States explained through schematic diagram:

TMG TY TTG

TY TSG TY
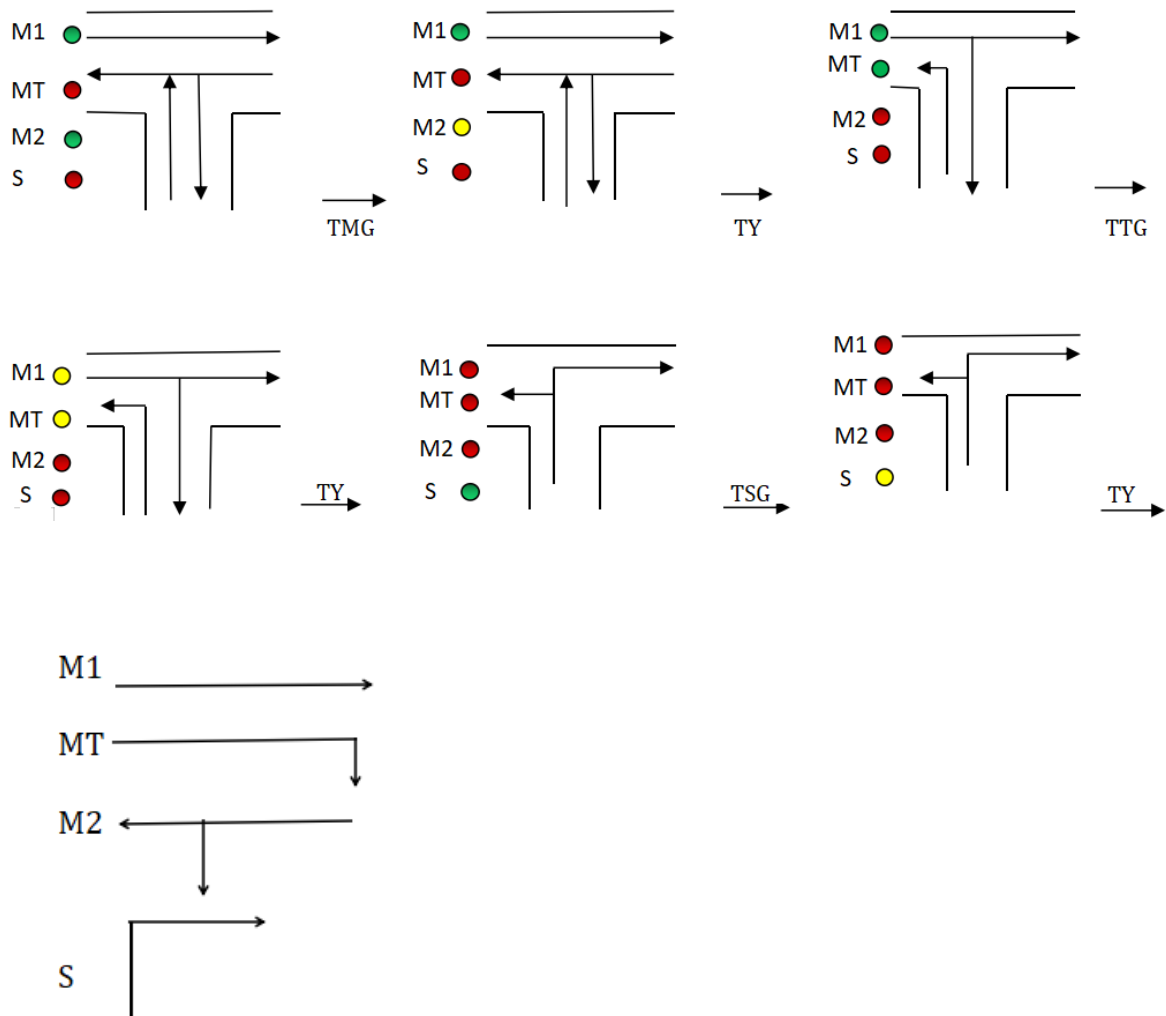
*where the direction of vehicles is explained through this image.

State Transition Table with time delays stated:

PRESENT STATE ABC	INPUT	NEXT STATE A*B*C*	S T	M1 RYG	M2 RYG	MT RYG	S RYG
000	-	001	1	000	000	000	000
001	$\overline{TMG}$	001	0	001	001	100	100
	TMG	010	1				
010	$\overline{TY}$	010	0	001	010	100	100
	TY	011	1				
011	$\overline{TTG}$	011	0	001	100	001	100
	TTG	100	1				
100	$\overline{TY}$	100	0	010	100	010	100
	TY	101	1				
101	$\overline{TSG}$	101	0	100	100	100	001
	TSG	110	1				
110	$\overline{TY}$	110	0	100	100	100	010
	TY	001	1				
111	-	000	0	000	000	000	000