**Clear out about 65 GB of space.**

The step to write to h5 takes about 30 GB per run, so for two runs you’ll need around 60 GB at the very minimum.

**For a baseline and alternative model run:**

Write out EMME matrices to H5

1. In your anaconda prompt, navigate to scripts/summarize/benefit\_cost.
2. Run python emme2h5.py outputpathforh5 jsonfilename inputfolder. (the last three are parameters for emme2h5.py)

Run network calculations for air quality and safety measures.

1. Navigate to scripts/summarize/benefit\_cost in your anaconda prompt.
2. Run python aq\_crash\_calcs.py.
3. The outputs will be in the directory for your model run called outputs in a file called AirQualityCrashes.xlsx.

**To calculate consumer surplus using both scenarios** on the matrix (now in h5) variables like time and cost,

1. Configure the file in scripts/summarize/benefit\_cost/benefit\_configuration.json to point to your inputs and outputs.
2. Navigate to scripts/summarize/benefit\_cost in your anaconda prompt.
3. Run python bc2.py -c benefit\_configuration.json.

**To format results**, now you will have 3 output files from which you will paste results into a file called benefit\_cost\_template.xlsx that can be found in the model run output\_templates directory.

First copy the consumer surplus calculation result from bc2.py into the first sheet called raw zonal. Next, copy the first model run air quality/safety results from aq\_crash\_calcs.py into the sheet links ben raw cell B3. Finally copy the second model run air quality/safety results from aq\_crash\_calcs.py into the sheet links ben raw cell O3.