Assignment: FinalProject#2

Final Project; 2nd Assignment:
Create an Empty aTaxi Management Plan for your Counties

Due: Tuesday, Dec. 9, 2014 (No extensions!!)

1. The objective of this assignment is for you to
    a. document the imbalance in the arrival and departure of aTaxis for your counties and
    b. develop an *Empty aTaxi Management Plan* for your combined counties, in which you can control "precisely" the management of the aTaxis within your counties, make available to a "pool" excess aTaxis and draw from a "pool" when you are short aTaxis.

2. You will be doing this for a single aTaxi "level-of-service" situation in which aTaxis operate from aTaxi stands located at the center of individual pixels and serve travelers to as many as 3 pixels (CD=3p), with max departureDelays of 300 seconds (DD = 300) and MaxCircuity for any rider is 20%.

3. aTaxi pixel departure files for you counties are located in http://orfe.princeton.edu/~alaink/NJ_aTaxiOrf467F14/aTaxiDeparturesByCounty_3p-300-20

4. aTaxi pixel arrival files for you counties are located in http://orfe.princeton.edu/~alaink/NJ_aTaxiOrf467F14/aTaxiArrivalsByCounty_3p-300-20

5. For each the top 20 pixels by # of aTaxi departures per day, generate for each a chart showing the aTaxi Supply- Demand imbalance

6. Develop an operational plan that dispatches excess aTaxis to the Pixels that are short aTaxis so that aTaxis of the proper size are available to serve all the customers in your counties.

7. There are 4 sizes of aTaxis: 2 passenger, 6 passenger, 20 passenger and 50 passenger aTaxis.

8. A preliminary aTaxiDeparture for Mer2 file that contains tabs of aTaxiDepartures (originalDeparture) for each pixel sorted by ToD (Time of Day) and aTaxiArrivals (madeEmpty) (but ONLY those that had originated @ a Mer2 pixel) for each pixel sorted by ToD http://orfe.princeton.edu/~alaink/NJ_aTaxiOrf467F14/mer2_DD300CD2_wAVOConstraint_WithEnds.xlsx