	
Frequency of events		Interview	
Average attendance at events		Interview	
Types of events	Networking event Awards/Acknowledgment Educational workshop/class/tutorial Investor event Lecture/Seminar/Discussion group/Conference/Roundtable Board/Membership meeting Competition Online forum Coaching/Mentoring Fundraising	Interview	