

# Spanning USA

Dennis Thinh Tan Nguyen and William Diedrichsen Marstrand

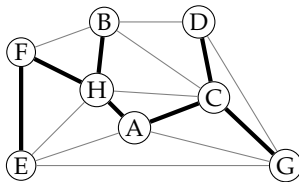
April 23, 2015

## Results

The following table summarizes our results:

Input file	MST total weight
USA-highway-miles.txt	16598
tinyEWG-alpha.txt	181

The MST we found in tinyEWG-alpha.txt can be drawn like this:



## Implementation details

We implemented the algorithm of Prim, using Princeton's PrimMST.java and created the graph using Princeton's EdgeWeightedGraph.java.

The total running time for our implementation is:  
 $O(n + m + m \log n)$ .