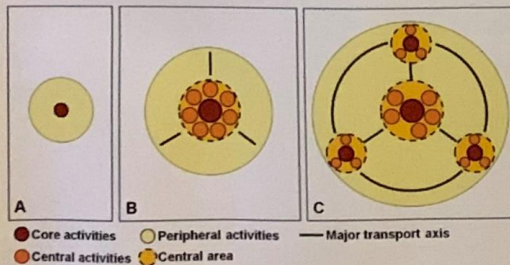


Introduction

This study analyzes employment-defined urban activity centers in the context of economic sectors. Pittsburgh's economic geography changes in the form of increases in activity center specialization. The period 1990-2012 documents a shift from Retail to Health Services as the leading sector and continuation of deindustrialization that relegates manufacturing to insignificance in activity center formation. Activity centers are unstable in both status and sectorial specialization

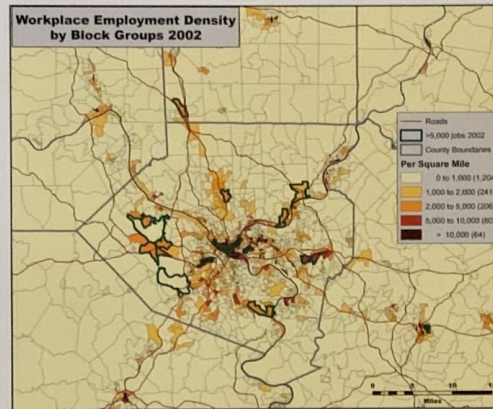


The theoretical model is polycentric urban structure. Should each center replicate functions of the others and serve a discrete sub-metropolitan area, or should each center specialize? Scholars can't agree.



Methods

Activity centers are defined by employment density. The data unit areas are census block groups.



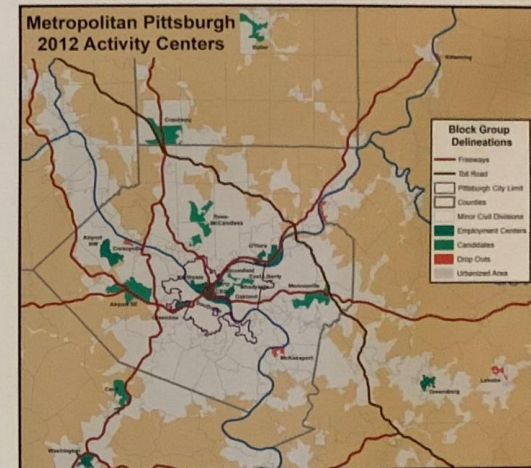
Location quotients measure regional trade-ability for each sector in an activity center. GINI coefficients measure the intensity of sectoral dominance within an activity center. Both require **BIG DATA**:

Table 4: 2012 Activity center sectoral concentration by Jobs, GINI coefficient, and Location Quotient (LQ).

County	Activity Center	Square Miles	Jobs Total	Density 44-45	Retail 62	Health 62	Jobs 1st Sector	NAICS 1st Sector	GINI	Highest LQ	LQ Code
Employment Centers											
42003	Airport NW	3.30	17069	5197	498	568	4588	48-49	0.574	7.68	48-49
42003	CCO	0.88	98638	112553	2096	5864	30023	52	0.562	5.21	52
42125	Coat	3.60	10338	2871	154	431	1400	55	0.415	5.68	53
42129	Greenoburg	1.66	11134	6688	1035	4485	4405	62	0.631	5.50	92
42003	Groveview	1.05	11900	11244	419	1587	3154	56	0.635	4.89	56
42003	Northside	1.73	30506	17610	455	8549	8549	62	0.500	7.07	71
42003	Oakland	0.85	64253	75155	395	2526	2526	62	0.801	3.98	61
42003	Onara	3.40	18270	5305	809	6483	6483	62	0.637	3.67	55
42003	RossMcCardless	4.25	14628	3499	4484	3639	4484	44-45	0.695	2.87	44-45
42003	Southside	1.35	17549	15233	1260	1877	2463	72	0.458	2.12	51
42125	Washington	2.22	11296	5096	987	3896	3896	62	0.553	3.60	92
Candidate Sites											
42003	AirportSE	7.11	21388	3007	5631	1002	5631	44-45	0.569	3.01	51
42003	Bloomfield	0.38	7938	21106	150	5973	5973	62	0.855	4.36	62
42019	Buter	3.76	12658	3632	2286	3896	3896	62	0.586	2.41	92
42019	Cranberry	4.45	17901	3775	2926	1482	3175	55	0.585	4.68	55
42003	EastBerry	0.65	8100	12467	3067	1480	1480	62	0.522	3.14	55
42003	Marionville	4.61	13991	4335	3019	2459	3019	44-45	0.588	2.35	44-45
42003	Shaylside	0.28	8348	29822	1312	4935	4935	62	0.799	3.43	62
42003	StripDistrict	0.62	7540	12213	591	364	1438	52	0.466	3.27	52
42003	Westview	0.93	8376	8972	270	336	3036	62	0.722	6.17	52
Dropouts											
420 13	Coranofield	0.38	1521	3961	243	253	253	62		3.25	42
420 13	Kissanring	0.21	1896	9136	277	559	559	62		5.50	92
421 13	Lanoka	0.92	4682	5065	228	1617	1617	62		3.85	11-33
420 13	McKeesport	0.81	4800	5390	154	3188	3188	62		3.85	62
421 13	NewKensington	0.96	2988	3125	231	507	517	31-33		4.29	22
Employment Centers											
Candidate Sites											
Dropouts											
4 County Totals		4893.18	1108833	247	118231	191133	191133		0.399		

Results

Activity centers are oriented toward major transportation features—here and elsewhere.



The Pittsburgh hierarchy is too fragmented and too specialized to optimize functional accessibility.

