

# Key Performance Indicators

## Stage Indicators

**Measurement:** Are there any Takt wagons that show visually past the stage indicator. Yes, or no?

**Target:** None are past.

## Roadblock Removal Average (RRA)

**Measurement:** The average time roadblocks are removed before they impact the flow of work.

**Target:** over 15 working days.

## Takt Control Revisions (TCR)

**Measurement:** The number of major revisions within a 12 month time span.

**Target:** <3: 12 Months

## Negotiations with Current Partner (NCP)

**Measurement:** The number of times a trade had to negotiate re-entry into an area where their process has been completed. The number of times is divided by the total number of Takt wagons in that week's Takt time scale.

**Target:** <20%

## Perfect Handoff Percentage (PHP)

**Measurement:** The number of times a trade handed off the Takt zone area perfectly to the next trades per the Takt time.

**Target:** >80%

## tRBR (time Remaining Buffer Ratio)

**Measurement:**  $(\text{Current End Buffer} / \text{Original End Buffer}) / (\text{Remaining Duration} / \text{Original Duration}) = \text{tRBR}$

**Target:** Should be > 1.0

## STA Elementary Classroom Clarity (ECC)

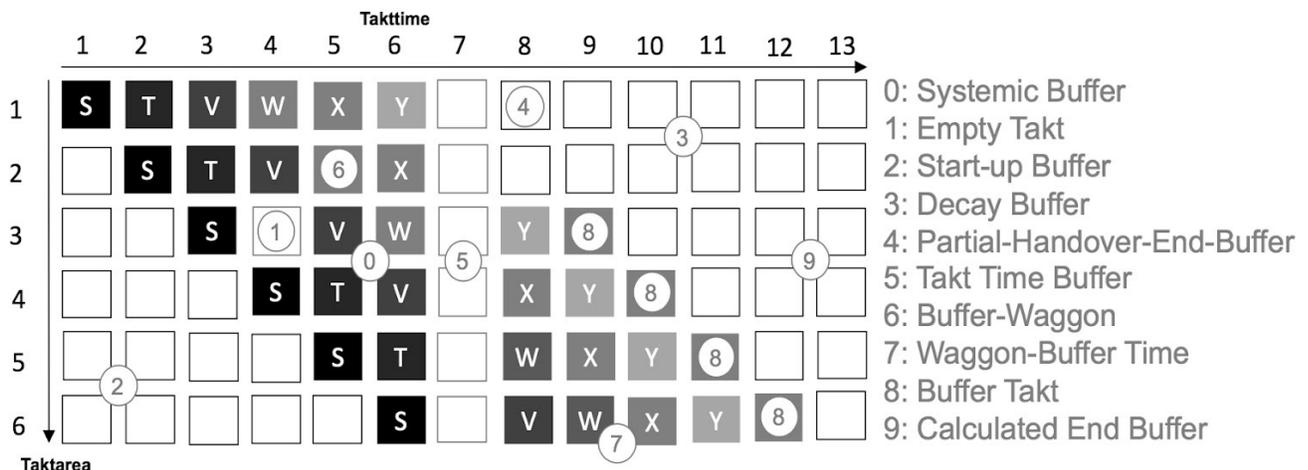
**Measurement:** The percentage of the plan a 3rd grader understands of the overall project plan on a macro level.

**Target:** >80%

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# Buffer Management

- ✓ **The Systemic Buffer**  
 This is a buffer type that is naturally a part of the system. An example of this would be Saturday and Sunday at the end of a 5-day Takt time.
- ✓ **The Empty Takt**  
 This is simply a Takt, or cell in Excel, that is left empty and serves as a buffer.
- ✓ **Takt Time Buffer**  
 A Takt time Buffer is where an entire Takt time scale is used as a buffer in the system. Carving out the week of Thanksgiving and Christmas week as a buffer week in the US is an example of this.
- ✓ **A Buffer Wagon**  
 This is a wagon that serves as a buffer within the Takt sequence.
- ✓ **Wagon Buffer Time:**  
 This is a small buffer built into the actual Takt wagon itself. This means the wagon within the Takt time is not planned to be 100% efficient.
- ✓ **The Calculated End Buffer**  
 The CEB is the buffer shown at the end of the project that can be considered the project buffer or contingency in the schedule.
- ✓ **Overall Project Risk Buffer**  
 This buffer can become the CEB or be shown as a separate risk buffer. This is created from the risk analysis. Examples of this would be where bottlenecks have shown their throughput time is too long, and additional resources are being procured to overcome the issue and run the trade sequences at the same throughput as other contractors. But, until this is confirmed and proven with first-in-place work, it is a risk. So, you may choose to add an overall Project Risk Buffer which shows the buffer time needed to still finish on time if the resource optimization ends up not being possible.



# Takt Health Parametrics

## The Value Parametric

The value parametric divides the Takts that are used in a Takt plan by the empty Takts. This parametric tracks the value being provided in the flow of the work, and it should range between .5 and 2.5 when calculated as an ideal. This ensures the Takt plan is structured in a way to provide maximum value.

## The Efficiency Parametric

The efficiency parametric compares the number of Takt wagons and Takt sequences and ensures the phase does not have over a 1:3 ratio in the number of each in comparison to each other. The ideal metric should be .3 to 3.0 when calculating the metric. This ensures the Takt sequences are structured ideally for optimum efficiency.

## The Stability Parametric

The stability parametric divides the train buffers by the end buffers. The ideal metric for this is .5 to 2.0 ideally, and this metric ensures you have a Takt plan that is stable with the appropriate ratio of buffers.