

Features vs Collision Rate (collision/re-ordered arterial class)

Linear regression

Mean Cross-Validated Mean Squared Error: 9.883375423

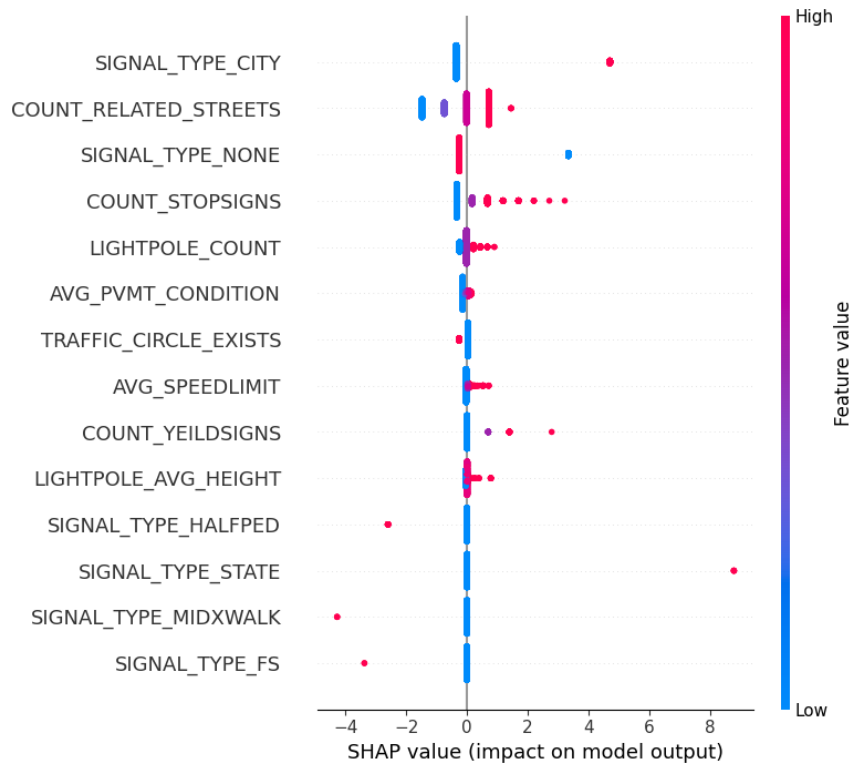
Feature Correlations:

COUNT_RELATED_STREETS	0.310981
AVG_PVMT_CONDITION	0.080860
AVG_SPEEDLIMIT	0.164093
TRAFFIC_CIRCLE_EXISTS	-0.027148
COUNT_STOPSIGNS	0.111437
COUNT_YEILDSIGNS	0.074944
LIGHTPOLE_COUNT	0.255695
LIGHTPOLE_AVG_HEIGHT	0.060115

dtype: float64

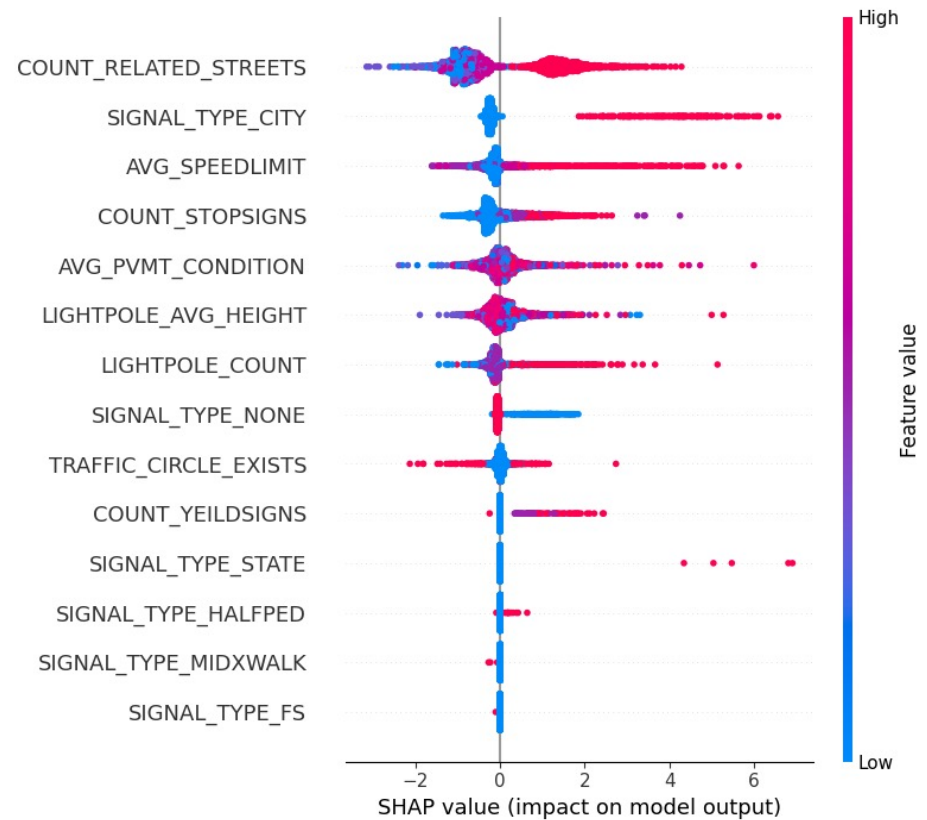
Sorted Features by P-values:

COUNT_RELATED_STREETS	2.87390391214843e-166
SIGNAL_TYPE_CITY	7.416147236992526e-100
SIGNAL_TYPE_STATE	4.012062980958514e-64
SIGNAL_TYPE_NONE	8.167209588035219e-51
COUNT_STOPSIGNS	1.3024771471490961e-47
Intercept	1.9546077758699336e-10
SIGNAL_TYPE_HALFPED	1.944887698489482e-08
COUNT_YEILDSIGNS	3.797114385919383e-08
SIGNAL_TYPE_MIDXWALK	1.4696156009440565e-06
LIGHTPOLE_COUNT	2.193061224314819e-06
SIGNAL_TYPE_FS	0.0004976827014693221
TRAFFIC_CIRCLE_EXISTS	0.0007641790293946246
LIGHTPOLE_AVG_HEIGHT	0.014482303874964315
AVG_PVMT_CONDITION	0.01946539453768848
AVG_SPEEDLIMIT	0.06044640863005986



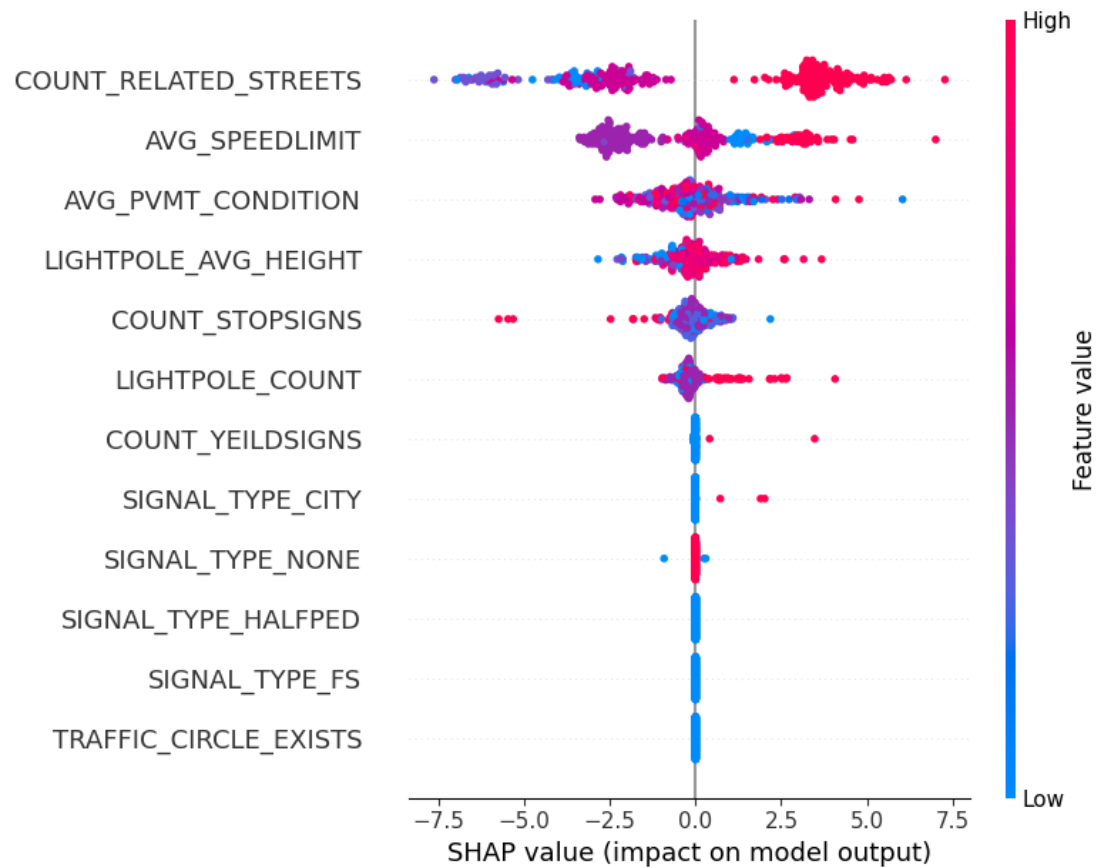
Features vs Collision Rate (collision/re-ordered arterial class) Random Forest

Cross-validation scores: [10.56498874
11.99342862 11.63402024 12.7279217
9.41678166] Mean squared error on test set:
9.771746843696976



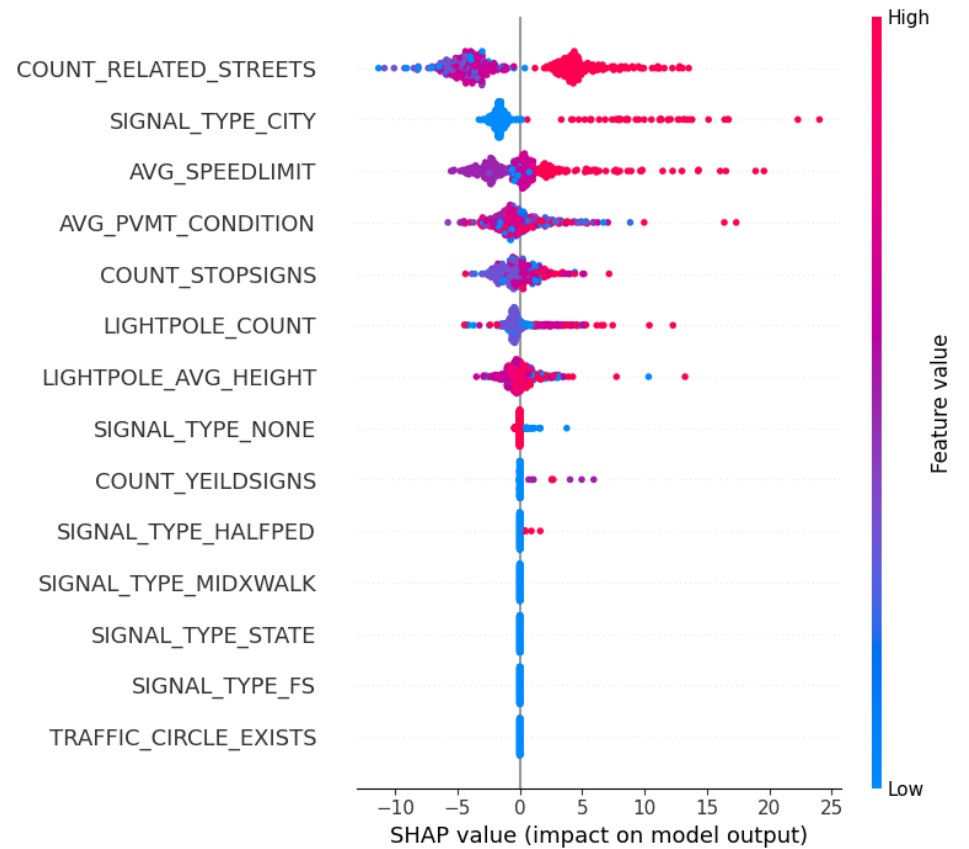
Features vs Collision (Collector_Arterial) Random Forest

Cross-validation scores:
[27.03027737 43.34711032
36.45152755 32.42040656
35.67921892] Mean squared error
on test set: 36.62236302914919



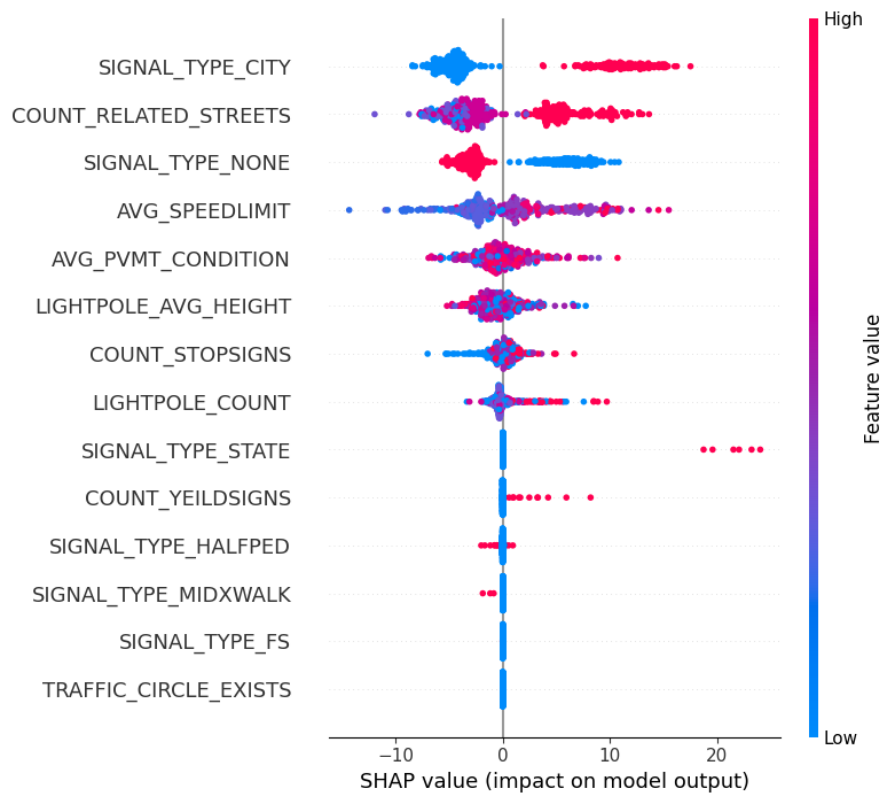
Features vs Collision (Minor_Arterial) Random Forest

Cross-validation scores: [153.95835289
109.01777443 147.56410675 140.36152864
108.83229522] Mean squared error on test set:
227.483640764444



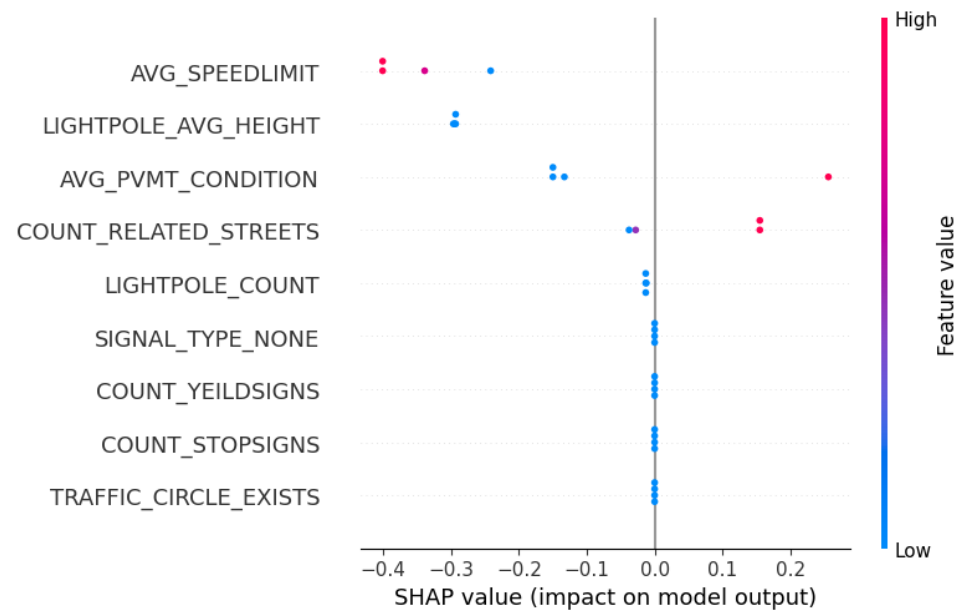
Features vs Collision (Principal_Arterial) Random Forest

Cross-validation scores: [644.29664377
451.21026644 456.88107736 494.90800292
413.73354613] Mean squared error on test
set: 519.1158571500497



Features vs Collision (State_Highway) Random Forest

Cross-validation scores: [0.26980023
0.13437306 6.90745222 11.38698091
0.12219086] Mean squared error on test
set: 0.9242603702215219



Features vs Collision (Interstate_Freeway) Random Forest

Cross-validation scores: [0.4248105
4.88537611 7.65114528 0.08907943
4.19584804] Mean squared error on test
set: 0.5668490219847808

