

ABOUT THE PARTNERS

<u>United Way</u> and the <u>Measure of America</u> joined forces in 2008 because both organizations focus on the building blocks of a good life—a quality education that starts from birth and ultimately leads to a stable job, enough income to support a family through retirement, good health, and the ability to achieve one's full potential. Out of this partnership came the Common Good ForecasterTM, a tool that shows how vital economic and social issues in your community might change if educational outcomes were better.

FREQUENTLY ASKED QUESTIONS

Step-by-step instructions:

- 1. **Choose** the geographic unit (county, state or nation) you want to explore.
- 2. **Move the slider for** the educational level in the selected community that marks the boundaries between four different levels of educational attainment for adults age 25 and older:
 - less than a high school education,
 - a high school diploma or equivalency degree,
 - some college or an associate's degree, or
 - at least a four-year college degree.

You can also view the U.S. and state average for your community.

- 3. **Explore** changes in the selected economic or social indicators below the sliders.
- 4. **Test** pre-determined scenarios. Select an option from the drop-down menu to explore what would happen if:
 - All adults age 25+ w/o HS graduate HS
 This takes all adults 25 and older who have less than a high school education and "graduates" them from high school. So, if you were looking at the US educational "mix" for example: 16%/30%/27%/27%. After choosing this scenario, the sliders would move to: 0%/46%/27%/27%.
 - All adults age 25+ move up 1 educational category
 The "educator's dream" scenario takes all adults 25 and older and has them

graduate to the next higher of the four defined categories of education. So, back to the US "mix": 16%/30%/27%/27%. After selecting this scenario, the sliders would move to: 0%/16%/30%/54%.

Note: This Forecaster is based on either observed data or peer-reviewed statistical models to forecast what changes might occur in other variables if increased levels of educational attainment are realized. For the majority of indicators included, the data are broken out by the education levels in these local areas. When adjustments are made in the "mix" of educational attainment, we are assuming that current relationships between education and all other factors in a given geographic area remain the same. Extreme adjustments to the sliders can produce unrealistic results in other factors (i.e. unemployment, poverty, and murder rates falling to zero).

What do the levels of education correspond to?

The Common Good Forecaster uses data from the 2009–2013 five-year American Community Survey of the U.S. Census Bureau. This survey includes data on seven categories of educational attainment, on the left. In the Forecaster, they are presented in the categories on the right:

•	Less than 9th grade 9th to 12th grade, no diploma	Less than high school education
•	High school graduate (includes equivalency diploma)	High school graduate (includes equivalency diploma)
•	Some college, no degree	Some college or associates
•	Associates degree	degree
•	Bachelor's degree	At least four-year college
•	Graduate or professional degree	graduate

How does the Forecaster work?

The Common Good Forecaster uses two different types of calculations. Method 1 is used for every indicator except life expectancy and incarceration, for which we use Method 2.

METHOD 1: We forecast the effect that changes in educational attainment will have on various outcomes based on the specific relationship that exists in each state or county between multiple variables. In County A, for instance, there may be greater economic returns to earning a college degree than in County B; Method 1 takes that variation into account when predicting how changes in educational attainment might affect poverty or earnings for residents of that county.

For Method 1, for adults age 25 and older, the weighted average of the indicators of each of the four education groups in a state or county for median personal earnings would be:

(% with less than high school x median earnings for this group) + (% with HS degree or GED x median earnings for this group) + (% with associate's degree or some college x median earnings for this group) + (% with bachelor's degree or more x median earnings for this group)

= today's median personal earnings.

This is based on estimates from reputable sources (i.e. Census Bureau, National Center for Health Statistics) for each community. All the countless external factors that affect the relationship between education and income, such as a community's current economic scenario, distance from commercial centers, geographic location, and others are thus taken into account. Each community has its own unique relationship.

METHOD 2: We use peer-reviewed research to establish a nationally representative relationship between the indicator in question and the educational attainment level. This method (applied to two Forecaster indicators, life expectancy and the incarceration rate) differs from Method 1 in that these results are education-to-indicator relationships at the national level applied to every local geography where data are available. The assumption is that the national relationship is valid for all constituent geographies. For illustrative and forecasting purposes, we find this an acceptable assumption.

Many factors affect outcomes in such areas as children's reading proficiency, obesity, income, poverty, and incarceration. Why pull out education and focus on this alone?

The Forecaster is an effort to disentangle the effect of education on various important indicators of personal and community well-being from the effects of other factors on those same indicators. For example, social scientists use the concept of socioeconomic status to describe the social and economic composition of an individual or family in relation to others in society; this status is based on a combination of factors, among them educational attainment and related prestige, income level, and occupation and associated status, and the resulting power and access to and control over resources that this status affords. Nevertheless, in practice, social scientists use what they can as a proxy for this broader concept. Can one ever separate entirely the effects of income and education? Often not meaningfully.

Aren't you oversimplifying the relationship between education and other factors in a community?

Yes and no. Scientists do this all the time by necessity. Might there be intermediate factors that are more important in affecting the indicators in this Forecaster? It's possible, but in terms of powerful underlying causes, not many match the breadth of impact that education has on people, their communities and their larger societies. And yes, by saying the relationship between education and these other factors is one-way only is not always accurate. For example, research shows that obesity can lead to social stigmatization and mental health issues, preventing some high school seniors from pursuing further education. By also answering no to

this question, we mean to say that in the case of one of our methods (see above for a discussion of both methods), we are actually being as rigorous as possible in honoring the differences of local places. We take local county estimates and reweight existing relationships determined by the many unique factors in that community. This method is rooted in the uniqueness of place.

For some indicators, there is no county data available at all. Why?

Some indicators are not available at all at the county level. Furthermore, data for counties with fewer than 10,000 residents could not be presented due to statistical instability. For incarceration, data are only available by state because many counties do not have prisons and because inmates are rarely imprisoned in their own communities.

What are my options if I live in a county for which there are no data?

One option is to select neighboring counties that seem similar to yours.

Sometimes major shifts in education produce only limited changes in other indicators. Why?

Each state or county has a countless array of factors affecting key social and economic indicators. (i.e. the community's current economic scenario, industry health and mix, distance from commercial centers). There are different ranges of what is possible county-by-county and state-by-state, depending on these factors.

In some counties, the difference between the maximum and the minimum values may seem small compared with ranges within other counties because the returns to education may be greater in some places than in others.

If no sliders are moved what am I seeing?

You are seeing the current situation in that place based on the most recent data available.

DATA SOURCES AND DEFINITIONS

INDICATOR	SOURCE	COVERAGE
Less than High School;	U.S. Census Bureau, American Community	States and
High School, including GED;	Survey, 2009-2013.	counties
Some College/Associate's		
Degree;		
College Grad or More		
Life Expectancy at Birth	Measure of America and Institute for Health	States and

	Metrics and Evaluation calculations, 2010.	counties
Low Birthweight	Centers for Disease Control and Prevention,	States
	National Center for Health Statistics, VitalStats	
	Online, 2013.	
Murder	Centers for Disease Control and Prevention,	States
	National Center for Health Statistics,	
	Compressed Mortality File, 2008-2013.	
Obesity	Centers for Disease Control and Prevention,	States
	2013 Behavior Risk Factor Surveillance System.	
Median Personal Earnings	U.S. Census Bureau, American Community	States and
	Survey, 2009-2013.	counties
Unemployment Rate	U.S. Census Bureau, American Community	States and
	Survey, 2009-2013.	counties
Poverty Rate	U.S. Census Bureau, American Community	States and
	Survey, 2009-2013.	counties
8 th Grade Reading	U.S. Department of Education, 2011 National	States
	Assessment of Educational Progress Reading	
	Test, Eighth-Grade Reading Proficiency.	
Voting	Atlas of U.S. Presidential Elections, 2012.	States and
		counties
Incarceration	U.S. Department of Justice, Bureau of Justice	States
	Statistics, 2004.	

DOWNLOAD DATA

Data used in the Common Good Forecaster are available <u>here</u>.