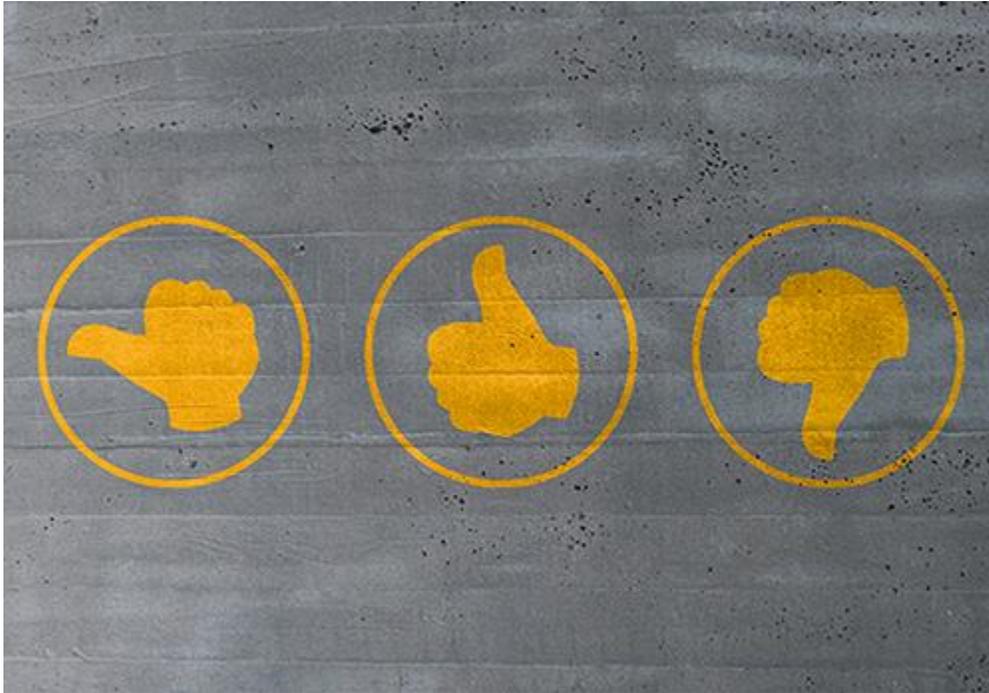# BASELINE DATA

- WHAT IS A BASELINE?
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- HOW DO YOU USE BASELINE DATA TO DEVELOP AN INTERVENTION?

So you've set out to identify the problems that exist in your community and you've started collecting information about a particular problem. How will you get started attacking the problem unless you first have some idea of its extent and intensity? Once the intervention is in place, how will you know how effective it is unless you know how bad the problem was before it started? This is where baseline measures come in to play.

WHAT IS A BASELINE?

To make a change in your community, one of the first things you'll need to do is figure out how much the different factors and trends you're examining are happening in the first place. Try to find out how prevalent any problems and positive tendencies are, how often things happen, the duration and intensity of most incidents, etc. The things you keep track of in order to obtain this sort of information are called baseline measures. In other words, the baseline is the standard

against which you will measure all subsequent changes implemented by your program. We call them baselines because they're usually shown as lines in graph form to easily show changes over time.

Here's how baseline measures work. Suppose you've observed a high rate of teenage pregnancy in your community, and your organization decides to do something about it. So you gather statistics over a one-year period about the number of reported teen pregnancies, and then you measure again, comparing the new figure against your baseline. Depending on whether the numbers have gone up, gone down, or stayed about the same, you'll know whether or not your intervention is working.

Let's look at some other examples of baseline measures from everyday life.

Examples: Baseline measures in everyday life

- A mother hears her baby crying. She knows from past experience how and when her baby usually cries -- that's her baseline. Because of that, she can tell this time around whether the baby is crying just because he's fussy, or whether there might be something to worry about.
- Rafael gets up in the morning and doesn't feel well. He makes that judgment based on knowing how he usually feels when he gets up. That usual feeling, based on past experiences, is his baseline. He uses it to help decide whether he should get up and go to work, or call in sick and get some rest.
- Your friend Marisol tells you you're looking good. She knows how you usually look-- that's a baseline for her. If you're looking particularly rested, or tanned, or fashionable, or bright-eyed this morning, Marisol notices and comments.

All of these simple everyday examples involve baselines. Sometimes people may call them other names: reference points, adaptation levels, anchors, or norms, for example. But whatever we call them, we all have them and we all use them. In a way, they are essential for all of us in making judgments about people and things. Without baselines, it would be much harder to navigate our way through the world.

Most everyday baselines are casual and informal. We may not even notice them; we certainly don't measure them. In making decisions about community actions, and about public policies in general, however, we sometimes take baselines a lot more seriously. For example, every month, the Consumer Price Index is released by the Bureau of Labor Statistics. The numerical value of that index, which tells us whether the cost of living is going up or down, relies on a baseline. Likewise, many other indices, including stock indices (e.g., the Dow Jones), local quality of life indicators, et cetera, rely on baseline measures.

Interpretations against a baseline are the way most policy decisions get made. If a new law has raised the penalties for drunk driving, has drunk driving decreased? What kinds of activities will draw visitors to local parks, based on data we already have on park use? Good decisions in these cases and countless examples more will depend on good collection and utilization of baseline data. Comparison to a baseline is the standard against which policy success is judged.

Experts generally consider determining baseline measures of behavior to be the first phase in any sort of behavior modification program, followed by implementation of the program and finally a follow-up phase in which the results are measured and analyzed.

WHY USE BASELINE MEASURES?

BASELINE MEASURES CAN TELL YOU WHETHER YOUR EFFORTS ARE WORKING.

To plan a truly effective program, you have to know how much of an effect your efforts are having. You need to have an idea of the level of the problem without your efforts being a factor to know whether you're really making a difference at all. Recording baseline measures, which you can then compare with whatever the numbers are after your intervention has started, will help you figure that out.

A baseline can help you make sense about something that might be too massive and complicated to understand otherwise.

A question like How well are our schools working? might be overwhelming to try to answer. However, keeping track of baselines, such as standardized test scores or high school graduation rates, can help you better understand the bigger picture.

A baseline can help you decide whether this is a good time to start an intervention or whether a particular intervention is appropriate.

Say you're working to decrease fatal car accidents in your county. One of the ways you're thinking about doing this is to start a program to encourage seat belt use. Getting some idea of how many people in your county are consistently using their seat belts will help you decide whether you should spend any time and resources on such a project. The rate of seat belt use will be your baseline measure. If 98% of local citizens are already using their seat belts most of the time, you may want to explore other possible interventions.

Baseline measures can sometimes tell you if an intervention isn't necessary at all.

For example, community leaders may be crying out about an increase in gang-related activities among youth and demanding programs to discourage it, but a good, accurate baseline measure of juvenile delinquency rates could show you that there really isn't a problem at all.

Baseline measures can help you tell if you're using methods that aren't working.

If there is no change in the behavior compared to the baseline, you can stop wasting your time with an ineffective method.

For example, let's say you're working to increase the numbers of pregnant women in your city getting prenatal check-ups, and you've decided to use a series of public service announcements to do this. By comparing the number of women receiving prenatal check-ups after a given period (such as a month or six weeks) to your baseline measure the number of women receiving prenatal check-ups just before the public service announcements started running you can decide whether the numbers have improved enough to warrant continuing with the public service announcements. Maybe the numbers are increasing and you'll decide to continue running the public service announcements, or they may be remaining steady or even decreasing, in which case you might want to consider trying another method.

Keep in mind, however, that your method or intervention may take some time to produce the desired effect. Behavior change may not show up immediately. Be sure to wait a while before concluding that a method or an intervention isn't working. It could be that it just needs more time.

HOW DO YOU DEVELOP A BASELINE?

PICK AN INDICATOR OR INDICATORS THAT BEST REFLECT THE BEHAVIORS THAT ARE MOST IMPORTANT TO YOU.

An indicator is anything that is measurable that can be used to identify a change in trends. An indicator can be the number of alcohol-related car accidents per county per month throughout your state, the number of people requesting a particular pamphlet that your organization distributes, or the number of pregnancies among teenagers in your community in a year.

The indicator needs to be relevant: it should tell you what you need to know.

Ask yourself these questions:

- Does this represent what's most important and pertinent to our community?
- Does this show some facet of the long-term well-being of our community?
- Is this measure showing what it's supposed to measure and not some by-product?
- Can this measure be compared to progress in similar communities on this issue?

Below is an example of a group selecting a baseline measure to use in tracking the effectiveness in one of its programs.

Example: An anti-gang project for urban high school students

Some indicators that you might want to consider using as your baseline measures could be rates of:

- Students involved in extracurricular activities and church groups
- Drug and alcohol use
- Students wearing gang colors
- Students in counseling programs
- Students in conflict resolution programs
- After-school and weekend employment

If one of the things your group is planning is an after-school discussion group, then the first indicator would probably be a good one for you to use as a baseline measure, because it should give you a good idea of the numbers of students who might be likely to participate in an after-school activity.

FIND MEASUREMENTS ON THOSE INDICATORS.

Once you've chosen indicators, decide exactly what you're going to measure, and for how long.

For example, will you measure violent gang-related incidents on school property during the school year? Will you measure the number of alcohol-related automobile fatalities over a four-week period? It's possible that someone else has already measured these things; if so, then you'll

just need to verify (and, if necessary, update) the information. Otherwise, you or someone else will need to go out there and measure them.

Some things to consider if you're doing the measures yourself:

- What characteristics of behavior should be measured? Some of those characteristics include frequency of behavior, rate of behavior, percentage of occasions the behavior occurs, and duration of behavior.
- Under what conditions should you collect data?
- Will you observe continuously or do sampling? If sampling, how often to do so?
- Will you collect data for given periods of time, or by intervals? If for given periods of time, how long will those periods be? If by intervals, how long will the intervals be?

Remember that a good baseline will include information gathered at several points over a period of time, rather than simply a snapshot of information gathered over, say, a single weekend.

HOW DO YOU USE BASELINE DATA TO DEVELOP AN INTERVENTION?

DECIDE WHICH PROBLEM(S) TO ADDRESS

Based on the data, decide what problem(s) should most be addressed by your group or coalition. What looks like it most needs to be dealt with? Is it something you can reasonably expect to be able to change?

IDENTIFY PRIMARY TARGETS OF THE INTERVENTION

This means deciding who your intervention will be aimed at. A given group of people? An institution? Decide how their behavior helps produce and maintain the problem. Figure out what your research results suggest about relationships between the problem(s) and the behaviors of the targeted group.

DEVELOP AN ACTION PLAN

- Set a behavioral goal for the intervention
- Study what knowledge and information you already have about the community and the problem to decide what procedures to use.
- Decide who will be in charge of making the behavior change(s).
- Determine how to involve those affected by the problem(s) in the solution.
- Study other models of change. What existing methods for dealing with the behaviors have been successful in similar communities?
- Decide how you will go about explaining the intervention to the public.

Get going! With the knowledge you've gained from checking your baseline measures, you will have a much better chance of making real changes in your community, and you can use those measures to monitor your success.

IN SUMMARY

Using your baseline measures to figure out how prevalent any problems and positive tendencies are in your community can be very effective in helping you to monitor how the effect your efforts are having. By giving you one way to measure the success of your programs, baseline measures can be enormously helpful to your efforts.