## **Individual Model Performance Comparison** Gradient Boosting vs Actual ( $R^2 = 0.9515$ ) Random Forest vs Actual ( $R^2 = 0.9667$ ) XGBoost vs Actual ( $R^2 = 0.9646$ ) — Gradient Boosting Random Forest XGBoost Target Value 20000 40000 60000 80000 100000120000140000160000 20000 40000 60000 80000 100000120000140000160000 20000 40000 60000 80000 100000120000140000160000 Test Sample Index Test Sample Index Test Sample Index LightGBM vs Actual ( $R^2 = 0.9630$ ) Deep Neural Network vs Actual ( $R^2 = 0.9467$ ) Optimized DNN vs Actual ( $R^2 = 0.9444$ ) Actual Deep Neural Network Optimized DNN LightGBM Target Value Target Value 20000 40000 60000 80000 100000120000140000160000 20000 40000 60000 80000 100000120000140000160000 20000 40000 60000 80000 100000120000140000160000 Test Sample Index Test Sample Index Test Sample Index