**Amazon Air Optimization Solution**

**Variables**

xij = quantity sent from hub *i* to focus city *j*, i= 1, 2, j = 1, 2, 3

yik = quantity sent from hub *i* to center *k*, i=1, 2, k = 1, 2, …65

zjk = quantity sent from focus city *j* to center *k*, j = 1, 2, 3, k = 1, 2, …65

There are 189 variables, excluding the hub, focus city, and center combinations, that are disallowed for distance reasons.

**Constraints**

Hub capacities:

Quantity into focus cities:

Quantity out of focus cities:

Center demand:

There are 73 such constraints.

**Objectives**

The first objective is to minimize cost. That looks like: