Connected Components Sketch Runtime Estimate
For nearly−full graphs (each edge present w/p 0.5)

897 hours

412 hours

30 hours

time required to process stream (hours)

1000

500

0

nodes in input graph

0   100,000   200,000   300,000   400,000   500,000
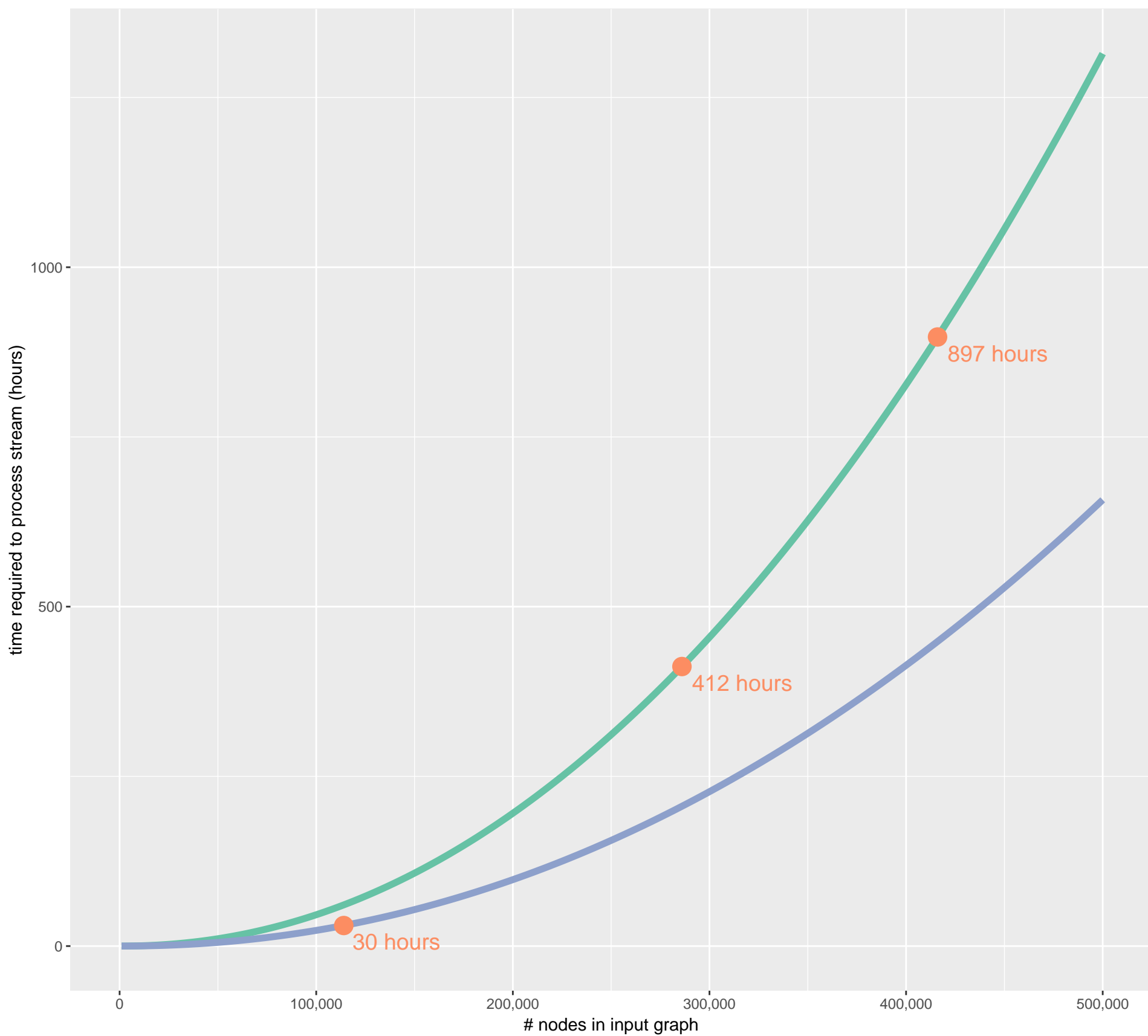
Data Structure   — sketch. 16B or 12B per bucket   ● Break−even points   — small sketch. 6B per bucket