.p

**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 the main directory of your model run in your anaconda prompt.
2. Run python scripts/summarize/benefit\_cost /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.