Separate Left Turn Phase Warrant
"Kentucky Method"

Project No. _____

Intersection: _____

The traffic volumes used below in this analysis are for peak hour volumes. The analysis should consider peak hour volumes + 5 year traffic volume projections for design of new traffic signals.

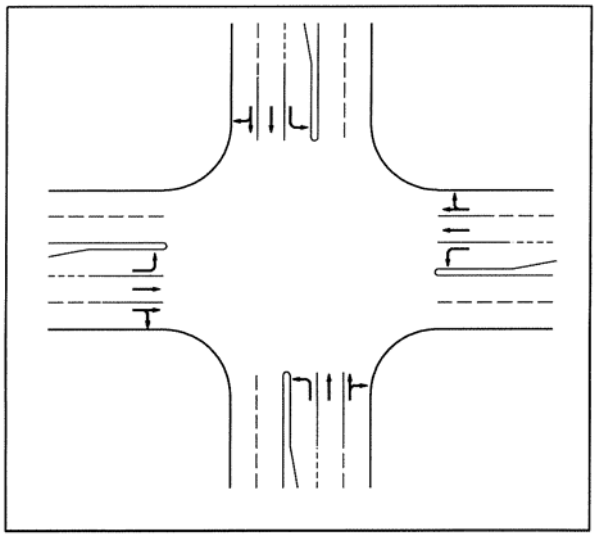
Analysis:

Volume of Left Turn Vehicles X $\frac{\text{Volume of Opposing Through Vehicles}}{\text{Number of Opposing Through Lanes}}$ = "X"

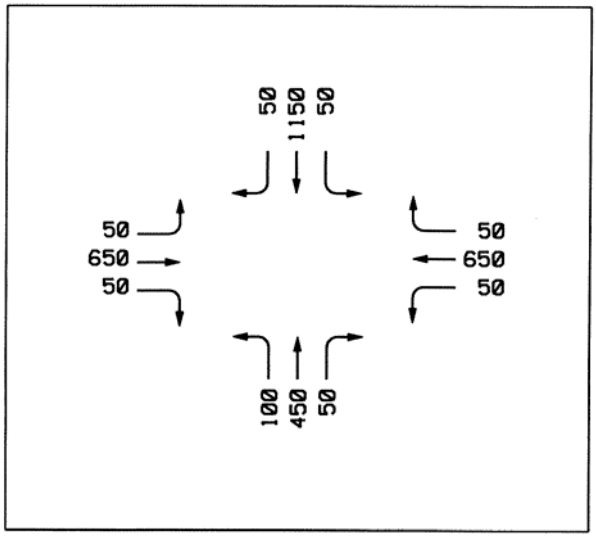
"X" = Left Turn Conflict Factor

1. If "X" is less than 50,000, a separate left turn phase may not be required.
2. If "X" is equal to or greater than 50,000, a separate left turn phase should be considered.

Example Problem



INTERSECTION LAYOUT



TURNING MOVEMENT VOLUMES

NB 100 X $\frac{1150}{2}$ = 57,500 Greater than 50,000

SB 50 X $\frac{450}{2}$ = 11,250 Less than 50,000

WB 50 X $\frac{650}{2}$ = 16,250 Less than 50,000

EB 50 X $\frac{650}{2}$ = 16,250 Less than 50,000

Northbound left turn meets warrants for a separate left turn phase.