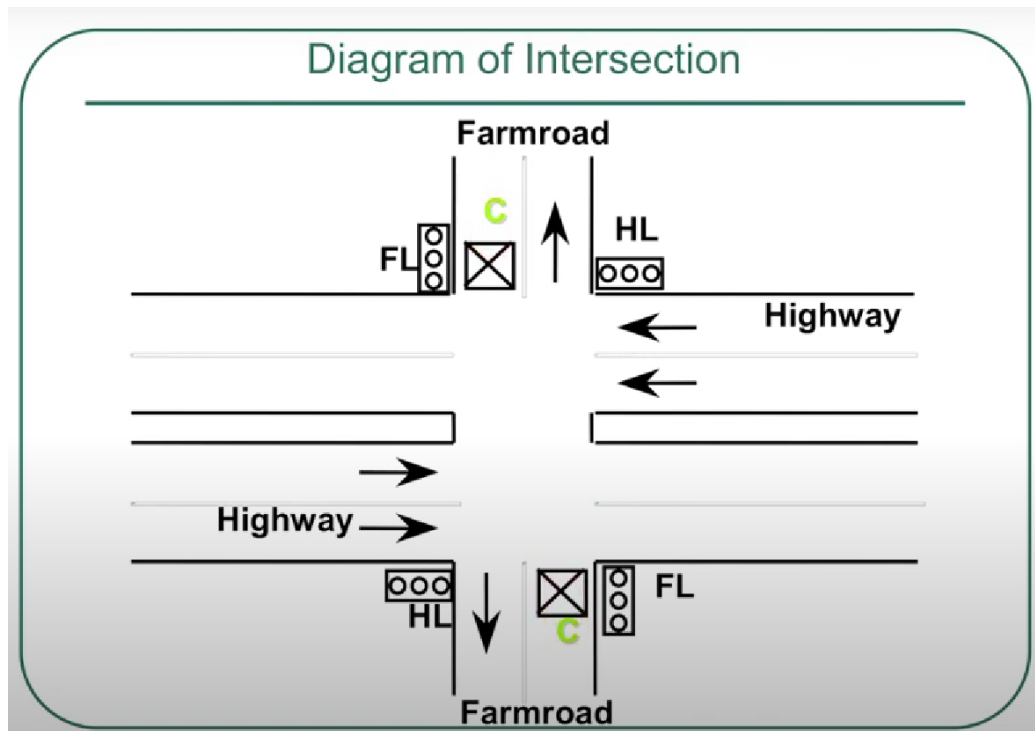


# Traffic Light Controlling System

A basic traffic light controller for a junction where a relatively less crowded road intersects with a highway



The farm road is less crowded and vehicles pass through occasionally. Therefore, we can place a sensor in the farm road prior to the junction to detect the presence of a vehicle. If Sensor C detects presence it Gives a window for the Farm road vehicles to pass by.

## **Implementation**

<u>Input signal</u>	<u>Description</u>
Reset(rst)	Fsm moved to initial state
C	Flag to show the Sensor C detection
TS	Flag to indicate Intervel for Farm road expired
TL	Flag to indicate Intervel for Main road expired

<u>Output signal</u>	<u>Description</u>
ST	Output signal that initiates both the timer interval for Farm road and Main road.

### States for the system

State	Description
S0	Highway green (farmroad red)
S1	Highway yellow (farmroad red)
S2	Farmroad green (highway red)
S3	Farmroad yellow (highway red)

### State transition diagram

