

What Does Data Have to Do with It?

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Thoughts on Indicators

- ❑ Types of indicators – *Pick your indicators wisely.*
- ❑ What should be the criteria of selecting indicators
 - People's Choice
 - Expert Analysis
 - Statistic Driven
- ❑ General rules to live by
 - Newer is better.
 - When can a flawed indicator be useful?
 - Less is more.
 - Compared to what?
 - Watch out for agency effects.
- ❑ Do not use for evaluation of individual programs.
- ❑ Taking the next steps.

Type of Indicators

- Outcome indicators
 - Examples: *Per capita income, employment change, productivity growth, infant mortality.*
 - Very difficult to move
- Factor indicators
 - General indicators that are hopefully connected to outcomes
 - But can be ill-defined
- Social/economic variable indicators
- Input or agency performance indicators

What should be the criteria of selecting indicators?

- ❑ People's Choice: From the ground up.
 - Builds buy-in from the community.
 - Develops dialogue and networks.
 - However,
 - ❑ Perceptions do not always equal reality.
 - ❑ Most do not know what they don't know.
 - ❑ Biases of the individual participating—the same cast of characters

Example: Priorities set by *Voices and Choices* in NEO Ohio.

- Economic Growth and Employment
- Education and Workforce
- Quality of Life and Place
- Equity and Fairness
- Cooperation and Governance

What should be the criteria of selecting indicators? (cont'd)

- Expert judgment
 - Draws on the expert knowledge in and outside the region.
 - Examples:
 - Kalamazoo Foundation Priorities
 - Boston Indicators Project

Kalamazoo Community Foundation Four Priority Areas

- ❑ Individuals and Families - *Building self-sufficiency through fundamental care and support*
- ❑ Economic and Community Development - *Enhancing quality of life and prosperity*
- ❑ Youth Development - *Nurturing and preparing our young people*
- ❑ Early Childhood Learning and School Readiness - *Preparing our children for success*

Boston Indicators Project

- ❑ **Knowledge jobs.** Indicator measures jobs held by managers, professionals, and technicians; and the educational attainment of the workforce.
- ❑ **Globalization.** Indicator measures the export orientation of manufacturing.
- ❑ **Economic dynamism and competition.** Indicators in this category measure the number of fast-growing "gazelle" companies; the rate of economic "churn"; and the number of initial public stock offerings by companies in each metro.
- ❑ **The transformation to a digital economy.** Indicators measure the percentage of adults online; the number of ".com" domain-name registrations; the share of students using computers in schools; Internet backbone capacity; and number of providers of broadband telecommunications services.
- ❑ **Technological innovation capacity.** Indicators measure the number of high-tech jobs; the number of science and engineering graduates from area colleges and universities; the number of patents issued; expenditures on research and development at colleges and universities; and venture capital investments.

Statistical Driven Indicators

- Based on statistical evidence of importance. *Are the variable indicators statistically associated with the identified areas of concern?*
- Example:
 - Cleveland Dashboard Study for the Fund for our Economic Future

Cleveland Dashboard Study for the Fund for our Economic Future

- Used more than 60 variables
- Established statistically significant association with growth factors and economic performance measures.

Table 4 Elements of the Regional Framework

Variable	Skilled Workforce	Assimilation Centers	Racial Inclusion	Legacy of Place	Income Equality	Locational Amenities	Business Dynamics	Urban/Metro Structure
Professional Occupation	0.955	0.062	-0.042	0.053	-0.032	0.033	0.017	-0.010
Graduate Degree	0.906	0.064	-0.077	0.006	0.010	0.039	0.075	0.058
Bachelors Degree	0.881	0.177	-0.049	0.063	-0.182	0.131	0.081	-0.089
Skill Differences	0.612	-0.083	0.199	0.011	-0.188	0.152	-0.041	0.075
Pct. Of Population >16 or 64 years old	-0.660	0.056	0.142	0.125	0.018	-0.081	0.280	0.142
Number of Patents per Employee	0.480	0.142	-0.181	-0.120	-0.176	-0.017	-0.087	0.073
Productivity in Information Sector	0.456	0.271	-0.042	-0.013	-0.011	-0.049	0.152	-0.025
Pct. Foreign Born	0.097	0.927	-0.105	0.023	0.084	0.055	0.153	0.084
Pct. Minority Business Employment	0.031	0.884	0.056	0.125	0.223	-0.087	0.076	-0.012
Pct. Hispanic	-0.138	0.770	-0.260	0.122	0.250	-0.030	0.142	-0.123
Cost of Living Index	0.342	0.683	-0.149	0.222	-0.132	-0.002	0.098	0.141
Pct. Asian	0.341	0.663	-0.180	0.104	-0.056	-0.033	-0.192	0.032
Commuter time	0.144	0.549	0.256	0.167	-0.080	-0.149	0.168	0.303
Pct. Homeownership	-0.160	-0.537	0.223	0.068	-0.349	-0.124	-0.027	0.324
Isolation Index	-0.034	-0.121	0.928	-0.025	0.182	0.167	-0.017	0.071
Disimilarity Index	-0.157	-0.167	0.826	-0.334	0.009	0.164	-0.031	0.141
Pct. Black	0.061	-0.121	0.587	0.299	0.394	-0.066	-0.058	-0.014
Climate Index	-0.076	0.469	-0.247	0.623	0.187	-0.050	0.343	0.097
Gross chg in employ. due to business churning	0.163	0.356	-0.042	0.618	0.142	0.120	0.470	-0.075
No. of governmental units	-0.164	-0.387	0.117	-0.449	-0.210	-0.070	-0.071	0.038
Crime Index	0.150	-0.217	-0.359	-0.530	-0.352	-0.153	-0.125	0.192
Pct. of Houses Built Before 1940	-0.035	-0.050	0.137	-0.878	-0.030	0.027	-0.118	0.086
Pct. Of child. Living in High Pov. Nbds.	-0.358	0.195	0.128	0.075	0.814	-0.029	0.039	-0.183
Income inequality	-0.005	0.387	0.285	0.206	0.765	-0.028	0.122	-0.054
Transportation Index	0.126	-0.099	0.168	-0.026	0.043	0.824	-0.074	-0.155
Recreation Index	0.083	-0.108	0.372	0.142	-0.265	0.584	0.214	0.184
Arts Index	0.525	0.241	0.248	-0.087	-0.244	0.535	-0.067	0.053
Major University Presence	0.487	0.026	0.074	0.107	0.104	0.520	-0.085	0.086
Health Index	0.445	0.003	0.196	0.019	0.186	0.451	-0.037	0.045
Pct. Of businesses employing < 20 workers	-0.023	0.200	-0.032	0.177	-0.047	-0.109	0.832	0.226
Gross chg in employ. due to business churning	0.163	0.356	-0.042	0.618	0.142	0.120	0.470	-0.075
Concentration in Mfg. Employment	-0.096	-0.151	0.016	-0.261	-0.288	-0.077	-0.693	0.164
Concentration of Poverty in Core City	0.089	0.107	0.124	-0.141	-0.034	-0.071	0.037	0.716
Pct of Metro Pop in Core City	0.128	-0.034	-0.154	0.098	0.262	-0.021	-0.109	-0.762

NEO DASHBOARD INDICATORS

- Skilled Workforce
- Urban Assimilation
- Racial Inclusion
- Legacy of Place
- Income Equality
- Location Amenities
- Business Dynamics
- Urbanization/Metro Structure

Cleveland Dashboard Findings

Factors	Growth Rate of:			
	Employment	Per Capita Income	Productivity	Output
Skilled Workforce	5	1	1	1
Racial Inclusion	3		3	3
Urban Assimilation	6		2	2
Income Equality	4	4		5
Business Dynamics	2			6
Legacy of Place Costs (negative)	1	2		4
Location Amenities		5		
Urban/Metro Structure		3		7

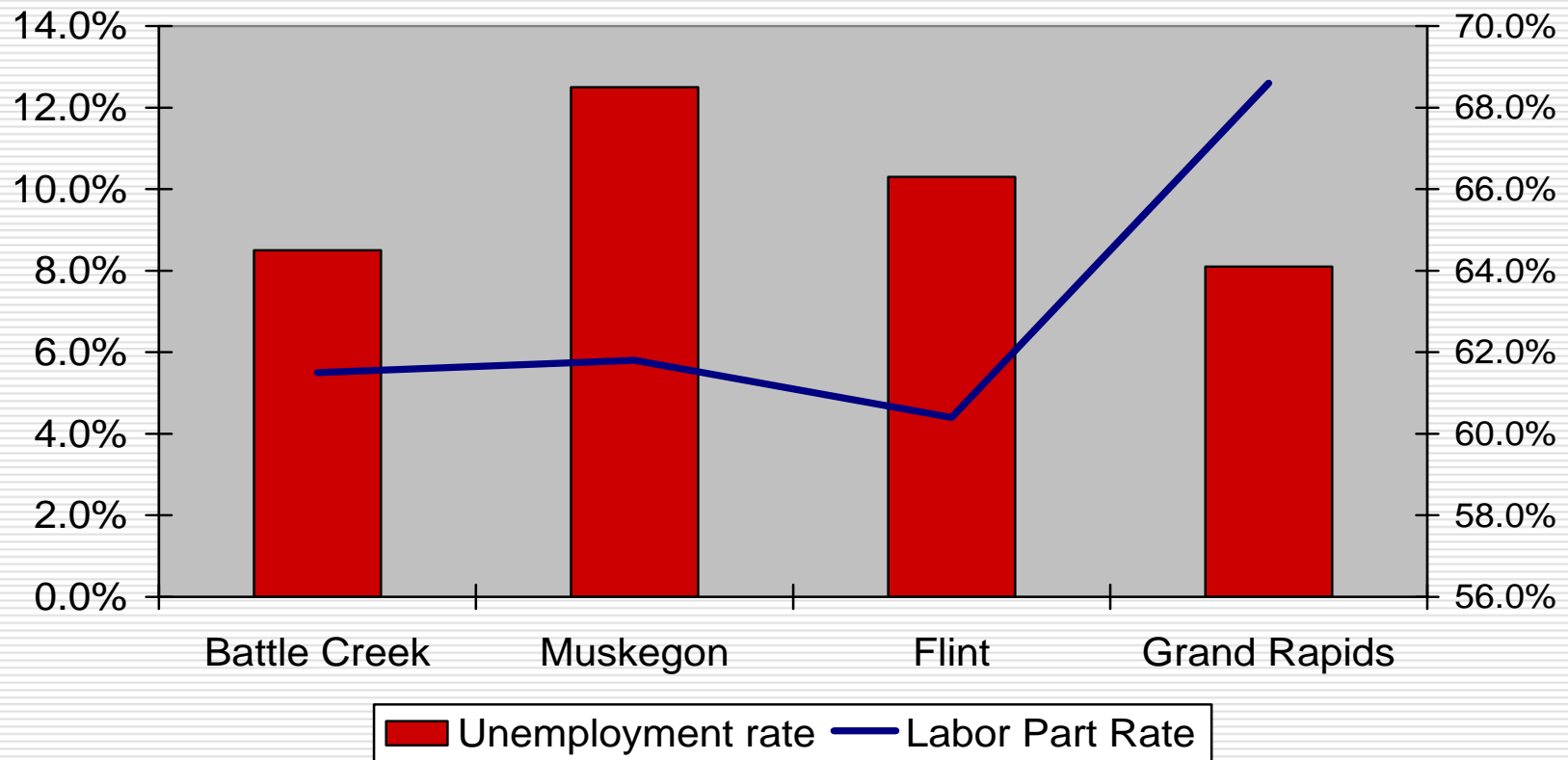
General rules to live by:

- ❑ Newer is better—*However, new is sometimes wrong.*
- ❑ When can a flawed indicator be useful?
- ❑ Less is more.
- ❑ Compared to what?
- ❑ Watch out for agency effects.

Flawed indicator: *the official unemployment rate*

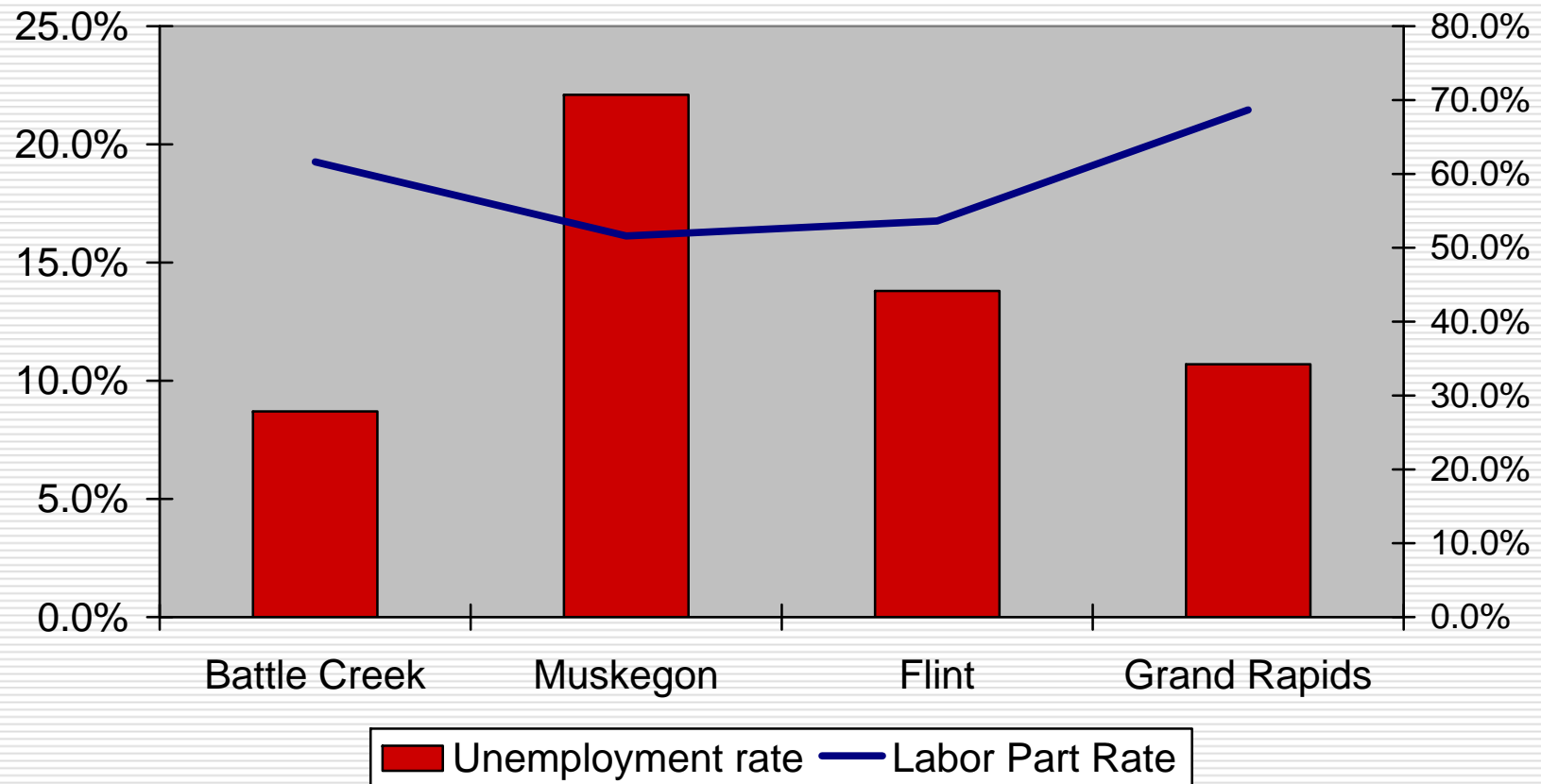
- ❑ What does it measure
 - Unsuccessful job seekers.
- ❑ What does it not measure
 - People who have given up looking for work or who have family commitments stopping them from working.
 - People who are underemployed
 - ❑ Stuck at part-time jobs for economic reasons
 - ❑ Stuck in full-time jobs that do not use all of their skills or abilities.
- ❑ So, should it be used as an indicator of employment conditions?

Employment Conditions in Four Metro Areas



Census 2005-2007 ACS

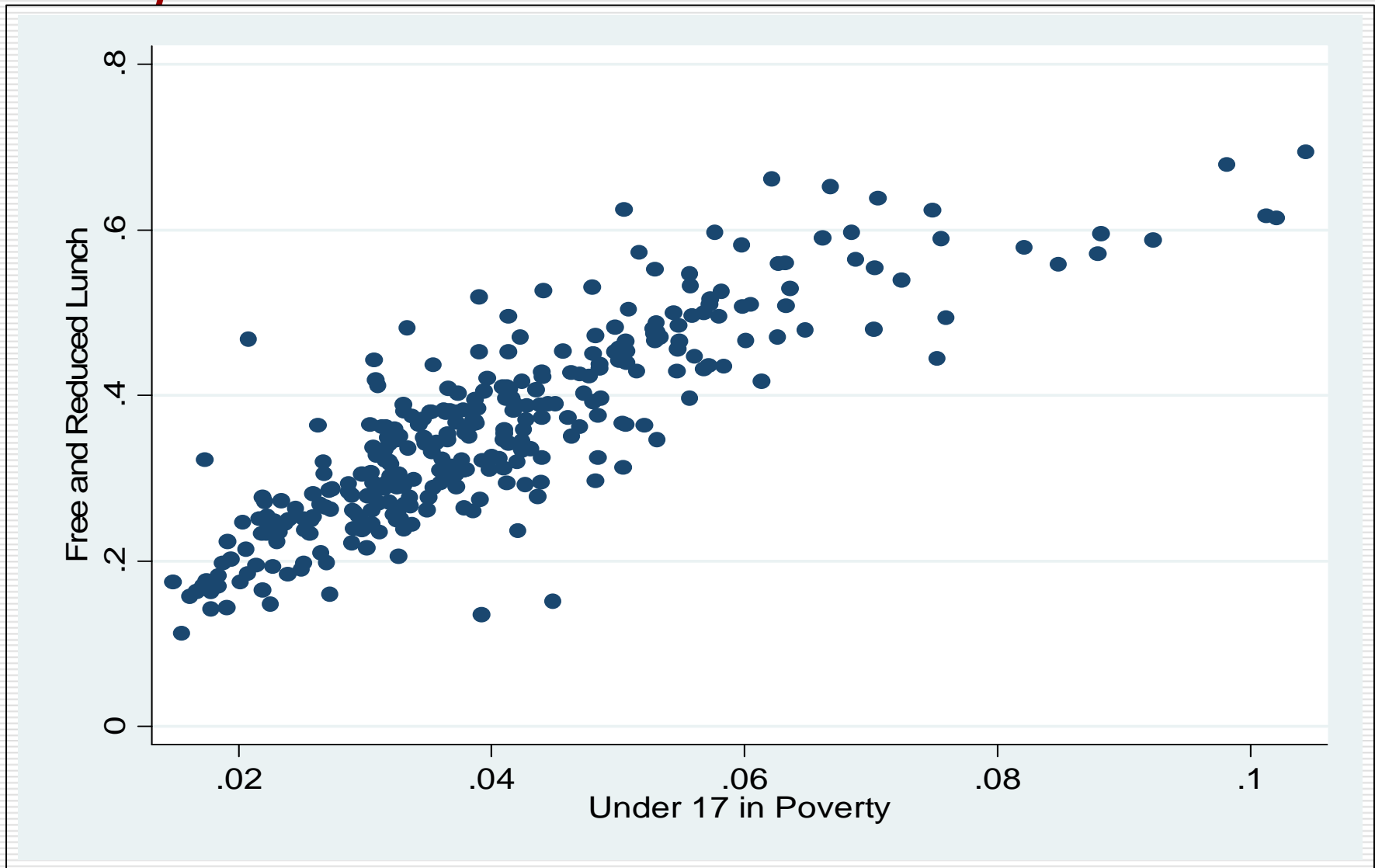
Employment conditions in the four metro areas' core cities



Less is more

- ❑ More data can cloud the vision and make decision making more difficult.
- ❑ It is up to working commitment to select only those indicators that matter.
- ❑ So, avoid duplication but keep those indicators that track what truly matters.

Less is more—*watch out for duplication.*



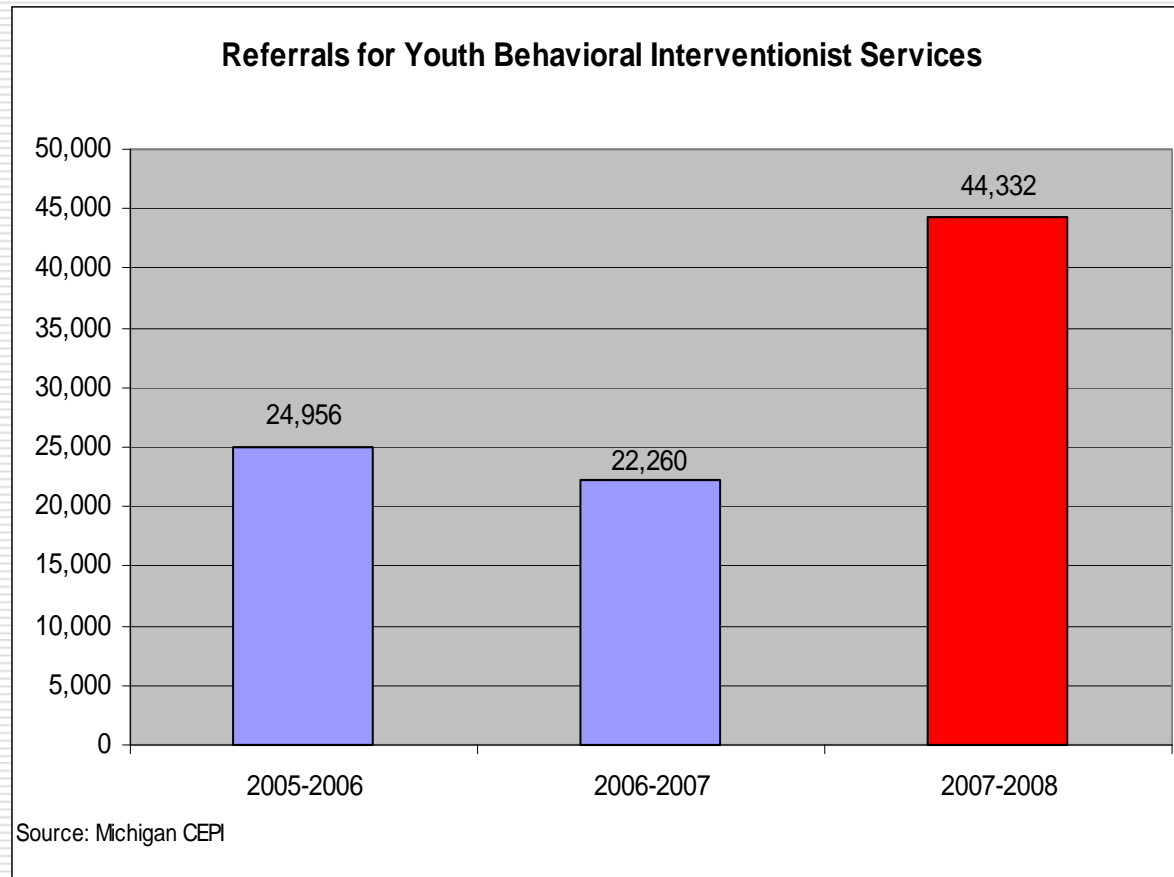
Compared to what?

- ❑ Comparison groups can account for the impact of national/international impacts.
- ❑ But selecting the members of the groups is difficult:
 - Size matters.
 - College/university presence matters.
 - Amenities matter.
 - Industry mix matters.
 - States do not matter.
 - Don't pick only dogs or stars.

Agency Effects

- New regulations
- Increase efforts or resources
 - More police – More crime
- Increased awareness.

Student referrals to behavioral specialists in K-12 schools in Kalamazoo County



In the 2007-2008 school year, KPS implemented a new disciplinary policy that dramatically increased the number of referrals; this makes comparisons with earlier years impossible.

Final Thoughts

- Indicators are tools best used for strategy planning and not for evaluation.
 - Do not teach to the test—do not focus on an particular indicator.
 - Good programs may generate great results which are still too small to move countywide indicators.
 - Indicator data can be up to two years old.

Final Thoughts – *How to Take the Next Step*

- ❑ The indicator report is not the finished product although it may finish its creators.
- ❑ It should be used to point in the general direction for resource allocation
- ❑ It should help connect the dots between actions and results.
 - Feeding hungry kids so they can learn.
- ❑ At the end of the day, any indicator report will likely disappoint if it is meant to measure progress of particular programs.

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