

Model	Train MAE	Test MAE	Train RMSE	Test RMSE	MAPE (%)	Median AE	Train R²	Test R²	Max Error
XGBoost (Default)	51.09	73.51	67.68	98.27	18.27	58.18	0.8162	0.5996	661.74
XGBoost (Optimized)	64.52	78.52	86.07	104.08	19.67	62.11	0.7028	0.5508	584.92
Random Forest (Default)	24.99	67.25	34.37	91.43	16.83	51.95	0.9526	0.6534	575.1
Random Forest (Optimized)	76.4	88.35	100.28	116.07	22.28	72.14	0.5966	0.4414	586.33
LightGBM (Default)	74.4	81.74	96.86	107.04	20.53	65.75	0.6236	0.5249	596.37
LightGBM (Optimized)	61.72	74.97	81.09	98.74	18.82	60.34	0.7362	0.5958	591.83
CatBoost (Default)	61.94	73.48	81.53	97.49	18.37	57.91	0.7333	0.6059	607.64
CatBoost (Optimized)	51.07	66.71	67.77	89.32	16.61	51.66	0.8157	0.6692	596.31