Model Metrics for US Traffic Fatality Data, 2019

Features & Model	Mean Absolute Error	Root Mean Squared Error	Coefficient of determination-R^2
Full Ordinary Least Squares	57.47	59.5	-3.35
Full Lasso (alpha = 1.0)	12.22	15.63	0.7
Full Linear Regression	10.99	15.21	0.72
Full Decision Tree Regressor max depth = 5	4.24	9.91	0.88
Trimmed Lasso (alpha = 1.0)	12.22	15.63	0.7
Trimmed Linear Regression	11.15	15.3	0.71
Trimmed Decision Tree Regressor max depth = 5	4.25	9.92	0.88

Final Rankings for the Trimmed Feature Sets, 2019

Category	Ranking from RFE with Lasso CV
PEDS	Rank 1.000
PERSONS	Rank 1.000
DRUNK_DR	Rank 1.000
RUR_URBNAME_Rural	Rank 1.000
HARM_EVNAME_Motor Vehicle In-Transport	Rank 1.000
HARM_EVNAME_Non-Motorist on Personal Conveyance[1]	Rank 1.000
HARM_EVNAME_Pedalcyclist	Rank 1.000
HARM_EVNAME_Pedestrian	Rank 1.000
HARM_EVNAME_Traffic Signal Support	Rank 1.000
HARM_EVNAME_Tree (Standing Only)	Rank 1.000
HARM_EVNAME_Other Object (not fixed)	Rank 2.000
HARM_EVNAME_Other Non-Collision[2]	Rank 3.000
HARM_EVNAME_Other Fixed Object	Rank 4.000

[1] Personal conveyance in FARS is different from how the term is used elsewhere. For FARS: "A personal conveyance is a device, other than a transport device, used by a pedestrian for personal mobility assistance or recreation. These devices can be motorized or human powered, but not propelled by pedaling." These include things like roller skates, skateboards, baby carriages, scooters, and motorized rideable toys but not golf carts and mini-bikes (2020 FARS CRSS Coding and Validation Manual).

[2] Non-collision events designate incidents where someone was injured while operating a vehicle or their vehicle suffered damages when no collision with another person occured.