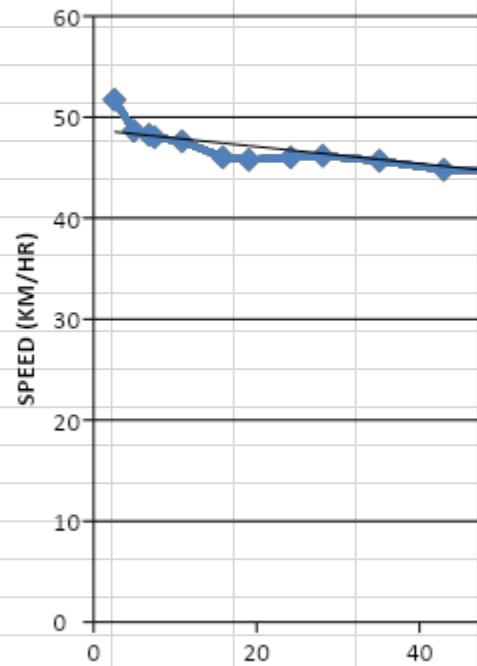


Flow	Stretch	Time	Speed	Density
100	50	3.48	51.724137	2.5537698
200	50	3.7	48.648648	4.9269472
300	50	3.73	48.257372	6.7958932
400	50	3.75	48	7.4796074
500	50	3.78	47.619047	10.8464152
700	50	3.91	46.035805	15.848368
900	50	3.93	45.801526	19.0350688
1150	50	3.91	46.035805	24.1768272
1400	50	3.9	46.153846	28.1095744
1650	50	3.94	45.685279	35.0684256
1900	50	4.02	44.776119	42.9688886
2150	50	4.02	44.776119	49.8485432
2400	50	4.1	43.902439	59.403303
2650	50	4.18	43.062206	66.324896
2900	50	4.26	42.253521	75.7303954
3200	50	4.27	42.154566	78.8840624
3500	50	4.35	41.379316	87.0477122
3800	50	4.37	41.189931	96.684792
4100	50	4.38	41.095896	99.9176576
4400	50	4.69	38.379536	106.122728
4700	50	4.36	41.284403	100.127184
5000	50	4.43	40.632054	101.586149



Inferences:

1. When the flow is minimum , the speed is maximum
2. When the flow is minimum, the density is minimum
3. Initially when the flow value increases, the speed decreases but its not like that for every increase in flow, the speed decreases
4. Overall speed v/s density and flow relation is non linear
5. From curve, if we put speed =0, we will get the flow value as 581.83
6. In speed-flow relation if we put flow =0, we will get the speed value as 48.75

Putting x=0; in equation

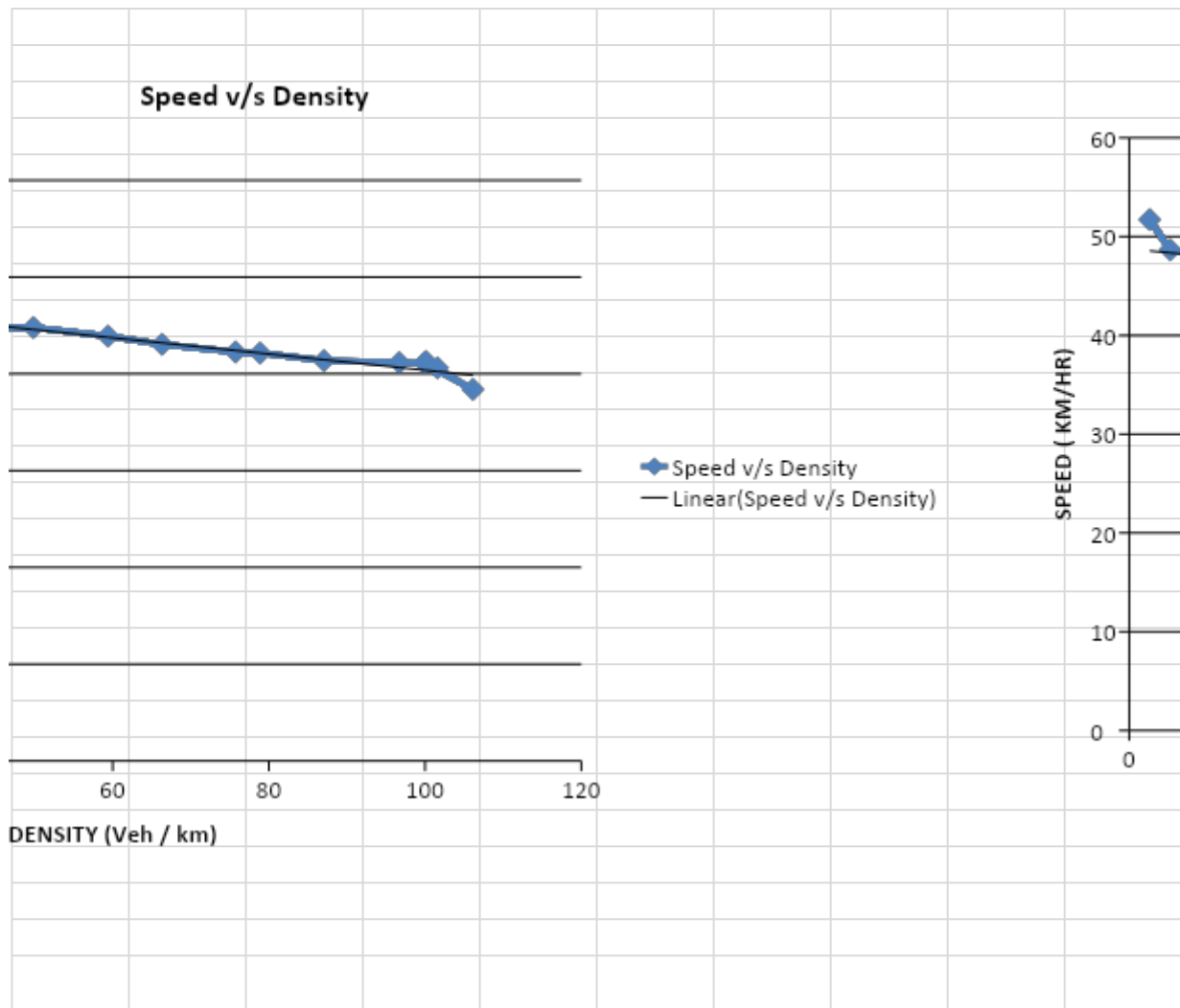
We will Get Y= 48.75 Km/hr.

Putting y=0; in equation

We will Get X= 581.83 Veh / hr

Now,

From the



the average speed is highest.

the density is also minimum.

As flow increases from 100 to 900, average speed decreases and corresponding density increases. As flow increases, the average speed is decreasing, some time it is remaining constant. The speed v/s flow plot is a straight line and as flow is increasing, density is increasing and speed is decreasing. (in speed-density relation); then we will get maximum density = 581.83 veh/km. At speed=0; we will get maximum flow = 25654 veh/hr (very high value, not looking realistic).

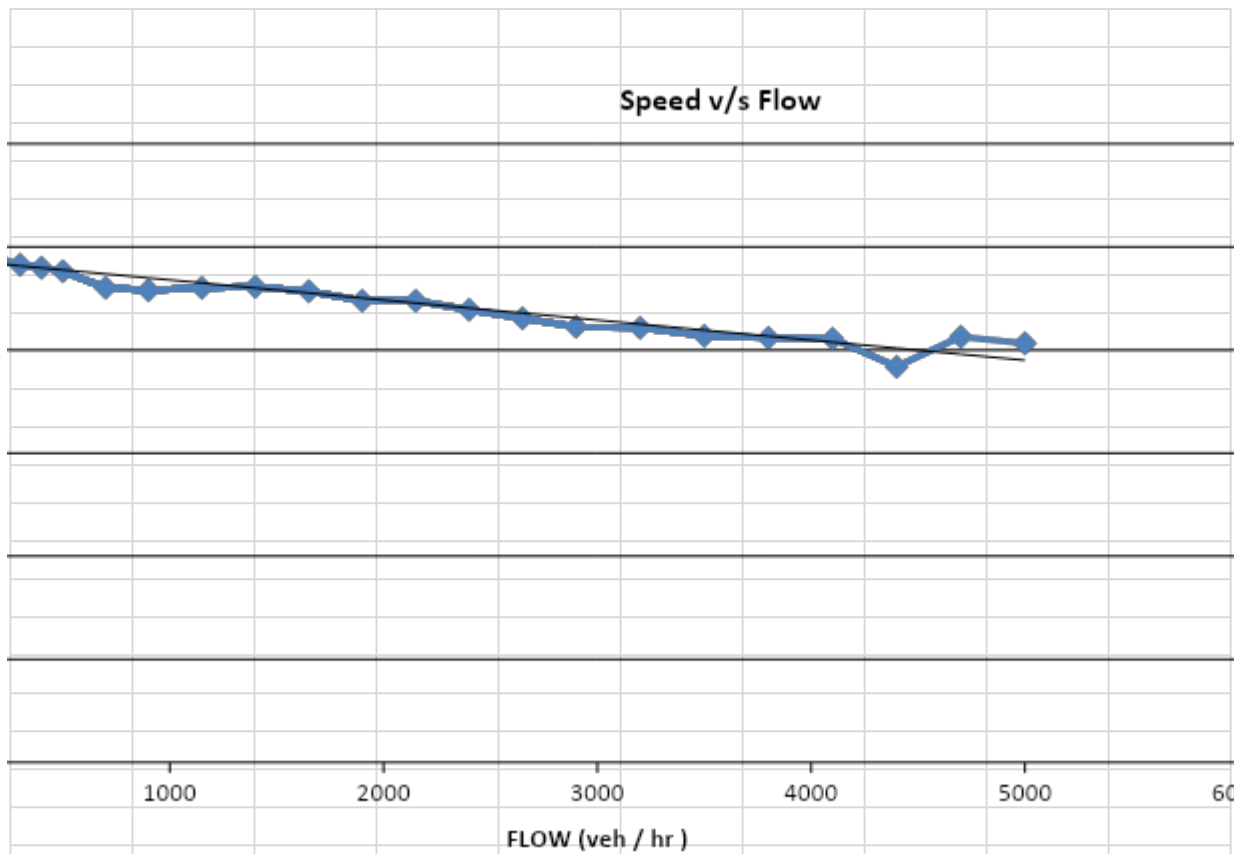
of speed v/s density;

(It is Nothing But Free flow Speed)

of speed v/s density;

(It is Nothing But Jam Density)

the relation, $\text{capacity} = (\text{free flow} * \text{jam density}) / 4 = (581.83 * 48.75) / 4 = 7091 \text{ veh/hr}$



eases,
 onstant and also sometime it is decreasing.
 average speed is decreasing.

realistic).

hr.

