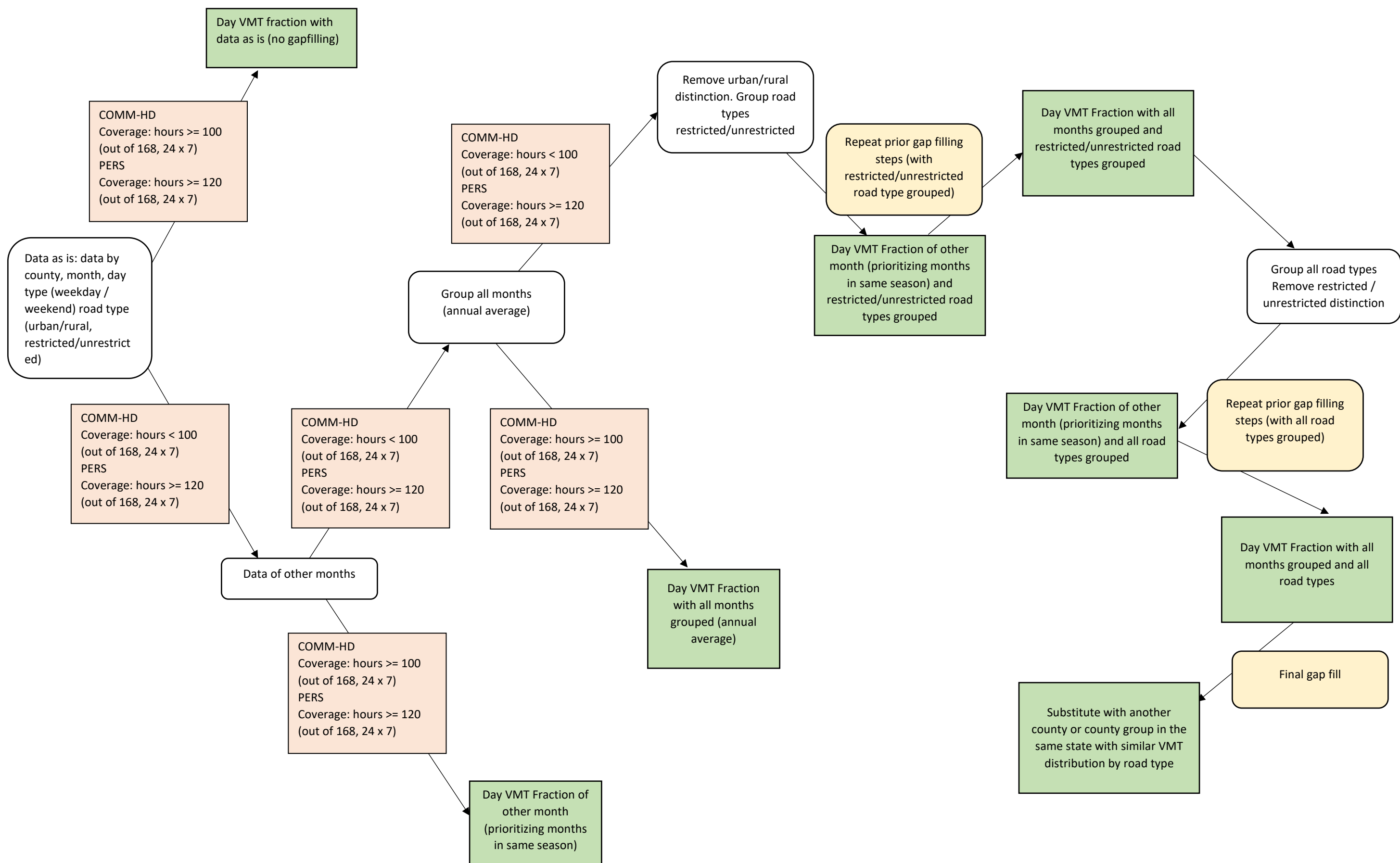
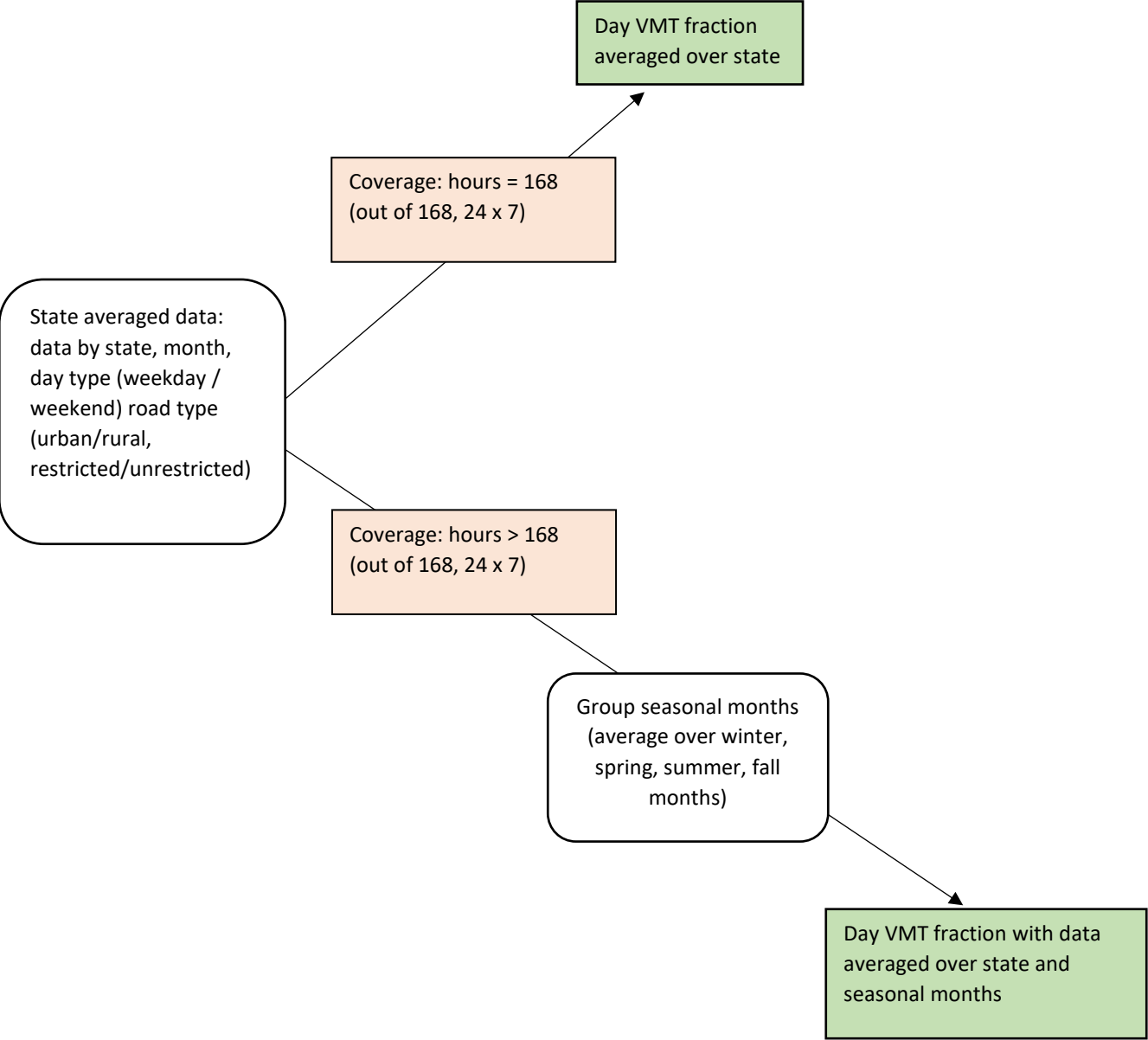


- The following are decision tree flowcharts for StreetLight data gap-filling procedures to improve profiles for areas with low data coverage and fill areas with missing data.
- Decision tree flowcharts procedures for hour and day VMT distributions and average speed distributions for each of the 3 vehicle categories defined in StreetLight: personal (PERS), commercial medium-duty (COMM-MD), and commercial heavy-duty (COMM-HD)
- National averages were used in counties where road types have insufficient or missing data, and activity is not expected for that road type based on zoneRoadType table in MOVES
- Decisions are primarily based on data coverage defined by the number of unique hours covered: 24 hours x # of days (5 weekdays/ 2 weekend days/ 7 full week)
- Due to very low data coverage for COMM-MD, statewide averages were used for COMM-MD profiles. COMM-HD and PERS retained county level detail

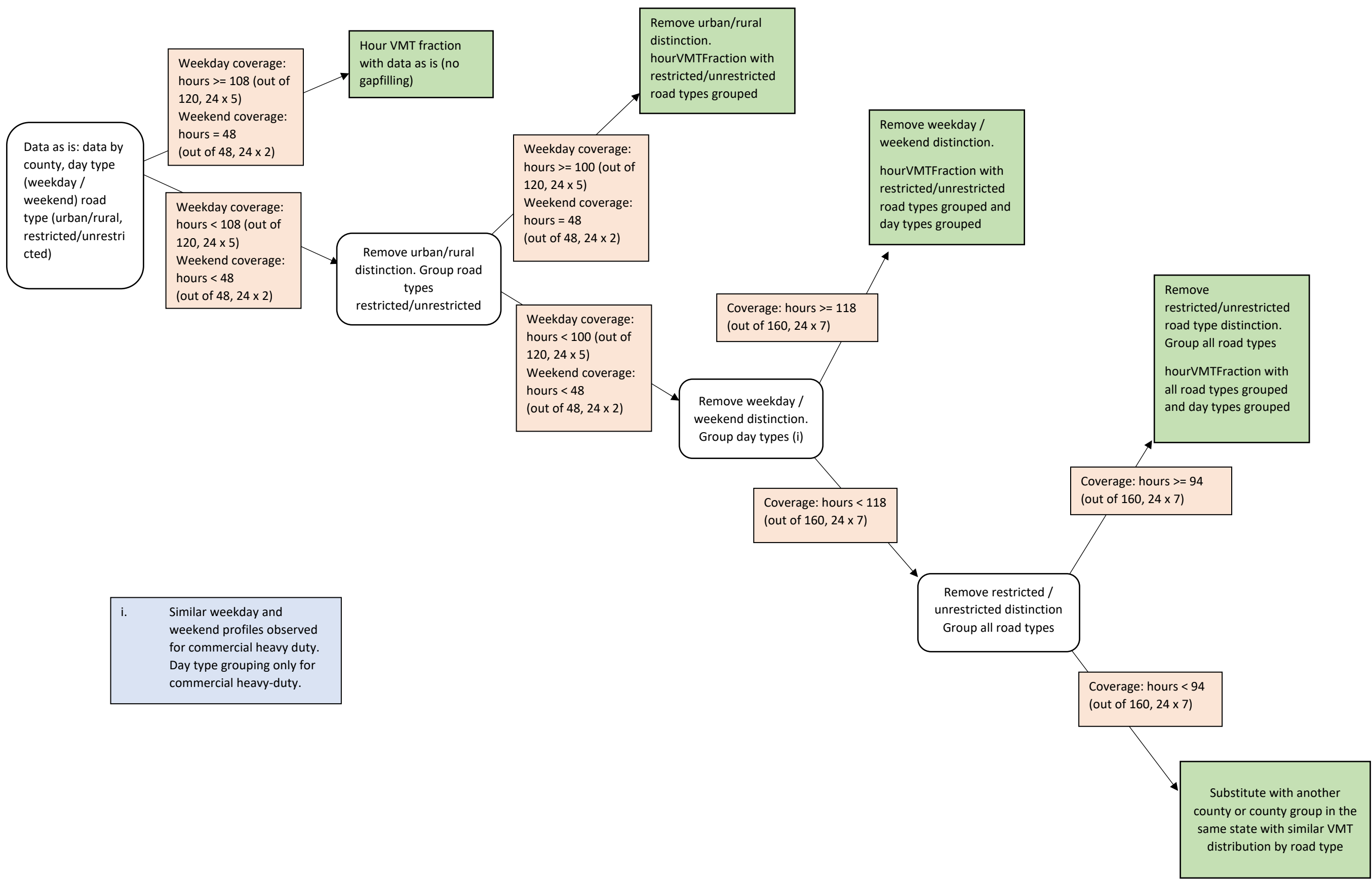
Decision Tree for day VMT
fraction gap filling
(PERS, COMM-HD)



Decision Tree for day VMT
fraction gap filling
(COMM-MD)



Decision Tree for hour VMT
fraction gap filling
(COMM-HD)



Decision Tree for hour VMT
fraction gap filling
(COMM-MD)

i. Could not use county level data due to very sparse data coverage for COMM-MD. Data was averaged over state

State averaged data:
data by state, day type
(weekday / weekend)
road type (urban/rural,
restricted/unrestricted)
(i)

Acceptable
distributions: visual
analysis of hour
VMT Fraction plots

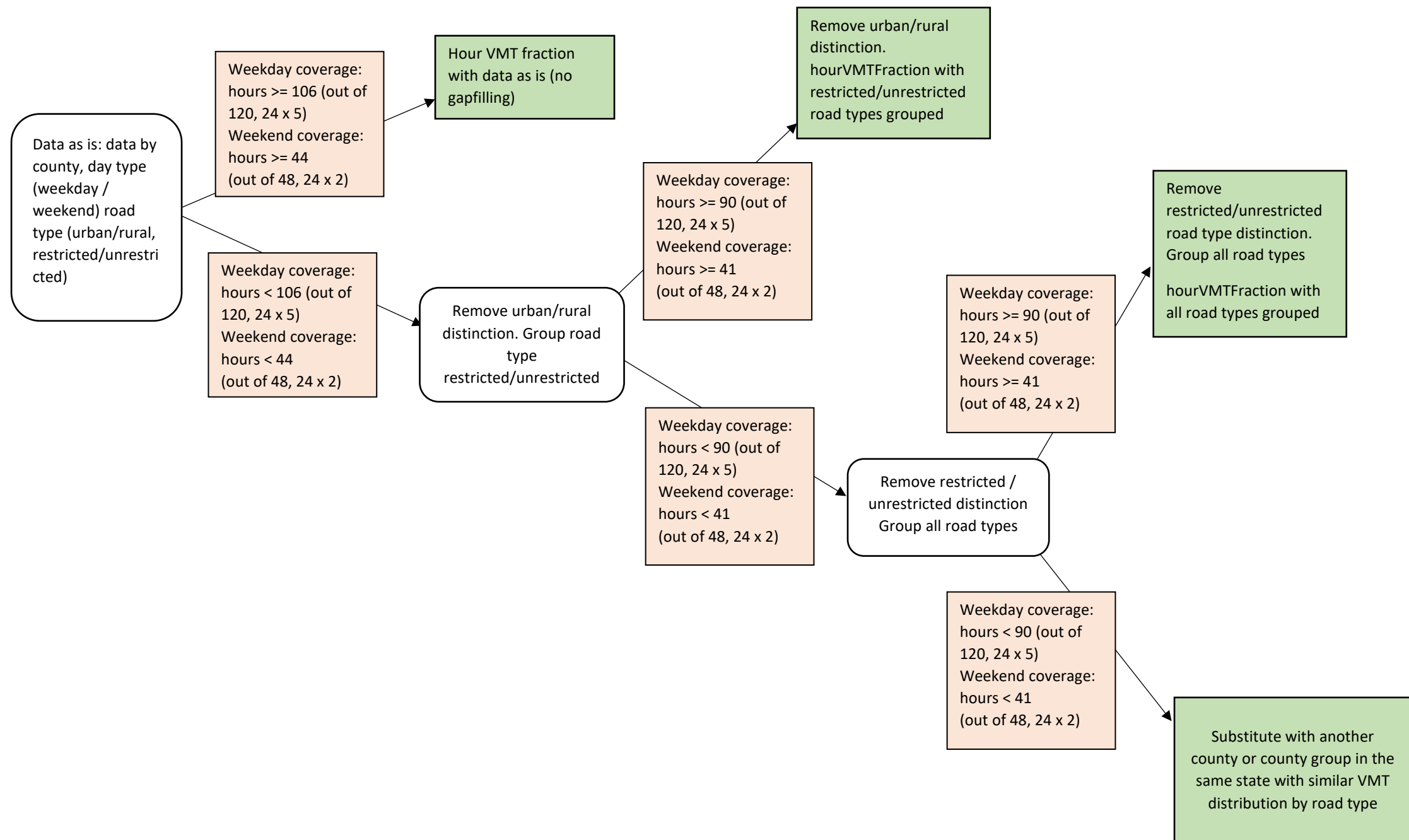
Noisy distributions:
visual analysis of
hour VMT Fraction
plots

Remove urban/rural
distinction. Group road
type
restricted/unrestricted

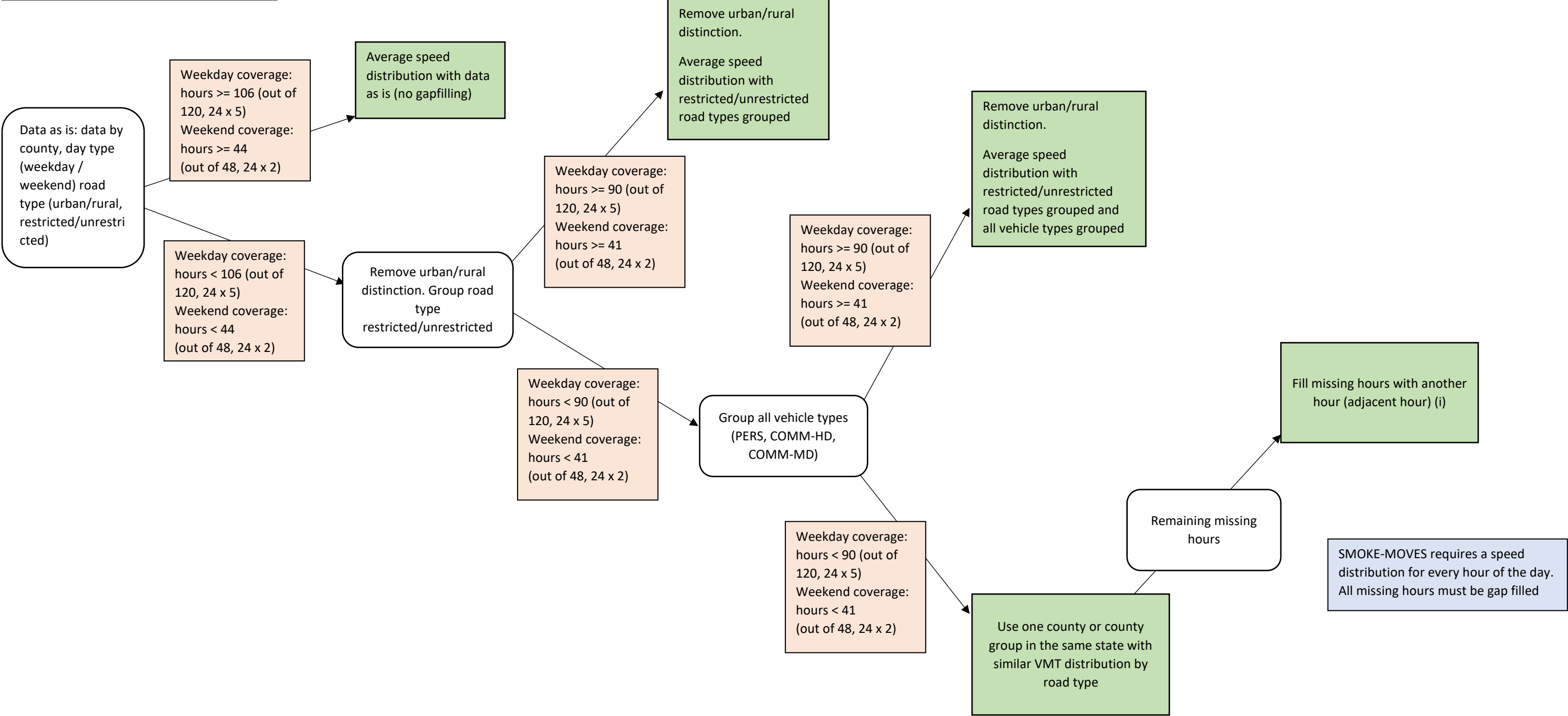
Remove urban/rural
distinction.
hourVMTFraction
averaged over state and
restricted/unrestricted
road types grouped

Hour VMT fraction
averaged over state

Decision Tree for hour VMT
fraction gap filling
(PERS)



Decision Tree for average speed distribution gap filling (PERS, COMM-HD)



Decision Tree for average
speed distribution gap
filling (COMM-MD)

