Forecasts generated using protected time series change significantly from those using the original time series. While prior experiments have demonstrated severe degradations in forecast accuracy from a VAR model applied to differentially private time series, little is known about how privacy protection affects other forecasting models. We measure the effects of several data protection methods (top and bottom coding, additive noise, differential privacy, and cluster-based swapping) on both simple and complex forecasting models. We find that data protection degrades forecast accuracy the majority of the time regardless of forecast horizon. Surprisingly, when the time series are protected with differential privacy or additive noise, we find that exponential smoothing models have better accuracy than LGBM models for all forecast horizons. reasons behindifor privacy protected time series data