**$10,000 Budget**

Number of robots

* 4
* 3

Robot type:

* Waffle (Turtlebot 3) - $1,800 - LiDAR and Intel depth camera (Joule)
* Turtlebot 2[e] - Orbbec Astra depth camera (Joule $1,900, Dragon $1,700, or Netbook $1,925)
* Oculus Prime - $1,400 - Orbbec Astra depth camera (ASRock J3710)

On-board processing of 3D depth camera data

On-board filtering of 2D LiDAR to be sent in simpler format to computer

Separate computer system for merging maps and user observation

**$5,000 Budget**

Number of robots

* 2

Robot type:

* Burger (Turtlebot 3) - $500 - LiDAR included - Add 2D camera for image processing and machine learning (dependent on project objectives)
* Waffle (Turtlebot 3) - $1,800 - LiDAR and Intel depth camera (Joule)
* Turtlebot 2[e] - Orbbec Astra depth camera (Joule $1,900, Dragon $1,700, or Netbook $1,925)
* Oculus Prime - $1,400 - Orbbec Astra depth camera (ASRock J3710)

On-board processing of 3D depth camera data

On-board filtering of 2D LiDAR to be sent in simpler format to computer

Separate computer system for merging maps and user observation

**Additional Concerns**

Wifi options

* Routers on each robot
* Routers on computer
* Separate router for communication