

TABLE 8

**Association among variables in simultaneous equations model—rural and urban commuting zones**

(Pearson correlation coefficients)

Commuting zone and variable name	Inventive class (IC)	Science, engineering, and technical (SET) employment	Creative class (CC)	Educated workforce (BA)	Patents	Unemployment rate (UR)	Wage-rental ratio (WageRentR)	Natural amenity rank (NatAmen)	Crime rate (CR)	Proximity to urban center (ProxUrbCen)	Location quotient for patent-intensive industries (LQPatInd)	1975–80 patent stock (PatStock)	Population density (PopDens)
Rural													
SET	0.978												
CC	0.952	0.957											
BA	0.913	0.932	0.984										
Patents	0.782	0.776	0.722	0.706									
UR	0.044	0.089	0.108	0.124	-0.046								
WageRentR	-0.402	-0.443	-0.467	-0.474	-0.287	-0.455							
NatAmen	-0.125	-0.048	-0.03	0.015	-0.099	0.274	-0.367						
CR	0.194	0.216	0.257	0.259	0.092	0.25	-0.48	0.12					
ProxUrbCen	-0.357	-0.323	-0.344	-0.319	-0.242	-0.033	0.376	-0.051	-0.242				
LQPatInd	0.343	0.251	0.212	0.145	0.286	-0.199	0.029	-0.428	0.032	-0.301			
PatStock	0.371	0.376	0.307	0.297	0.483	-0.033	-0.103	-0.063	0.063	-0.127	0.124		
PopDens	0.564	0.514	0.541	0.505	0.364	0.046	-0.344	-0.117	0.268	-0.497	0.318	0.178	
University research expenditures (UniResExp)	0.326	0.409	0.332	0.352	0.433	0.067	-0.194	0.026	0.031	-0.063	0.007	0.105	0.092
Urban													
SET	0.996												
CC	0.984	0.973											
BA	0.976	0.966	0.996										
Patents	0.833	0.833	0.766	0.755									
UR	-0.095	-0.102	-0.058	-0.049	-0.11								
WageRentR	-0.317	-0.323	-0.331	-0.33	-0.325	-0.233							
NatAmen	0.168	0.173	0.181	0.178	0.25	0.308	-0.613						
CR	0.072	0.073	0.088	0.077	-0.013	0.231	-0.261	0.129					
ProxUrbCen	-0.34	-0.34	-0.331	-0.324	-0.275	0.063	0.222	-0.076	-0.117				
LQPatInd	0.169	0.149	0.131	0.115	0.249	-0.307	0.234	-0.291	-0.107	-0.207			
PatStock	0.899	0.878	0.892	0.891	0.749	-0.04	-0.218	0.073	0.001	-0.279	0.221		
PopDens	0.577	0.565	0.646	0.689	0.352	-0.002	-0.202	-0.003	0.024	-0.261	0.031	0.536	
UniResExp	0.8	0.807	0.786	0.795	0.716	-0.076	-0.324	0.11	0.036	-0.272	0.092	0.68	0.557

**Source(s):**

U.S. Patent and Trade Organization; Census Bureau, Special Tabulation (2000), Census of Population and Housing, Summary File 1 and Summary File 4, and Shapefile; Integrated Postsecondary Education Data System, 2000; Department of Justice, 2000; Department of Agriculture, Economic Research Service, 1999, 2000; Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 1998.