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Timing Experiments

The following table contains all results used throughout the report.

Table 1: Experiment results

Maximum Delay	Packet Discard Probability	Average Transmission Time (ms) - small.txt	Average Transmission Time (ms) - medium.txt	Average Transmission Time (ms) - large.txt
0	0	109.24	526.26	1329.96
0	0.1	1135.40	6032.34	14967.89
0	0.2	2404.85	11488.11	31302.68
0	0.3	4970.08	20591.23	52625.70
0	0.4	5707.87	31173.00	82818.03
0	0.5	6219.76	47019.57	116720.03
10	0	246.29	883.55	2216.96
20	0	401.24	1577.77	3852.20
30	0	552.45	2279.06	5616.91
40	0	576.38	2947.57	7272.38
50	0	719.07	3632.85	8818.38
20	0.1	1114.78	6166.19	14685.60
20	0.2	2250.09	12887.66	31115.85
20	0.3	3983.78	21303.48	51617.77
40	0.1	1270.28	6760.44	16680.63
40	0.2	2722.00	11570.50	32073.24
40	0.3	3705.86	21210.03	50367.89

The following figure shows the results of increasing the probability that a packet gets dropped (with no delay).

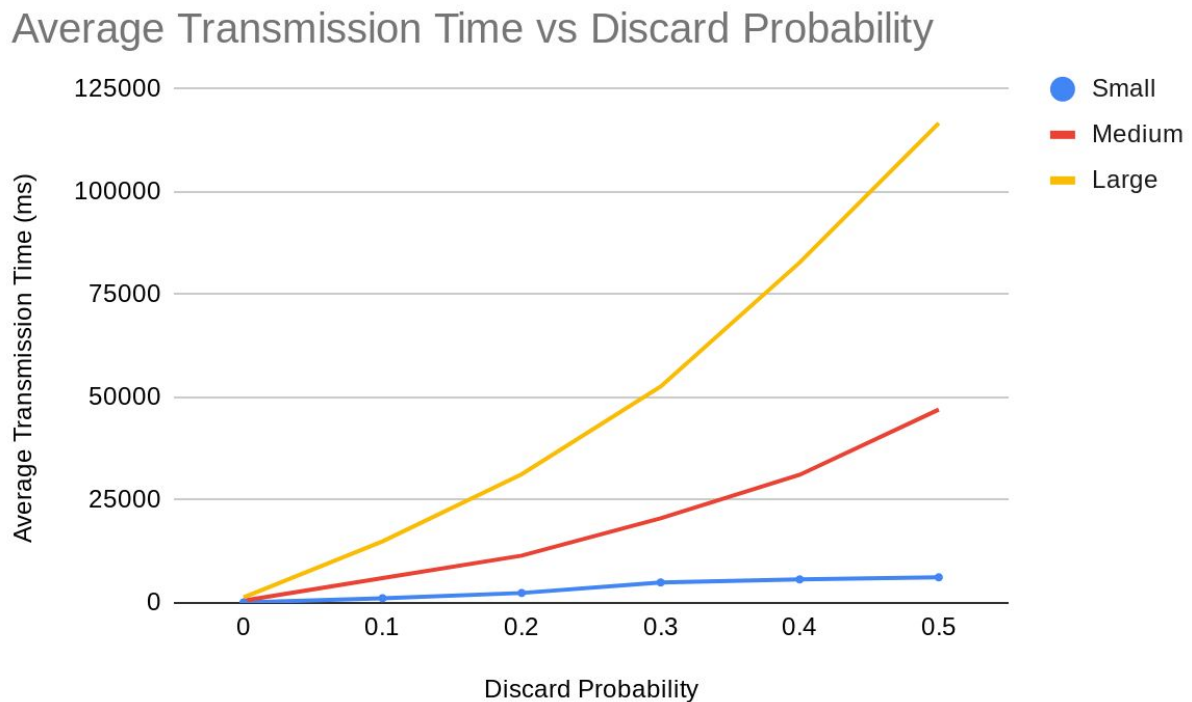


Figure 1: Average transmission time per file size for increasing probability of packets being dropped with zero delay.

The following graph shows the effects of increasing the maximum delay of packets (again, whilst keeping the probability of packet loss to 0%)

Average Transmission Time (ms) vs Maximum Delay (ms)

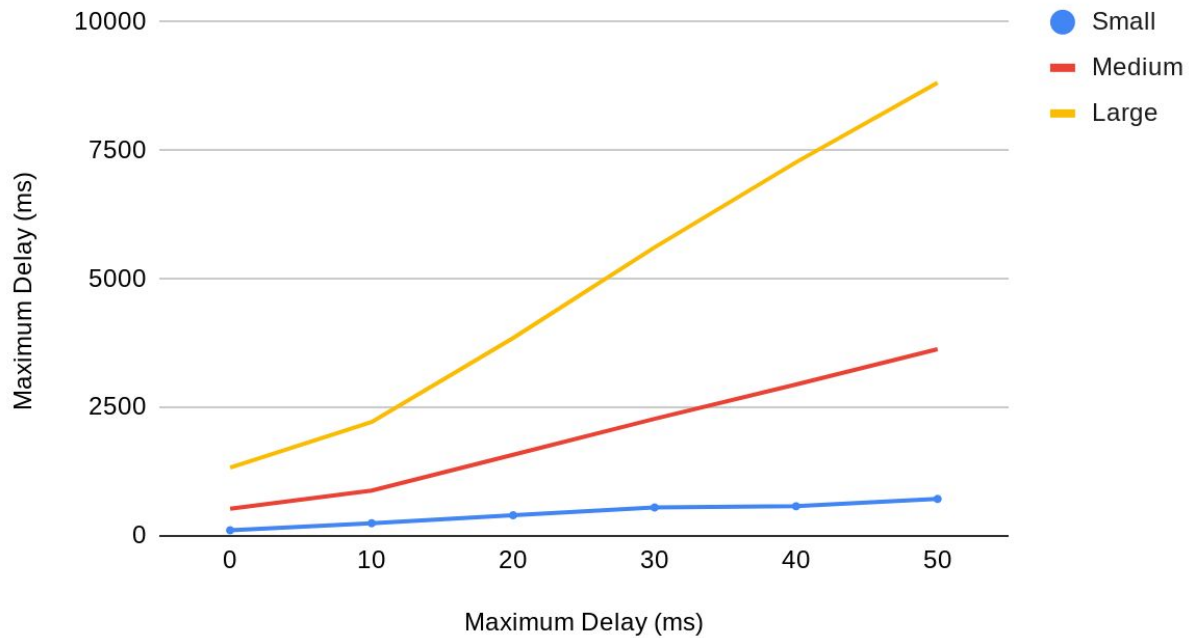


Figure 2: Average transmission time per file size for increasing maximum packet delay

The following graph shows the effects of increasing the chance of packet loss for networks with non-zero maximum delays. Both 20 & 40ms were used.

Average Transmission Time (ms) vs Packet Delay Probability

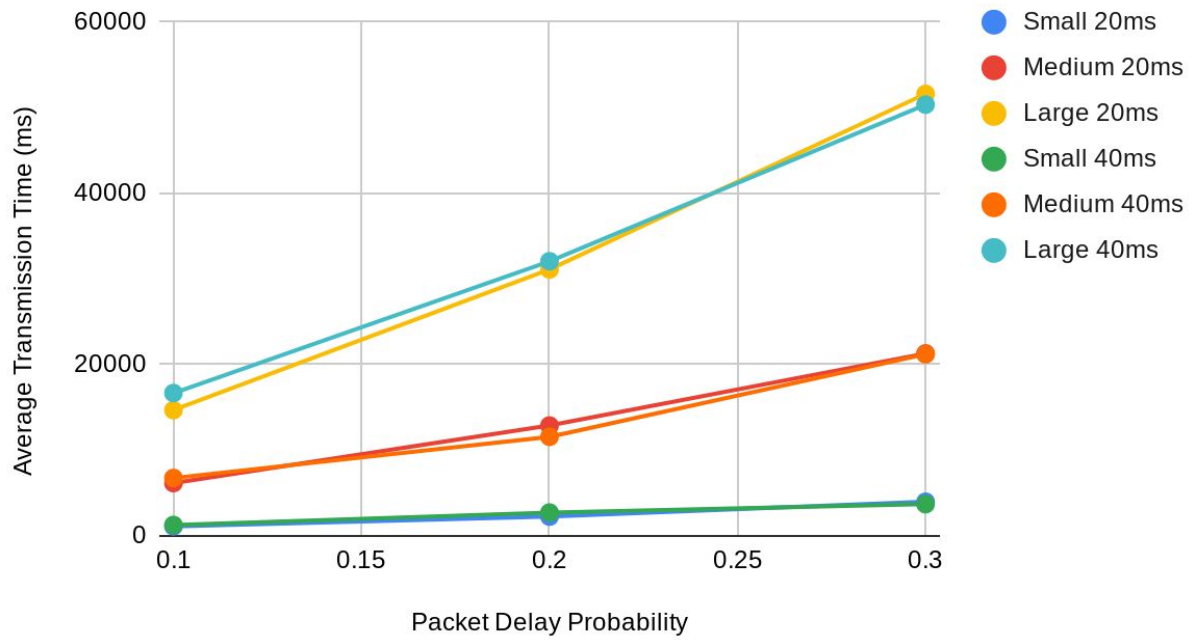


Figure 3: Average transmission time per file size for increasing probability of packets being dropped for varying maximum delays