

AV-TNC Model Testing

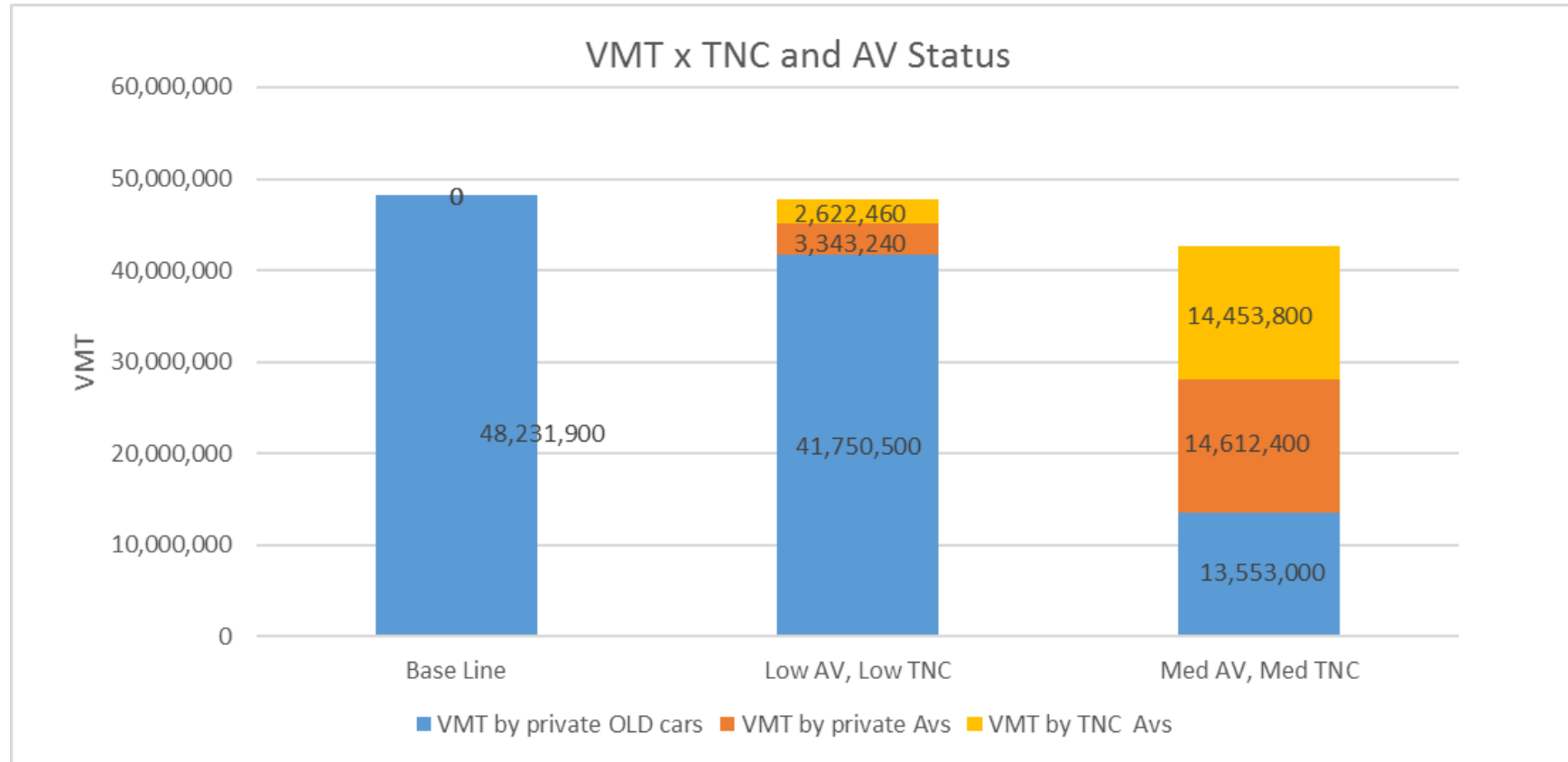
Presented at SACOG Travel Model Users Conference

January 22-23, 2019

SACSIM AV/TNC Modeling

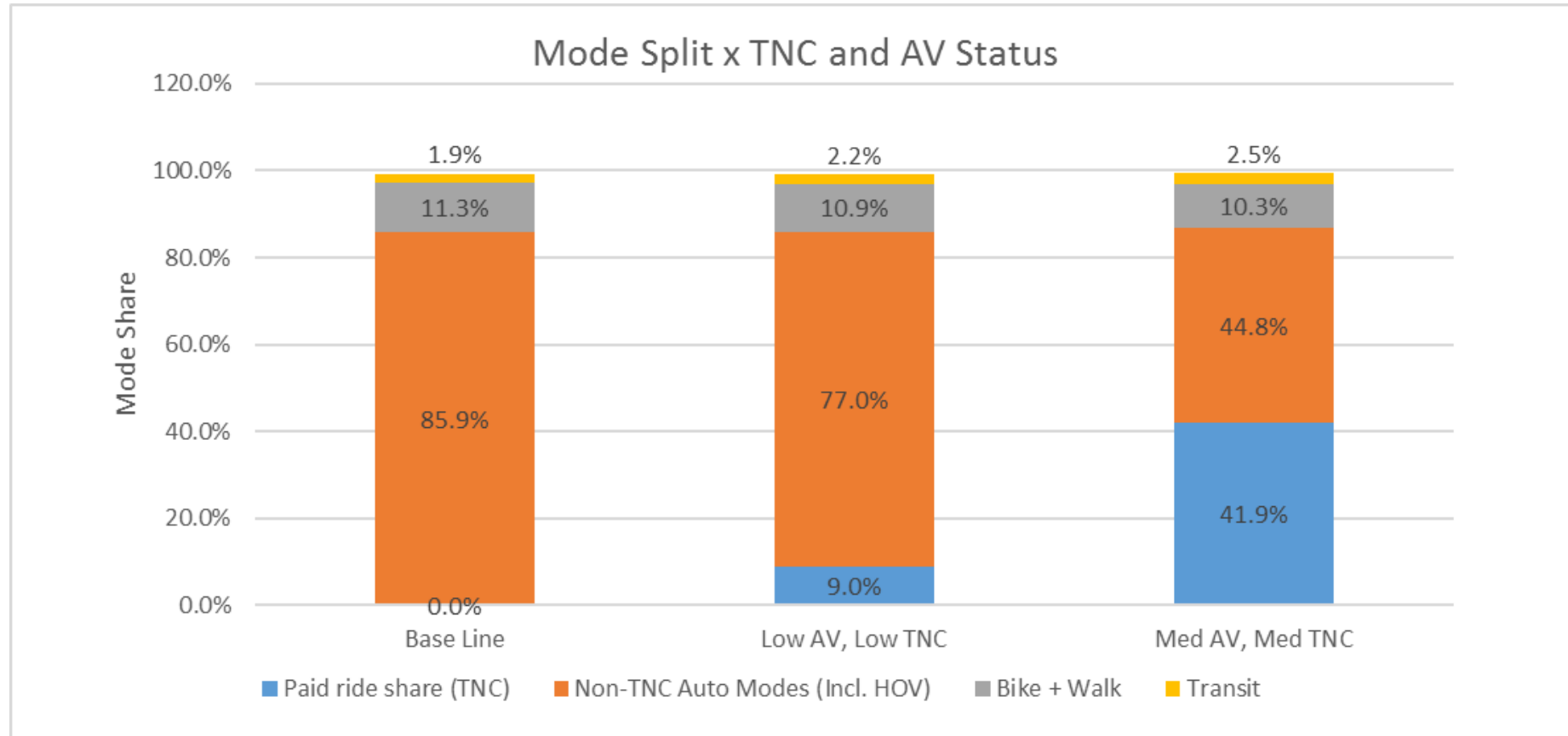
- TNCs:
 - Limited empirical data for TNC model development
- AVs:
 - No empirical data
 - Some simulation-based data
- Model enables significant flexibility to test different predictions surrounding AV use and its effects, using variables in the model run configuration file (config.run2.xml).

Sample AV-TNC Test Results: VMT



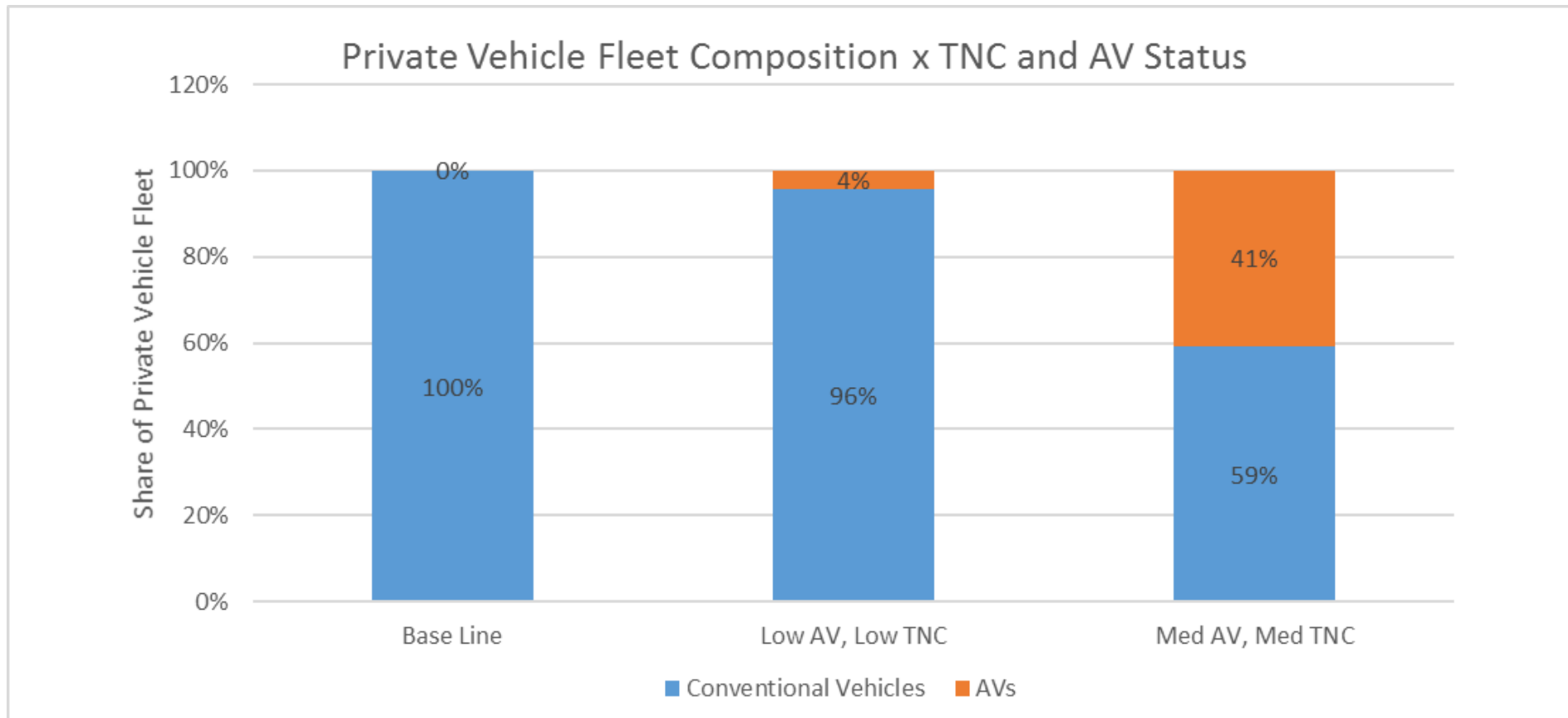
Configuration Variable	Base	Low AV, Low TNC	Med AV, Med TNC
AV_AutoTypeConstant	NA - AV module turned off	-3	0
AV_PaidRideShare_ModeConstant	NA - AV module turned off	-3	0
AV_SharingEconomy_DensityCoeffcientForOwning0Vehicles	NA - AV module turned off	0.00001	0.0001

Sample AV-TNC Test Results: Mode Split



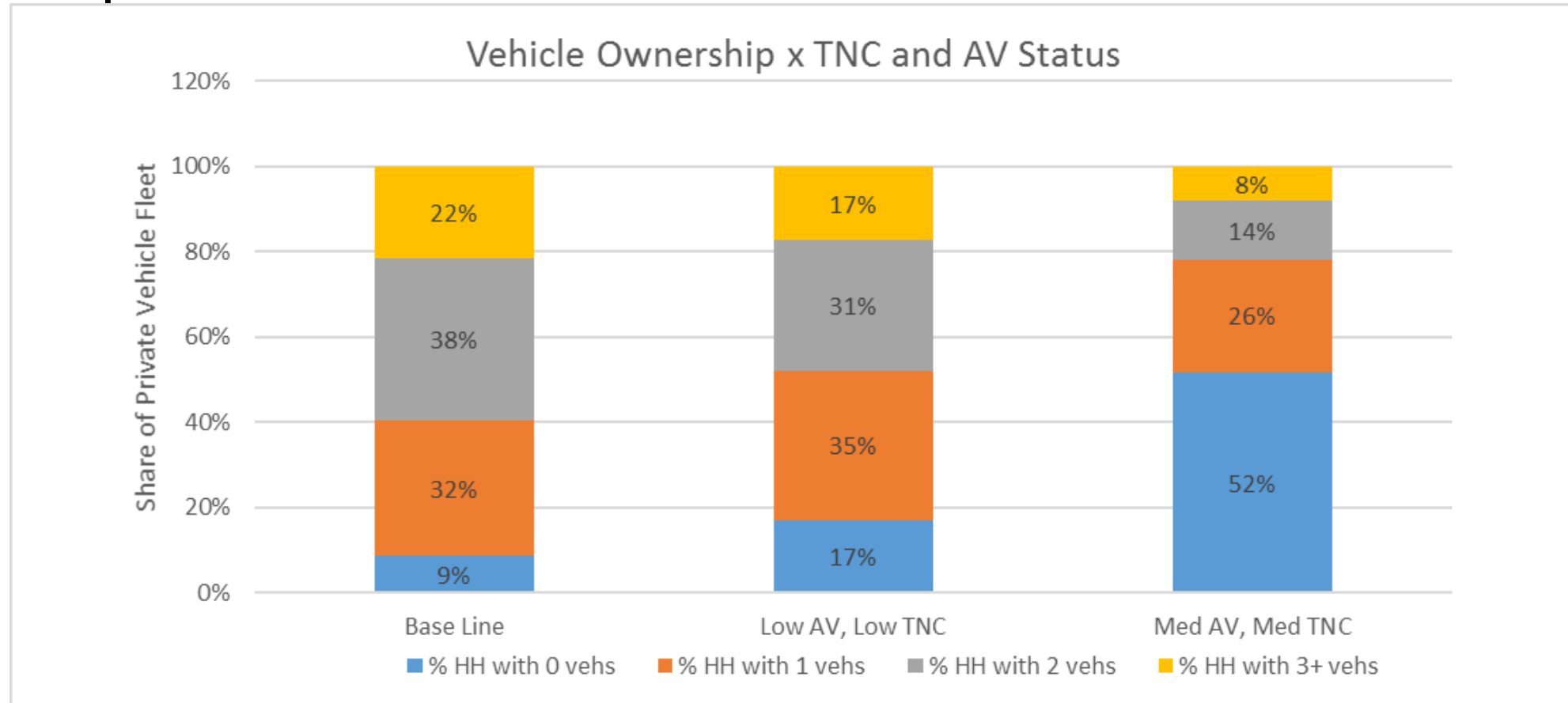
Configuration Variable	Base	Low AV, Low TNC	Med AV, Med TNC
AV_AutoTypeConstant	NA - AV module turned off	-3	0
AV_PaidRideShare_ModeConstant	NA - AV module turned off	-3	0
AV_SharingEconomy_DensityCoefficientForOwning0Vehicles	NA - AV module turned off	0.00001	0.0001

Sample AV-TNC Test Results: Vehicle Fleet



Configuration Variable	Base	Low AV, Low TNC	Med AV, Med TNC
AV_AutoTypeConstant	NA - AV module turned off	-3	0
AV_PaidRideShare_ModeConstant	NA - AV module turned off	-3	0
AV_SharingEconomy_DensityCoeffcientForOwning0Vehicles	NA - AV module turned off	0.00001	0.0001

Sample AV-TNC Test Results: Vehicle Ownership



Configuration Variable	Base	Low AV, Low TNC	Med AV, Med TNC
AV_AutoTypeConstant	NA - AV module turned off	-3	0
AV_PaidRideShare_ModeConstant	NA - AV module turned off	-3	0
AV_SharingEconomy_DensityCoeffcientForOwning0Vehicles	NA - AV module turned off	0.00001	0.0001