

BUILT FOR ZERO CANADA  
**REDUCE TO ZERO: MEASURING REDUCTIONS  
IN CHRONIC HOMELESSNESS**

DRAFT: JUNE 2019



## OVERVIEW

Built for Zero Canada (BFZ-C) communities work through a series of milestones within cohorts on their journey to achieving chronic functional zero. Once a community has achieved a Basic Quality By-Name List (QBNL) and set their baseline month (see document on BNL), they transition from the 'BNL cohort' to the 'reduce cohort' (see Figure 1).



Figure 1: Built for Zero Canada Cohorts

While in the reduce cohort, communities focus on developing a Coordinated Access System and begin actively monitoring progress toward chronic functional zero through baseline reductions, as well as measuring improvement projects through run charts (see document on run charts). Additionally, communities in this cohort can begin projecting the number of months it will take to achieve chronic functional zero while they are in the 'home stretch.'

This document covers definitions for baseline reductions and home stretch projections. It also covers how to analyze and interpret data visuals for both. Finally, the document includes the support and recognition that occurs at each reduction milestone through BFZ-C.

# BASELINE REDUCTIONS

## Definitions:

A baseline is a point of reference from which change can be measured. For Built for Zero Canada communities, a baseline generally refers to the number of people experiencing chronic active homelessness during the baseline month. The initial baseline month is typically the same month that a community achieves a Quality By-Name List.

A baseline and baseline month may be adjusted or updated, depending on circumstances, but should be done sparingly. Communities should always do this in consultation with a Built for Zero Canada Improvement Advisor or Data Advisor. Every time the baseline is reset, it reduces the number of months of QBNL data that can be used to inform projections and improvements.

Built for Zero Canada monitors chronic active homeless data at a community level for reductions that are **below chronic baseline** and **reduced chronic by 50%**. The “Below Chronic Baseline” was established based on community feedback as the first reduction milestone to be recognized. The “Reduced Chronic by 50%” reduction aligns with the federal National Housing Strategy goal to reduce chronic homelessness by half by 2028.

### **Below Chronic Baseline**

A community is recognized for being below chronic baseline when the number of chronic active homeless is at least 10% less than the number of chronic active homeless during their baseline month for three consecutive months.

### **Reduced Chronic by 50%**

A community is recognized for having a 50% reduction when the number of chronic active homeless is at least 50% less than the number chronic active homeless during their baseline month for three consecutive months.

## Analyzing a Chart for Baseline Reductions:

BFZ-C communities can analyze charts in their Performance Management Tracker to determine if they have reduced below chronic baseline and/or reduced by 50% below chronic baseline. In these data visualizations, the indicator value or y-axis is the number of chronic active homeless and the unit of time in months is on the horizontal or x-axis. The dark blue bars represent the number of chronic active homeless per month, the orange line is the baseline, and the dotted yellow line is the baseline target. Before analyzing the visuals, you need to establish:

- Baseline month
- Baseline number
- Scope of reduction
- Baseline target

### Below Chronic Baseline

In the example below (Figure 1) the community's baseline month is August 2018. During this month there were 174 individuals experiencing chronic homelessness. To be considered below chronic baseline, the community must reduce the number of chronic active homeless by 10%, making their baseline target 157. They must remain at 157 or below for three consecutive months. In Figure 1 you can see this data plotted on a chart and it is evident that the community was below chronic baseline from December 2018 to March 2019.

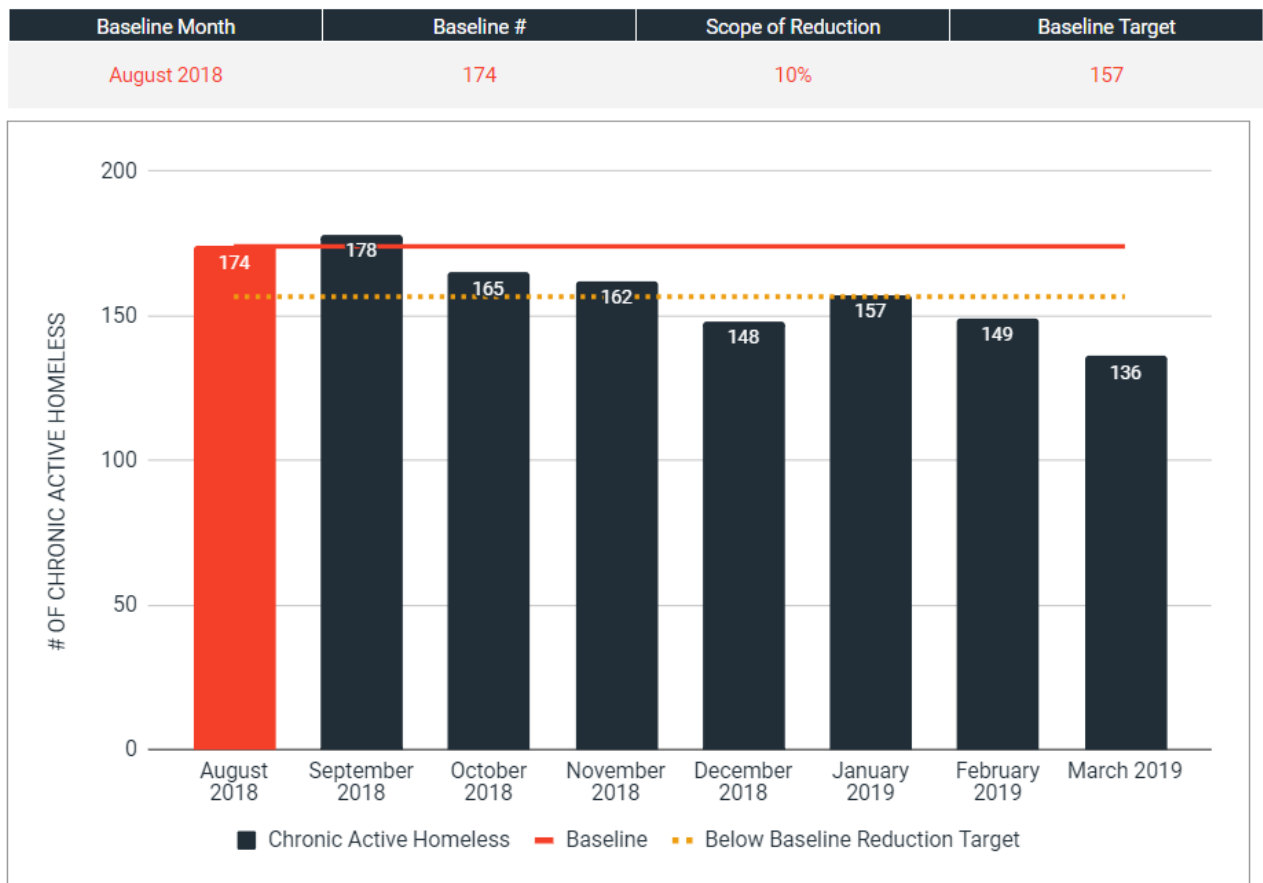


Figure 2: Below Chronic Baseline

## Reduced Chronic by 50%

In this example (Figure 2) the community's baseline month is August 2018. During this month there were 174 individuals experiencing chronic homelessness. With a 50% scope of reduction, their baseline target is 87. The community must remain at 87 or below for three consecutive months. In Figure 2 you can see this data plotted on a chart and it is evident that the community reduced chronic by 50% from February to April 2019.

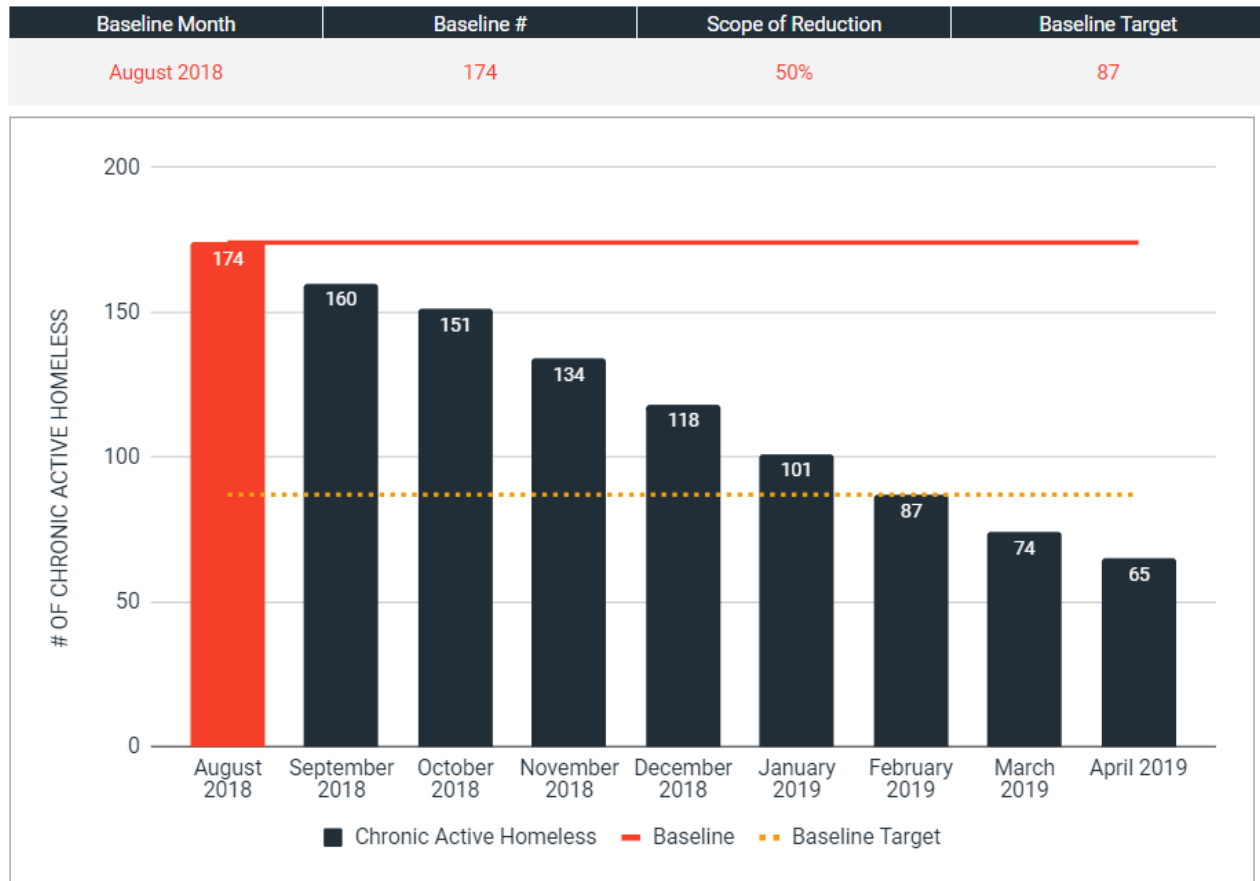


Figure 3: Reduced Chronic by 50%

### Interpreting Baseline Reductions:

Baseline reductions are not statistically significant but do demonstrate that the number of chronic active homeless has reduced. In other words, it's possible that the "reduction" occurred as part of random, everyday variation (i.e. "common cause variation"). To understand the reason for this reduction, it's best to analyze baseline reductions in tandem with run charts for downward trends and downward shifts. In addition, an analysis of other BNL data points (e.g. chronic move-ins) can provide a broader understanding of the changes at play in a community and whether the reductions are sustainable, replicable, and/or scalable.

## **Recognizing Baseline Reductions:**

BFZ-C monitors baseline reductions along with communities. In both Below Chronic Baseline and Reduced Chronic 50%, we seek to understand the community strategies at play that have led to the reductions and to highlight or bright spot them for other communities to learn from. In addition, once communities reach Below Chronic Baseline, their Away Team is recognized at the next Learning Session with “Shift Happens” t-shirts as they have started to see reductions in their active chronic homeless numbers.

## **HOME STRETCH**

### **Definitions:**

A community is in the “Home Stretch” if they have at least 6 months of Quality By-Name List data AND are projected to achieve chronic functional zero within 12 months.

The projected number of months until chronic functional zero is achieved is based on an assumption that the projected monthly net change will remain stable.

### **Projected Monthly Net Change**

The projected monthly net change takes into consideration:

- The difference between the number of chronic active homeless during the baseline month and the most recent reported month
- The number of months between the baseline month and the most recent reported month

### **Projected Number of Months until Chronic Functional Zero**

The projected number of months until chronic functional zero is achieved takes into consideration:

- The difference between the number of chronic active homeless during the most recent reported month and the chronic functional zero threshold
- The projected monthly net change
- The requirement to be below the chronic functional zero threshold for three consecutive months to achieve chronic functional zero

## Analyzing a Home Stretch Chart

When a community enters the “Home Stretch,” a chart will appear in their Performance Management Tracker (see figure 4). Communities can analyze this chart to understand their projected monthly net changed and projected number of months until chronic functional zero. In this data visualization, the indicator value or y-axis is the number of chronic active homeless and the unit of time in months in months is on the horizontal or y-axis. The dark blue bars represent data that has been submitted by the community and the grey bars represent the projected number of active homeless required to achieve functional zero within the projected time frame. The orange line is the chronic functional zero threshold and the yellow line and shaded area is the projected chronic active homeless number until chronic functional zero is achieved.

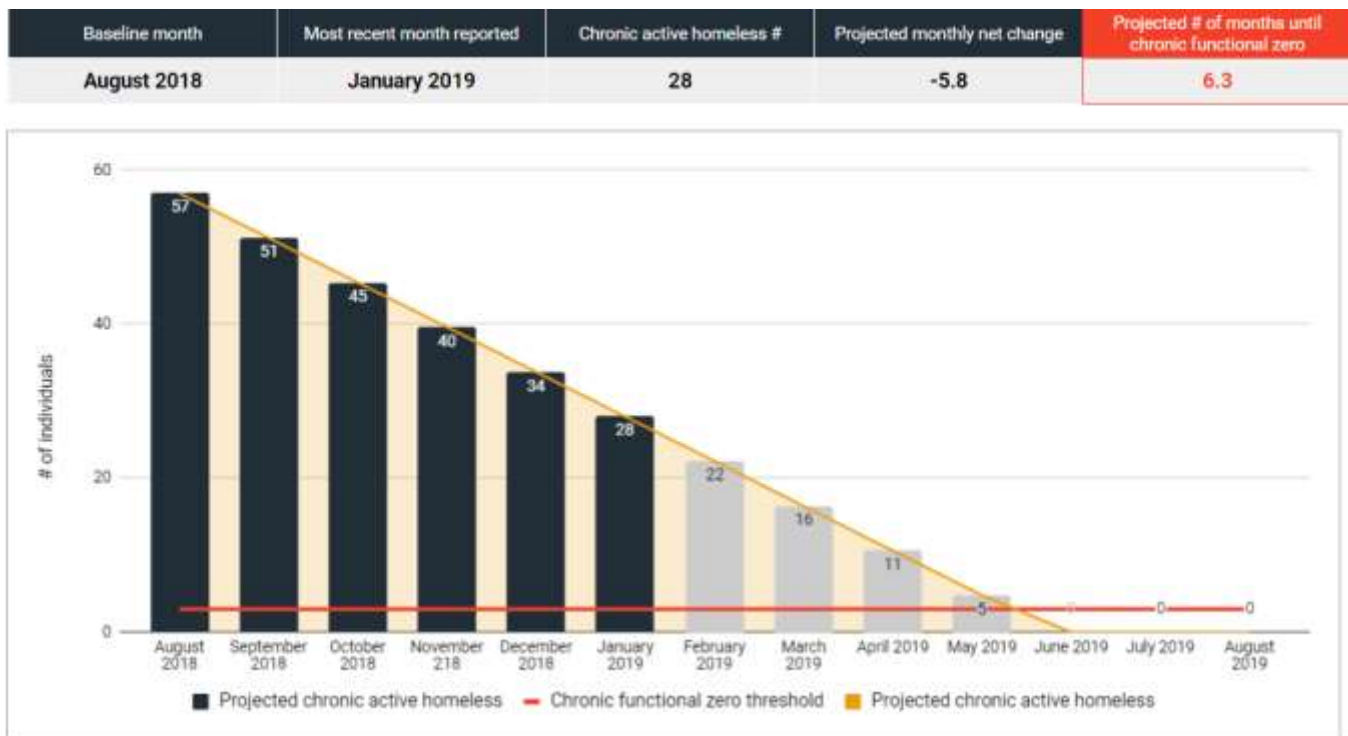


Figure 4: Home Stretch Projections Chart

Before analyzing the visual, you need to establish:

- Baseline month
- Most recent reported month
- # of chronic active homeless during baseline
- # of chronic active homeless during most recently reported month
- Chronic functional zero threshold

This information will provide:

- Projected monthly net change
- Projected # of months until chronic functional zero

In the example above (Figure 3), the community has a baseline month of August 2018 and their most recent month reported is January 2019 with 28 chronic active homeless individuals. The projected monthly net change is -5.8, making it 6.8 projected months until chronic functional zero is achieved. The chart displays the months between the baseline and most reported as dark blue (August 2018 to January 2019). The grey bars show the number of chronic active homeless the community will need to achieve from February 2019 to August 2019 in order for chronic functional zero to be achieved.

### Analyzing a Home Stretch Table

Once the Home Stretch projections have been established, a table will be added to the 'Home Stretch' tab in the community's Performance Management Tracker. The table provides an overview of the QBNL data points between the baseline and most recent reported month (in black font). Then, the months are listed until it is projected that the community will achieve chronic functional zero (in orange font), along with the projected chronic active homeless numbers. These numbers are locked in, but the remaining data points are flexible. BFZ-C works with a community to estimate the other data points. Estimates are informed by the median achieved between the baseline and most recent reported month (shown at the top of the table) and must be balanced and reliable (two columns at the right of the table). See Figure 5 for an example.

Reporting Month	Medians	3.0	1.0	3.0	0.0	0.0	Net Monthly Change	Balance Check	Data Reliability
	Chronic Active Homeless	Chronic Move-Ins	Chronic - Moved to Inactive	Chronic Inflow	Chronic - Returned from Inactive	Chronic - Returned from Housing			
August 2018	57	0	0	1	0	0	1		
September 2018	44	9	6	2	0	0	-13	Yes	0.00%
October 2018	46	2	0	7	0	0	5	No	-6.52%
November 2018	46	3	1	4	0	0	0	Yes	0.00%
December 2018	25	11	13	1	1	0	-22	No	4.00%
January 2019	28	3	1	8	0	0	4	No	-3.57%
February 2019	22	8	2	3	1	0	-6	Yes	0.00%
March 2019	16	10	1	4	0	1	-6	Yes	0.00%
April 2019	11	7	2	3	1	0	-5	Yes	0.00%
May 2019	5	8	1	2	0	1	-6	Yes	0.00%
June 2019	0	5	1	0	1	0	-5	Yes	0.00%
July 2019	0	1	1	1	1	0	0	Yes	0.00%
August 2019	0	1	1	1	1	0	0	Yes	0.00%

Figure 5: Home Stretch Projections Table



## Interpreting 'Home Stretch' Projections

While home stretch projections are based on Quality By-Name List data, they merely provide an estimate of when a community will achieve chronic functional zero and a pathway for how to get there. Other factors have equal, if not more, influence on when a community will achieve chronic functional zero, including community will, partner engagement, leadership, and a robust coordinated access system. When communities enter the home stretch, they should continue to introduce tests of change and monitor improvement projects with run charts for trends and shifts. Not only will this help drive a community toward chronic functional zero, but it will provide a deeper understanding of improvements and system changes that are sustainable, replicable, and/or scalable.

## Home Stretch Supports

BFZ-C is testing what it takes to support communities through the Home Stretch to reach and sustain functional zero. The following is our current theory



## Home Stretch Theory

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1.	Deep dive on data and identify remaining challenges and needed strategies to reach functional zero
2.	Assess interest and will with core local leaders
3.	Offer additional support from the BFZ-C Team
4.	Command Centre monthly meeting (currently testing)
5.	Further refine challenges and opportunities for external support
6.	Identify partners to provide additional external support
7.	Local teams refine strategy at Learning Session
8.	Execute strategy with coordinated support
9.	Review data and adjust strategy

