

# Behind the Numbers



Go to pages 56-58 for more data analysis

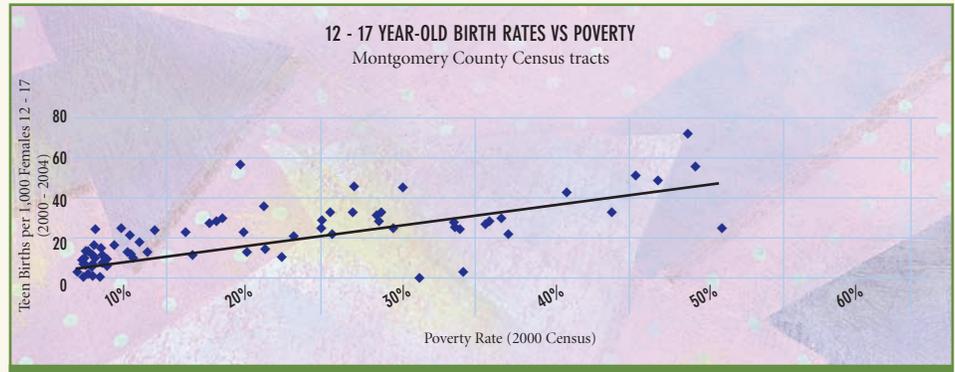
## NEIGHBORHOOD INDICATORS

One of the community outcomes embraced by the FCFC is the desire to live in “Safe and Supportive Neighborhoods.” Under this outcome, the FCFC tracks three indicators: Violent Crime, Property Crime and Voter Participation. While it is encouraging that the trend for all three has generally been in the desired direction (pages 56-58), the FCFC recognizes that the effort to achieve this outcome is far from over.

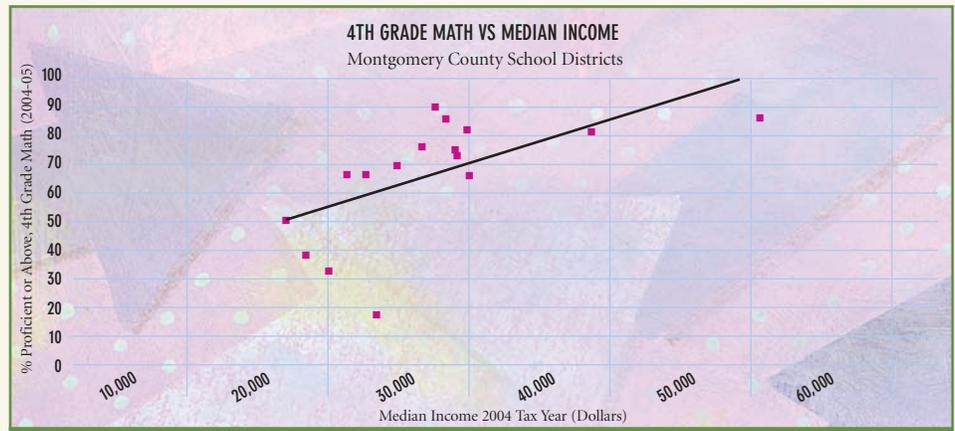
For some neighborhoods in particular, the path toward becoming safe and supportive may be especially difficult because of pre-existing, troubling conditions. Neighborhoods are complicated things and no two are alike. Each has its own set of strengths and its own set of challenges.

Exploring the nature and extent of these strengths and challenges is one way to go “behind the numbers.” In doing so, we will examine some of those “pre-existing, troubling conditions” that ultimately do have an influence on the neighborhood indicators being tracked by the FCFC.

Poverty is central to a thorough discussion of neighborhood conditions. As measured and reported by the Census Bureau, poverty is usually considered in terms of the individual or of the family. The fact that people who experience poverty tend to live near each other leads to a concentration of poverty in certain neighborhoods and gives poverty a spatial dimension. While the areas in Montgomery County with high and extremely high poverty became larger between 1970 and 2000, they remained concentrated in and near Dayton. (See maps on page 53.)



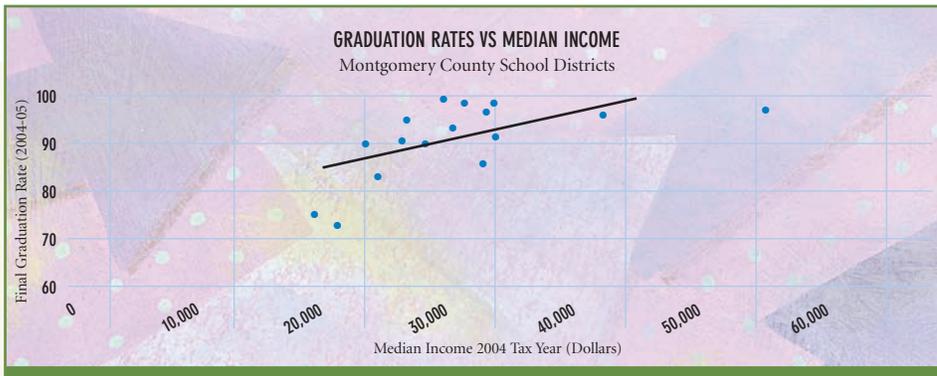
**Fig. 1** Teen birth rates tend to increase with an increase in the poverty rate. In Montgomery County a 12 – 17 year old girl living in a Census tract with extreme poverty (> 40%) is 29 times more likely to give birth than a girl living in a Census tract with very low poverty (< 2%).



**Fig. 2** Students in more affluent school districts tend to perform much better on academic performance. In Montgomery County a 4th grade student in one of the most affluent districts is more than twice as likely to score Proficient or above in math as a student from one of the least affluent districts.

Concentrated poverty means that other troubling conditions that are associated with poverty—low educational attainment, poor health, and dismal outcomes for children growing up in these neighborhoods, to name a few—are also concentrated. While this fact may be well understood in a general sense, it is striking to see what this means for Montgomery County’s neighborhoods.

For example, the birth rate for teenagers (12 – 17 years old) can be determined for each Census tract and plotted against the corresponding poverty rate (Fig. 1). Similarly, student achievement data and high school graduation rates for each school district in Montgomery County can be plotted against the corresponding median income (Figs. 2 and 3). In all three cases, the correlation between the amount



**Fig. 3** High school graduation rates tend to be higher in school districts with higher median incomes. The graduation rate in the districts with the highest median income is 22 percentage points higher than the rate in the districts with the lowest median income.

of income and the quality of the results is – literally – visible.

Simply put, poverty is the logical starting point for measuring neighborhood distress. A useful tool for further analysis can be derived from the work of John Kasarda who chose the following four measures, in addition to poverty<sup>1</sup>:

1. *Joblessness*—proportion of males 16 years old and over who are not working regularly where “working regularly” is defined as having a full or part time job for more than 26 weeks (in a year).
2. *Female-headed families*—proportion

of families with children under age 18 that are headed by a woman (spouse absent).

3. *Welfare receipt*—proportion of families receiving public assistance income.
4. *Teenage school dropout*—proportion of persons aged 16 to 19 not enrolled in school and not high school graduates.

All of these can be measured with Census data. Because Census tracts are often used as proxies for neighborhoods, it is possible and useful to extend this list in order to get a more complete picture of neighborhood conditions. (Fig. 4.)

For each of these measures, between 16 and 28 different Census tracts are excessively higher (or lower) than Montgomery County’s average.<sup>2</sup> (Fig. 5.) These results support the belief that, while the neighborhoods with the most measures of distress are concentrated in the core of the county, neighborhoods beyond this core are not immune from troubling conditions.

In fact, 66 of the county’s 145 Census tracts (or 45% of the county’s tracts) are identified by at least one of the 11 measures that were examined. Fig. 6 lists the jurisdictions (names and boundaries per 2000 Census) that contain these troubled tracts; they comprise most of the jurisdictions within Montgomery County.

This approach to data analysis is but one of many possible ways to discuss and categorize neighborhoods. The current result – that most of the jurisdictions within Montgomery County contain Census tracts with troubling conditions—is not meant to imply that those few jurisdictions which are not identified by this approach are somehow exempt from all problems. For example, the Census tract where residents have the highest median income also has residents (over 4%) living in poverty. Similarly, Census tracts with the highest rates of attainment of (at least) a bachelor’s degree are also home to hundreds of adults who never finished high school. While these tracts may have much lower rates of conditions such as poverty or non-completion of high school, the burden on individual residents remains high.

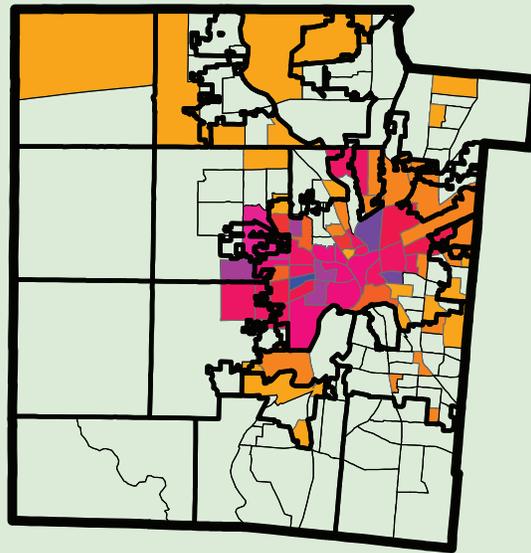
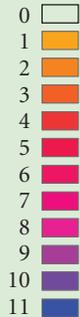
**FACTORS LEADING TO INCREASED DISTRESS**

<p><b>HIGH RATES OF</b> Poverty, Joblessness, Female-headed Families, Public Assistance, Teenage School Dropout, Childhood Poverty, Youth Inactivity (16 – 19 years old, not a graduate, not in school, not working, not in the military)</p>	<p><b>LOW RATES OF</b> Median Housing Value, Owner-occupied Housing, High School Graduation, Bachelor’s Degree Attainment</p>
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**Fig. 4** Eleven indicators of neighborhood distress for which data are available by Census tract are listed.

MONTGOMERY COUNTY: TROUBLING CONDITIONS

NUMBER OF MEASURES



**Fig. 5** 66 of Montgomery County’s 145 Census tracts are affected by at least one of the 11 measures that were examined. Tracts that are the most affected are concentrated in the core of the county, but neighborhoods in many jurisdictions are not immune.

	Total	P	J	F	W	T	C	Y	M	O	H	B
Butler Township	1											
Clay Township	1											
Clayton	2											
Dayton	11											
Englewood	1											
Harrison Township	7											
Huber Heights	2											
Jefferson Township	10											
Kettering	5											
Moraine	2											
Riverside	6											
Trotwood	10											
Vandalia	1											
West Carrollton	3											

P	Poverty	>= 25.91%
J	Joblessness	>= 48.1 %
F	Single-parent (Female) family	>= 49.68%
W	Public Assistance (Welfare)	>= 7.24%
T	Teen Dropout	>= 22.64%
C	Childhood Poverty	>= 35.19%
Y	Youth Inactivity	>= 16.48%
M	Median Housing Value	<= \$54,800
O	Owner-occupied Housing	<= 42.8 %
H	High School Graduation	<= 70.6 %
B	Bachelor’s Degree	<= 6.3 %

Therefore, it may be more useful to think of distress as occurring along a continuum, with some neighborhoods and their residents clearly experiencing more and some less, than to think of distress as either present or absent. Seen in this light, all neighborhoods experience distress.

We began by saying that the path toward becoming safe and supportive may be especially difficult for some neighborhoods because of pre-existing, troubling conditions. By looking “behind the numbers” we can see that the magnitude of those troubling conditions does indeed vary across the county but that, at some level, all neighborhoods experience distress. The nature of these conditions also means that all of the FCFC’s Outcome Teams have a role to play in helping Montgomery County’s neighborhoods become safe and supportive.

<sup>1</sup>Kasarda, John D., “Inner-City Concentrated Poverty and Neighborhood Distress: 1970 to 1990”, *Housing Policy Debate*, 4(1993):253-302.

<sup>2</sup>We used the same criterion that Kasarda used: more than one standard deviation away from the mean.

**Fig. 6** Neighborhoods affected by one or more of the 11 troubling conditions can be found within most of Montgomery County’s jurisdictions. This table shows, for each jurisdiction, the number and identity of the troubling conditions affecting at least one Census tract within that jurisdiction. The conditions are listed below along with the values that meet the criteria used to determine a troubling condition.