

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: City Expenditures in the United States

Volume Author/Editor: Harvey E. Brazer

Volume Publisher: NBER

Volume ISBN: 0-87014-380-8

Volume URL: <http://www.nber.org/books/braz59-1>

Publication Date: 1959

Chapter Title: Appendix B, Correlation between Expenditure Categories for 462 Cities, the Cities of California, Massachusetts and Ohio, and 40 Large Cities

Chapter Author: Harvey E. Brazer

Chapter URL: <http://www.nber.org/chapters/c9205>

Chapter pages in book: (p. 72 - 74)

TABLE B-3

Coefficients of Simple Correlation between Expenditure Categories,
30 Massachusetts Cities

	Total General Operating	Common Func- tions	Police	Fire	High- ways	Recrea- tion	General Control	Sanita- tion
Common functions	0.739							
Police	0.738	0.709						
Fire	0.628	0.695	0.708					
Highways	0.188	0.537	0.054	0.060				
Recreation	0.543	0.689	0.528	0.456	0.073			
General control	0.421	0.416	0.467	0.348	0.184	0.087		
Sanitation	0.485	0.754	0.347	0.373	0.289	0.694	0.002	
Mean coefficient	0.535	0.648	0.507	0.467	0.173	0.439	0.275	0.421

TABLE B-4

Coefficients of Simple Correlation between Expenditure Categories, 32 Ohio Cities

	Total General Operating	Common Func- tions	Police	Fire	High- ways	Recrea- tion	General Control	Sanita- tion
Common functions	0.586							
Police	0.501	0.598						
Fire	0.485	0.737	0.495					
Highways	0.105	0.250	0.079	0.115				
Recreation	0.471	0.609	0.337	0.475	0.209			
General control	0.498	0.451	0.145	0.337	0.059	0.309		
Sanitation	0.534	0.715	0.455	0.591	0.190	0.486	0.344	
Mean coefficient	0.454	0.564	0.373	0.462	0.144	0.414	0.306	0.474

TABLE B-5

Coefficients of Simple Correlation between Expenditure Categories,
40 Large Cities and Their Overlying Local Governments

	<i>Total</i>	<i>Common</i>						
<i>General Operating</i>	<i>General functions</i>	<i>Common functions</i>	<i>Police</i>	<i>Fire</i>	<i>High- ways</i>	<i>Recrea- tion</i>	<i>Sanita- tion</i>	<i>Educa- tion</i>
Common functions	0.857							
Police	0.719	0.670						
Fire	0.725	0.613	0.769					
Highways	0.172	0.353	-0.125	-0.003				
Recreation	0.526	0.386	0.314	0.291	-0.034			
Sanitation	0.250	0.373	0.300	0.075	0.230	0.051		
Education	0.620	0.826	0.296	0.294	0.249	0.209	-0.003	
Welfare	0.805	0.539	0.313	0.411	0.121	0.560	0.008	0.471
Mean coefficient	0.584	0.577	0.407	0.397	0.120	0.288	0.161	0.370
								0.404

APPENDIX C

CORRELATION BETWEEN THE INDEPENDENT VARIABLES AND BETWEEN THE EXPENDITURE CATEGORIES AND THE INDEPENDENT VARIABLES

TABLE C-1

Coefficients of Simple Correlation, Selected Independent Variables and
Expenditure Categories, 462 Cities

<i>Independent Variable or Expenditure Category</i>	<i>Population in 1950</i>	<i>Density of Population in 1950</i>	<i>Rate of Growth of Population 1940-1950</i>	<i>Median Family Income in 1949</i>	<i>Employment per 100 of Population in Manufacturing (1947), Trade and Services (1948)</i>	<i>Intergovernmental Revenue per Capita, 1951</i>
Density	0.267					
Rate of growth	-0.054	-0.216				
Income	0.025	0.118	0.007			
Employment	0.016	0.131	-0.395	0.028		
Intergovernmental revenue	0.141	0.084	-0.180	0.063	0.151	
Total general operating	0.144	0.235	-0.236	0.064	0.160	0.732
Common functions	0.135	0.216	-0.148	0.239	0.168	0.416
Police	0.239	0.412	-0.101	0.211	0.198	0.234
Fire	0.042	0.239	-0.208	0.178	0.183	0.451
Highways	-0.063	-0.262	-0.050	0.162	0.022	0.224
Recreation	0.059	0.029	-0.010	0.150	-0.028	0.199
General control	0.103	0.121	-0.038	0.123	0.079	0.280
Sanitation	0.091	0.184	-0.088	0.169	0.110	0.222