**Executive Summary**

This summary provides a result analysis and discussion of the strength and limitation of our model. Results of data analysis show that in general increase TU and RU rate can decrease the total cost. Train the model based on RU rate can be more cost saving. From Fig 1, we can see that even the lowest RU rate has lower cost per pound than the best TU rate.

Fig 1. The Cost Per Pound of TU and RU Policy

**Strength**

* Using RU policy is more cost saving in general. When at rate 90%, RU policy can reduce at most 0.0148$ cost per pound than TU policy.
* After applying our model to generated data, we can get an optimal assignment plan, which selects the cheapest way to deliver products to the chosen seed locations.
* Our model can capture the complexity of the assignment situations as we make reasonable assumptions to build the model and use different data to test the model.

**Limitation**

* When set RU rate at 90%, TU rate is over 100%, which is impossible in real world. Therefore, in the next stage we will try to choose the best RU rate while ensuring that the TU rate is reasonable.
* This model is not completed and in the next stage, we will combine routing sub-problem model to optimize the whole mode