

Model Comparison Report					
Fit and error measures					
Model	Accuracy	F1	Accuracy_Bike	Accuracy_Car	Accuracy_Public Transportation
DT_Transportation	0.8306	0.8916	0.9753	0.7898	0.9098
FM_Transportation	0.8497	0.8999	0.9753	0.8184	0.9060
Boosted_Transportation	0.8341	0.8462	0.8519	0.8221	0.8647
<p><b>Model:</b> model names in the current comparison.</p> <p><b>Accuracy:</b> overall accuracy, number of correct predictions of all classes divided by total sample number.</p> <p><b>Accuracy_[class name]:</b> accuracy of Class [class name] is defined as the number of cases that are <b>correctly</b> predicted to be Class [class name] divided by the total number of cases that actually belong to Class [class name], this measure is also known as <i>recall</i>.</p> <p><b>AUC:</b> area under the ROC curve, only available for two-class classification.</p> <p><b>F1:</b> F1 score, <math>2 * \text{precision} * \text{recall} / (\text{precision} + \text{recall})</math>. The <i>precision</i> measure is the percentage of actual members of a class that were predicted to be in that class divided by the total number of cases predicted to be in that class. In situations where there are three or more classes, average precision and average recall values across classes are used to calculate the F1 score.</p>					

Confusion matrix of Boosted_Transportation			
	Actual_Bike	Actual_Car	Actual_Public Transportation
Predicted_Bike	69	34	1
Predicted_Car	0	661	35
Predicted_Public Transportation	12	109	230

Confusion matrix of DT_Transportation			
	Actual_Bike	Actual_Car	Actual_Public Transportation
Predicted_Bike	79	35	1
Predicted_Car	0	635	23
Predicted_Public Transportation	2	134	242

Confusion matrix of FM_Transportation			
	Actual_Bike	Actual_Car	Actual_Public Transportation
Predicted_Bike	79	36	1
Predicted_Car	0	658	24
Predicted_Public Transportation	2	110	241