

The Active Service Slot

The Connecticut Opportunity Project's Key Performance Indicator for Measuring and Managing Program Capacity

August 2021

Comparing caseload slots and turnstile numbers to active service slots

When considering program size or capacity, the usual practice is to rely on the metrics of caseload slots and turnstile numbers. Caseload slots are calculated in terms of the number of program participants that each staff member is expected to carry on his or her caseload, and then multiplying that number by the number of program staff to arrive at a measure for the program's service capacity. An alternative is to count the number of people who are enrolled in a program during a specific time period as if they were entering through a subway turnstile and the program size is the total number of individuals counted in this way. For reasons that will become clear, we find such measures of little value when it comes to operating a program that is intended to help its participants improve their lives and life prospects.

The metric that the Connecticut Opportunity Project (CTOP) uses, and that our grantees find very useful for managing their programs, is the active service slot. ***By active service slot we mean a position in a program occupied by a member of the target population that the program is designed to benefit – who also is receiving the full range of services, at the prescribed intensity and frequency, as well as in the places appropriate to their needs and via the prescribed modalities.***¹ This article discusses what all this means and entails.

An example: why using caseload slots or turnstile numbers to calculate program capacity tells us next to nothing

Some years back one of us was asked to consult to an after-school program for middle school students in a major Northeastern city. The program met during the school year and focused on developing skills for life, high levels of school attendance, low levels of behavioral referrals in school, and pro-education values. It offered 60 slots at any given time through two full-time staff members and four college interns who carried caseloads of 10 participants each, and served some 60 to 90 participants annually.

Staff and interns were expected to develop success-focused, trusting and meaningful relationships with the children on their case-loads. In addition, they provided recreational and creative/expressive activities, led field trips, taught social/emotional skills and behavior management, conducted group-based team and trust-building exercises, communicated at least weekly with parents, and liaised with participants' school personnel where they advocated for special services as needed. They also provided special events for participants during school vacations, homework assistance, mathematics skill-building, and enrichment for one-hour

¹ Hunter, D. E. K. & Koopmans, M. (2006). Calculating Program Capacity using the Concept of Active Service Slot. *Evaluation and Program Planning* (29). pp 186-192.

sessions, two times per week. It was expected of these children that they would participate throughout middle school and attend all sessions in order to benefit fully from this program.²

Several points are worth making here:

- The standard for enrolling a child in this program was very broad: the only requirement was that enrollees be local middle school students. With such a broad population it is very likely that a goodly number of enrollees simply do not need the program to achieve the academic outcomes that are the measure of its success. Why? Well, some probably were doing just fine in school without the program; and some could have been receiving academic supports elsewhere. So the program really could not claim credit for having produced good academic outcomes for some significant, but unknowable, portion of the children it served.
- While the program “expected” participating children to remain engaged for years, it in fact served many more children annually than the program had room for in program slots – and indeed there was a pattern of participant turnover (as high as 50%) that did not meet extended program participation expectations. Therefore, in spite of the program’s intentions, it was very debatable whether in reality it would serve any given child long enough to benefit that child as intended.
- When the individual program components were examined, those activities that were intended to drive academic gains and related behavioral changes did not meet what many practitioners in the field have suggested as minimal “dosages” – in time per session, in frequency, or in the time period children actually participated.

So, what was this program’s capacity?

If we want to count the number of caseload slots for which the program was budgeted, the number would be 60, holding constant from year to year.

If we use turnstile numbers – counting the number of children who got enrolled each year, the number would be more like 90 enrollees annually.

If we wanted to take into consideration the number of children of those enrolled who actually participated more than a year, as the program hoped and expected, the number would drop by about fifty percent – let’s say 45 new enrollees a year.

If we wanted to identify those enrolled children who actually needed the program in order to achieve its targeted outcomes, the number – though unknowable because of lack of clearly defined enrollment criteria and baseline data – would likely be much less than 45.

² This program, and many like it, can be wonderful places for children to spend time, to be stimulated, and to be kept safe – which was the original intent of after-school programs until federal funding for them was in part shifted to the U.S. Department of Education from the U.S. Department of Health and Human Services, which brought a demand that they produce academically relevant outcomes. Like many other such programs, this after-school program accepted this requirement but did little programmatically to meet it.

Clearly, the program's budgeted slots and actual enrollment (turnstile) numbers actually have little or no importance if we expect this measure of program capacity to tell us anything meaningful about the potential value of the program to the children it enrolled.³⁴

So what is a meaningful way to calculate a program's capacity? As we pointed out at the beginning of this article, for this purpose CTOP has adopted the metric of the active service slot.

Active service slots and program capacity

To know what constitutes an active service slot it is important to recognize that this concept rests firmly on the idea of a target population, which refers to the individuals, families, or groups who are the intended beneficiaries of a program's work and the focus of its efforts. For programs designed to produce desired changes (outcomes) with participants, ***active service slots consist of position in a program occupied by members of its target population who are participating in the program's core activities (elements) at dosages levels (intensity⁵, frequency, duration) using the prescribed modalities⁶, and providing them in appropriate locations or venues⁷ – that are necessary for them to benefit as intended.***⁸

In this context, ***core activities are those program elements that are indispensable for promoting the achievement of participant outcomes***; however, they often are surrounded by other elements that help make the program more enjoyable or otherwise act as "glue" to help keep participants engaged. These latter (peripheral) elements are more likely than core activities to change in response to emerging circumstances and are where staff creativity often is expressed and innovation can flourish. Core program elements, in contrast, will of necessity remain relatively stable; they should change only in the context of rigorous efforts to examine them and look at evidence regarding their continued effectiveness.

In this context it makes good sense to say that ***a program is a set of active service slots that are provided within a coherent framework through a management and accountability system that clearly identifies the short-term, intermediate, and long-term participant outcomes for***

³ A general definition of a given program's social value would identify the fact that the program is serving participants who actually need it to achieve specific long-term outcomes, and is producing those outcomes consistently, reliably, and sustainably; a more rigorous definition would add the requirement that alternative explanations for how participants achieved those outcomes have been eliminated through comparison to some set of non-participants – often called a comparison or control group (which also are called counterfactuals).

⁴ Since this program claimed to be promoting key academic and behavioral outcomes for its participants, it is worth noting that in fact its efforts to collect outcome data were haphazard and unreliable.

⁵ In this context "intensity" refers to the amount of time spent on each contact or activity.

⁶ By modalities we mean the ways in which services are delivered, including whether they are provided in person or remotely and consisting of such things as one-on-one meetings, group-based meetings, family-based meetings, and so on.

⁷ Venues are the contexts within which services are delivered – such as via home visits, out in the community, at the program's offices.

⁸ Furthermore, the modalities through which the activities are provided (in-person one-to-one, in-person group, telephone or texting, Zoom, etc.) and venues where they take place (center-based, street-based, home-based, etc.) also should be specified.

which the program holds itself accountable, and clearly specifies the core activities and services that are intended to help participants achieve these results.

It follows that ***the capacity of a program is equal to the number of active service slots it is providing***, on average, over a given period of time (a month, a quarter, a semester, a year, etc.).

It is also worth highlighting that ***active service slots are the best possible proxies for the social value of a program*** until the assumptions that informed the design of its active service slots can be tested through an implementation evaluation and ultimately by an impact or benchmarking evaluation.

How to design and calculate the number of active service slots in a program

In a set of slides posted on the CTOP website under Resources,⁹ we present a series of steps needed to design a program's active service slots and then to calculate their number. In brief, these are:

1. **Develop and codify the program's target population.** Generally speaking, this consists of identifying key indicators in two categories – demographics and risk. *Demographic indicators* are such relatively stable things as residence, date of birth, gender, race/ethnicity, socioeconomic status, etc. *Risk indicators* are such things as living in poverty, poor health, failing in or dropping out of school, a history of incarceration or being in the process of reentering the community, living in or transitioning out of foster care – that predict difficult life trajectories but are more changeable and therefore can be moderated or even overcome by social service programs.

CTOP's mission is to invest in and help strengthen youth-serving organizations in Connecticut so they can work effectively, reliably, and sustainably with young people ages 14 to 22 who are disengaged or disconnected¹⁰ in order to help them re-engage in and complete secondary education, then transition successfully to the pursuit of post-secondary education, such as a technical certification, military enlistment, or an academic degree – with the ultimate goal that all young people will achieve satisfying employment that supports their agency and self-sufficiency.

2. **Design and implement a system for enrolling target population members in the program.** This requires a screening tool that uses the demographic and risk indicators developed in Step 1 to identify those people who are appropriate for enrollment in the program. Then a system needs to be put in place with effective policies and processes

⁹ <https://www.ctoportunityproject.org/resources/?CurrentPage=0&Keywords=&ResourceTypeIDs=2>

¹⁰ Disengaged young people are middle school or high school students who are on a path towards dropping out of school – as indicated by poor attendance, failing grades, and getting into trouble at school. Moderately disconnected young people are those who have in fact dropped out of school and are drifting about aimlessly and frequently are starting to get into legal difficulties. Severely disconnected young people no longer are engaged with any prosocial institutions or relationships, are often in gangs and participating in serious crimes as well as becoming perpetrators (and victims) of gun violence.

to ensure the reliability of decision-making so that the great preponderance of program participants are in fact the people for whose benefit the program was designed.

CTOP measures the social value created by its grantees in terms the success achieved by the young people from the target population described above who graduate from the programs they offer and subsequently achieve the outcomes listed in our mission.

3. **Develop and codify the program.** This involves selecting the core program elements that, combined, will be used to help members of the target population achieve key outcomes as intended. This involves specifying the activities and services that will be offered, their frequency, intensity, and the modalities to be used. Also, it is important to create job descriptions that spell out the competencies staff will need to do the work reliably, effectively, and at high levels of quality.
4. **Implement an internal monitoring system.** This is a key aspect of a broader performance management data system that:
 - a. Assigns program participants unique identifiers,
 - b. Documents their demographic and risk indicators at the time of enrollment,
 - c. Records any subsequently collected baseline assessment data,
 - d. Monitors their participation in program elements, and
 - e. Monitors their progression toward the achievement of targeted outcomes.
5. **Generate a "monthly program capacity report".** This report counts only those youths who have been participating in the ways and at the levels specified in Step 3, and will provide the basis for monitoring program capacity using active service slots.

As suggested in Step 5, the true program capacity will tend to fluctuate based on actual client participation and the appropriateness of newly enrolled program participants. A member of the target population in a program slot who does not participate at the levels called for in the program design during a given period cannot be counted as occupying an active service slot during that time. Also, if someone who falls outside the parameters of the target population nevertheless is enrolled in the program and is participating as called for, that person cannot be counted as occupying an active service slot even though this person is on a caseload. Hence the fluctuations in program capacity over time and the fact that ***program capacity is a statement of what happens on average***, rather than being a picture of an absolute or steady count.

Of course, if the fluctuations are too frequent or the number of fluctuations too great, one should view this as an indication that something about the way the program is being delivered is in need of improvement. This can be achieved by asking and answering the four key questions of performance management: What do we need to do better? What do we need to do more of? What new ways of working should we try out? What are we doing wrong that we should stop doing?

From the foregoing, it should be obvious that the elements and dosages of an active service slot likely will vary from organization to organization, from program to program. ***Each of CTOP's***

grantees, therefore, owns the work of arriving at operational definitions of active service slots for their own programs.

The disengaged and disconnected young people who constitute CTOP's target population are unlikely ever to progress straightforwardly up a ladder of sequenced services – in reality they are likely to experience significant setbacks from time to time and, for a while, not be willing or able to participate in a given activity to which they have been assigned. When this happens it is expected that the youth's case manager or youth development worker will act to strengthen the engagement with the young person and ultimately to reconnect the young person to these activities. This means that while the youth might relapse or otherwise slip, she or he will remain an occupant of an active service slot by virtue of being in this relationship with the youth development worker. This also means that, as we discuss below, **for programs that use tiers to manage service delivery, the capacities of service tiers are fluid and should be tracked no less than monthly to maintain the program's performance at high levels of quality, reliability, sustainability, and effectiveness.**

How CTOP applies the concept of active service slots to grantees' youth programs

As noted above, CTOP's mission is to invest in and help strengthen youth-serving organizations in Connecticut so they can work effectively, reliably, and sustainably with young people ages 14 to 22 who are disengaged or disconnected in order to help them re-engage in and complete secondary education, then transition successfully to the pursuit of post-secondary education, such as a technical certification, military enlistment, or an academic degree – with the ultimate goal that all young people will achieve satisfying employment that supports their agency and self-sufficiency.

CTOP has adopted the use of active service slots to understand grantees' youth program capacities in part because this metric is entirely focused on the needs of the individual young people (program participants) occupying them. We recognize that the contents of such slots should shift as the needs of the young people shift or new ones emerge, and as they either progress or fail to progress in attaining outcomes. The bottom line is: **active service slots are youth-centered, not program-centered (that is, not a fixed number of fixed program elements.)** To restate the matter, the concept of active service slot is inherently a fluid one, not static nor permanent. What is fixed (at least for extended periods of time) is that they do have core contents and are the fundamental elements of a program.

In the foregoing we have alluded to the fact that there are two major kinds of activities that we consider to be the essence of an active service slot for CTOP's target population, but we want to spell them out clearly here:

1. **Activities engaged in by a dedicated youth development worker with each young person where the object is to develop, sustain, strengthen, and use the relationship** as a means to help the youths regulate their emotions and become more forward-looking – that is,

focused on improving their lives and future prospects. *In this regard, CTOP believes that for disengaged and disconnected young people it is essential that youth development workers be trained in and utilize Cognitive Behavioral Theory (CBT)¹¹ methods in pretty much all interactions with the young people with whom they are working.*

2. ***Activities devoted to engaging (and often re-engaging) these young people in activities that promote their progression along a series of outcomes*** that prepare them for success in the world. Often, these kinds of activities – such as transitional employment – are called services. Based on what we have learned in the course of our work, CTOP understands that for some young people – especially those who have not yet become fully disconnected from school or work – it can be useful to provide different services at various tier levels based on how far each youth has progressed toward achieving key outcomes. Thus, at each service tier such activities constitute part of an active service slot.

It follows that at various points in a program young people may be offered new services which further promote their progress and teach them selected skills. These can include, among many things, opportunities to engage in community service or in activities focused on preparing them for success in school or in work. While many organizations treat such interventions as free-standing programs that are separate from the core youth development program (often referred to as case management or youth work),¹² we see them as adjunct services that are accountable for teaching skills (focused short-term outcomes) but in the end are not responsible for driving youth progression. ***In our view, it is the youth development workers who are responsible for driving progress by program participants*** and who make use of such services for the young people on their caseload in each case as indicated. Our metaphor for this has been that youth development is the trunk of the tree that drives youth growth, and that specialized services are branches attached to the trunk that of necessity shift more readily in the winds of change.

By the way, programs often offer activities such as recreation and creative-expressive opportunities that function as “glue” to help young people stay involved in the program. While essential, these should, as suggested earlier, be viewed as peripheral to core programming and therefore not as part of an active service slot.

The use of active service slots has provided CTOP grantees with means to specify and operationalize their programming in ways that are highly adaptive and well designed to promote positive youth outcomes. Not coincidentally, they have also served as vehicles for helping these organizations understand their true program delivery costs and to build robust business plans accordingly.

¹¹ CBT – also variously referred to as Cognitive Behavioral Therapy, Cognitive Behavioral Systems, and TEB (Thinking, Emotions, and Behavior).

¹² To a large degree this artificial segregation of programs is an artifact of categorical and/or program-dedicated funding, which in CTOP’s view is one of the many ways funders’ practices keep nonprofit service providers from reaching their potential for delivering effective youth programming reliably, effectively, and sustainably.