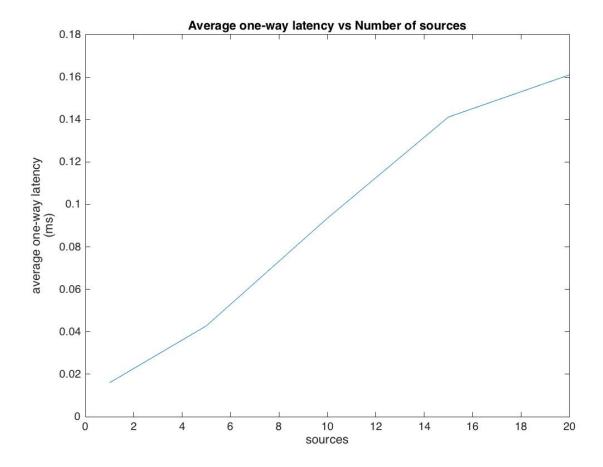
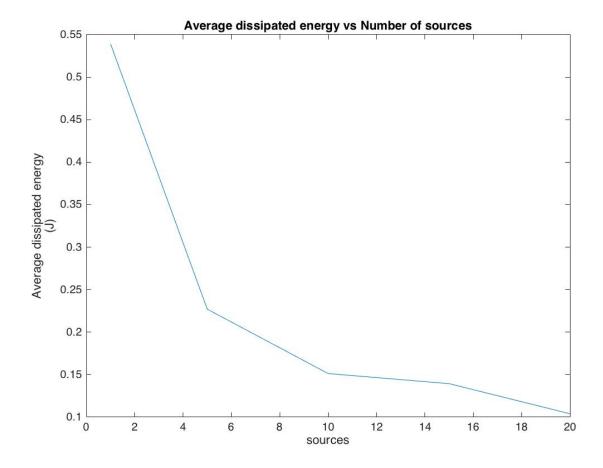
EECE5698: Wireless Sensor Networks (and the Internet of Things)

Instructor: Dr. Tommaso Melodia

Homework 2



From the figure above we can see that the average one-way latency increases as the increment of numbers of sources. It is because the more sources in the network, the more traffic is, especially the neighbors of sink. Although the reinforcement rule finds the low delay paths, the heavy traffic leads to the increment of latency.



From the figure above, we can see that the average dissipated energy decreases as the numbers of source increases. In directed diffusion, once sensors detect phenomena, generated events are disseminated to users. Intermediate nodes may aggregate several events into a single to reduce transmissions. As a result, the total per-transmission overhead (e.g., packet headers, MAC control packets) will be reduced and the average dissipated energy savings will be more evident.