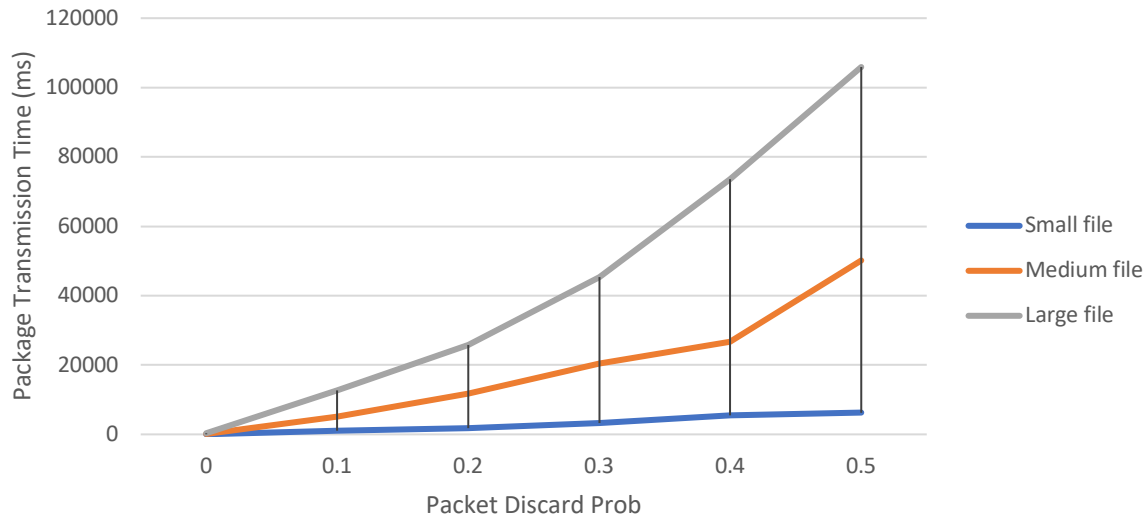
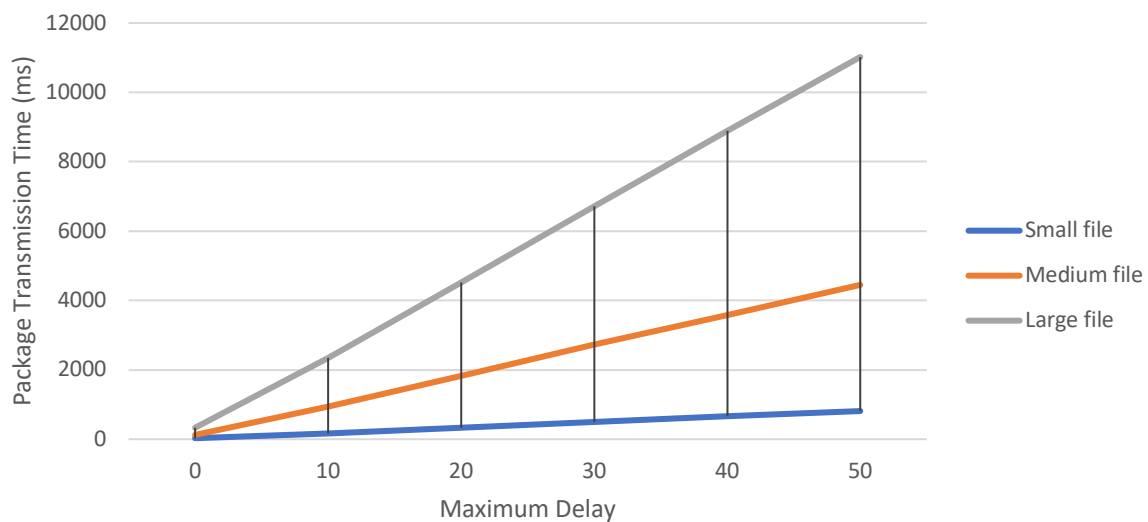


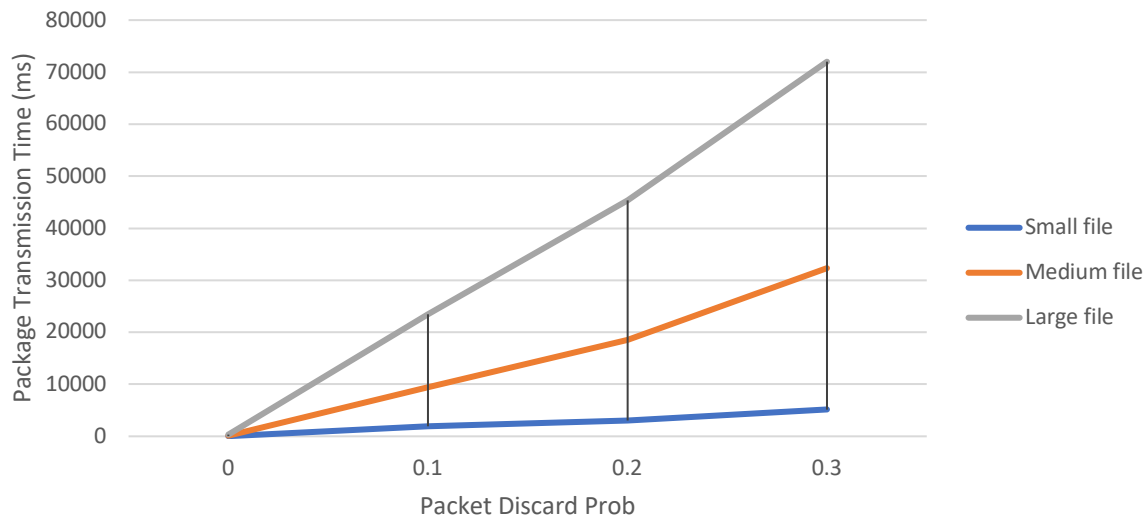
Maximum Delay = 0, Packet Discard Probability on small, medium and large files



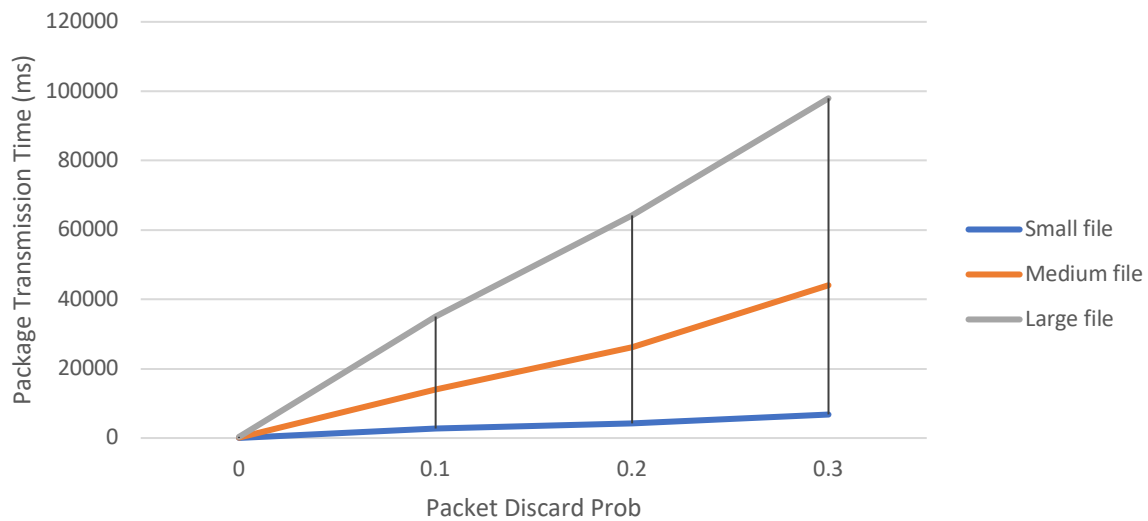
Packet Discard Probability = 0, Maximum Delay on small, medium and large files



Maximum Delay = 20, Packet Discard Probability
on small, medium and large files



Maximum Delay = 40, Packet Discard Probability
on small, medium and large files



Q1: How do changes in packet delay, probability of loss impact the transmission time?

From the graph, we can see that by increase the packet delay, is impact a little bit of the transmission time due to the timeout that I set is 100ms for package. If the maximum transmission delay is above 100ms, then there is high possibility that the package needs to send it again due to it cannot get ACK in time.

For the probability of loss, it is significantly impacting the transmission time. The reason is that when the package lost probability increase, then there are more packages need to resend again due to lost. Since the package will wait until timeout to send new package, it increases the transmission time significantly.

Q2: How do changes in file size (number of packets sent) impact transmission time?

Due to the different number of packets, it will take time to send more packets than small number of packets. Therefore, large file will take longer than small files to finish the transmission.