	Critical Path Delay(ns)	Maximum Frequency (MHz)	LUT usage	Gates (LUT * 6)
RCA 8-bit Width	7.108	140.6865504	8	48
RCA 16-bit Width	8.825	113.3144476	24	144
RCA 32-bit Width	12.286	81.39345597	56	336
RCA 64-bit Width	19.812	50.47445992	112	672
CLA 8-bit Width	7.1	140.8450704	8	48
CLA 16-bit Width	7.65	130.7189542	29	174
CLA 32-bit Width	9.737	102.7010373	71	426
CLA 64-bit Width	16.205	61.70934897	143	858
Prefix-Adder 8-bit Width	7.132	140.2131239	13	78
Prefix-Adder 16-bit Width	8.496	117.7024482	29	174
Prefix-Adder 32-bit Width	9.86	101.4198783	138	828
Prefix-Adder 64-bit Width	11.3	88.49557522	363	2178

Summary: As the width increases the RCA slows down the most as it increases but as you can see it uses the least amount of total gates. The CLA is best at the 16-32 bit width because it uses blocks which balance between delay and gate usage. The prefix on the other hand uses the most gates because it's computing everything in parallel, this leads to consistent times with it slowly increasing, but this also leads to it being the most expensive of the 3 but it may be worth it when getting to the higher bit ranges.