The metrics we chose are values that are crucial to planning Sprints.

We have 2 week sprints, starting and ending on Fridays. Our development cycle is **planned** to be finished the second Tuesday of our sprint, while planning is performed between Tuesday and Thursday before we demo to our sponsor and then close out the sprint the following day.

This is why tracking metrics relevant to Story Pointing; mainly Velocity, Burndown and WIP, and Testing times; time taken to test as well as time taken to resolve bugs and issues, are crucial to sprint planning. We must know how many points we are able do deliver per sprint in order to plan future workload, and that is our time taken to test and/or resolve bugs becomes higher, we must allocate more time in our plan to test.

Sprint Pointing

These metrics are tied relatively closely together, so opting to track them together was simple.

**Burndown**

A measurement of how much work is left, in our case in story points, versus time in our sprint.

During a sprint, this metric will give us a good idea of how much work we’re getting done and whether more effort needs to be committed to our stories before the end of each sprint.

**Velocity**

How much work was committed to in a sprint versus how much was completed.

Tracking what we’re planning for versus what we’re actually doing will allow us to know if we’re over or under committing work for each sprint.

**WIP**

How much work is left in progress at the end of a sprint; essentially the difference in our values for velocity.

Testing

Since testing is (obviously) integral to our sprint cycles, tracking how much time is put in to testing activities becomes crucial when planning sprints.

**Time taken to test**

As our functionality grows, the time taken to test will grow as well.

**Time taken to resolve bugs/issues**

As with any project, addressing errors in code and subsequently fixing them takes time.

Original Proposal:

We will be using 4 important metrics (taken from Kanban/Lean) to continuously track and improve flow of productivity for this project:

1. **Cycle Time**
   1. How long it takes to develop a feature or complete a deliverable from the time it was assigned or from the time we made note to begin working on it
2. **WIP**
   1. The amount of cards we have in the work in progress (WIP) area at the end of each sprint
   2. Velocity/Burndown Chart
3. **Lead time**
   1. How long it takes to finish a feature or deliverable starting from the time you actually sit down to start working on it to when you finish it
4. **Throughput**
   1. The rate of cards moved to finish per a day/week/month.
   2. The average lead time
5. **Future Cycle Time**
   1. This is a calculated metric which will be useful for estimating and discovering when we’re trying to accomplish too much at once. Formula: WIP/Throughput.

We should start tracking all of these things so we can make smarter, and more informed decisions earlier in the project lifecycle.

Story Points - we should assign cards story points to track the size of the responsibility we’re taking on and putting into WIP every week. Easy scale to choose from is 1,2,4,8,16.

Process:

* Sort the cards based on their complexity
  + Size of the task, know-how to complete it, amount of research it will take/unknowns/risks
* Start by assigning the smallest task with 2 points
  + Do this because if we feel something is easier then we can assign it with 1
* Then move up until we hit 16