Detector Accuracy Information

Note: Accuracy has not been confirmed at individual sites.

Radar Wavetronix Matrix – Vehicle Count Accuracy

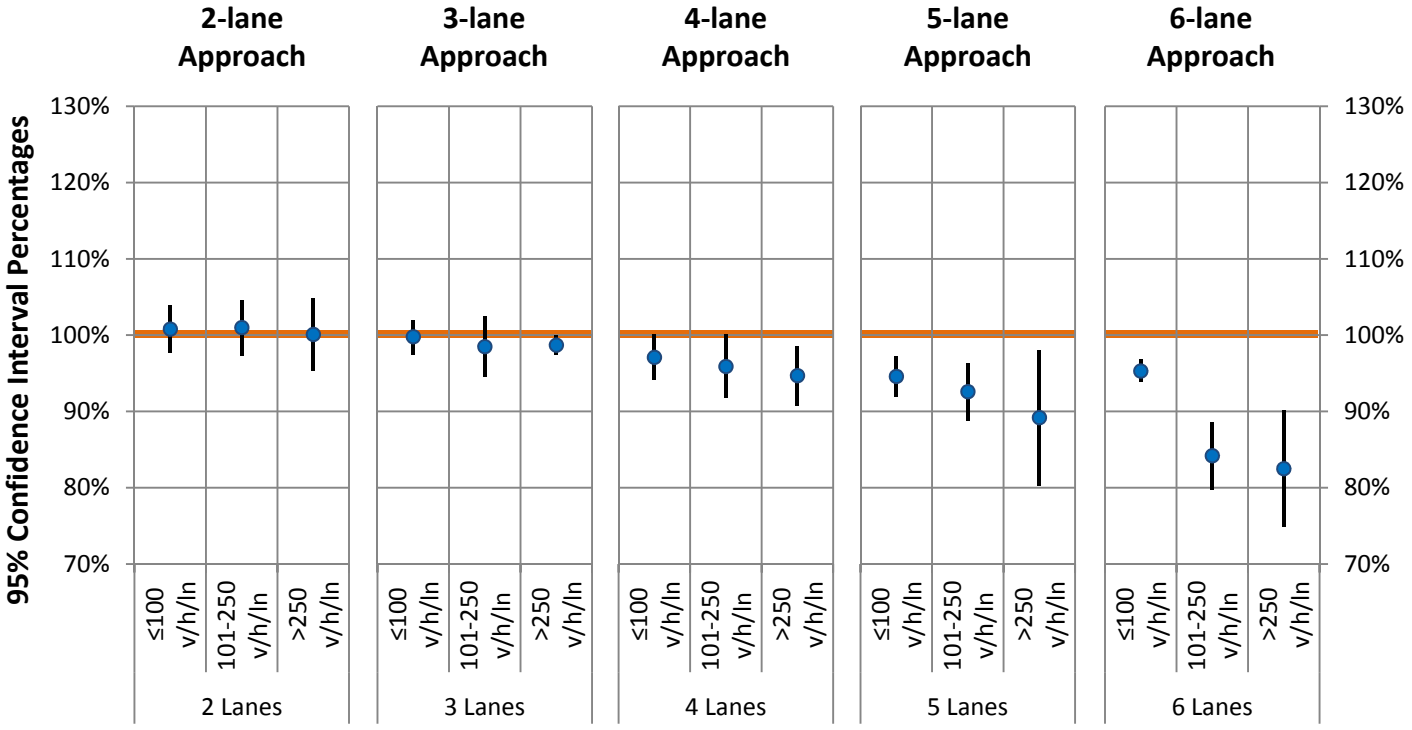
Radar Wavetronix Matrix – Vehicle Count Accuracy (%) by Lane Volume

Number of Approach Lanes	Low Volume (≤100 veh/hr/lane)			Medium Volume (101-250 veh/hr/lane)			High Volume (>250 veh/hr/lane)		
	Lower 95% CI	**Mean**	Upper 95% CI	Lower 95% CI	**Mean**	Upper 95% CI	Lower 95% CI	**Mean**	Upper 95% CI
2	97.6	**100.8**	103.9	97.3	**101.0**	104.6	95.3	**100.1**	104.8
3	97.5	**99.8**	102.0	94.6	**98.5**	102.5	97.4	**98.7**	99.9
4	94.1	**97.1**	100.1	91.7	**95.9**	100.1	90.8	**94.7**	98.6
5	91.9	**94.6**	97.2	88.8	**92.6**	96.3	80.3	**89.2**	98.0
6	93.8	**95.3**	96.8	79.7	**84.2**	88.6	74.9	**82.5**	90.2

Source: Report No. UT-15.14 (August 2015)
Table 5-1 a & b – Volume Level vs. Number of Approach Lanes
https://www.udot.utah.gov/public/ucon/uconowner.gf?n=26445305298673985

Radar Wavetronix Matrix - Mean Multiplication Factors

Number of Approach Lanes	Low Volume (≤100 v/h/ln)	Medium Volume (101-250 v/h/ln)	High Volume (>250 v/h/ln)
	Mean Multiplication Factor	Mean Multiplication Factor	Mean Multiplication Factor
2	0.992	0.990	0.999
3	1.002	1.015	1.013
4	1.030	1.043	1.056
5	1.057	1.080	1.121
6	1.049	1.188	1.212



Detector Accuracy Information

Note: Accuracy has not been confirmed at individual sites.

Radar Wavetronix Advance – Vehicle Count Accuracy

Radar Wavetronix Advance – Vehicle Count Accuracy (%) by Lane Volume

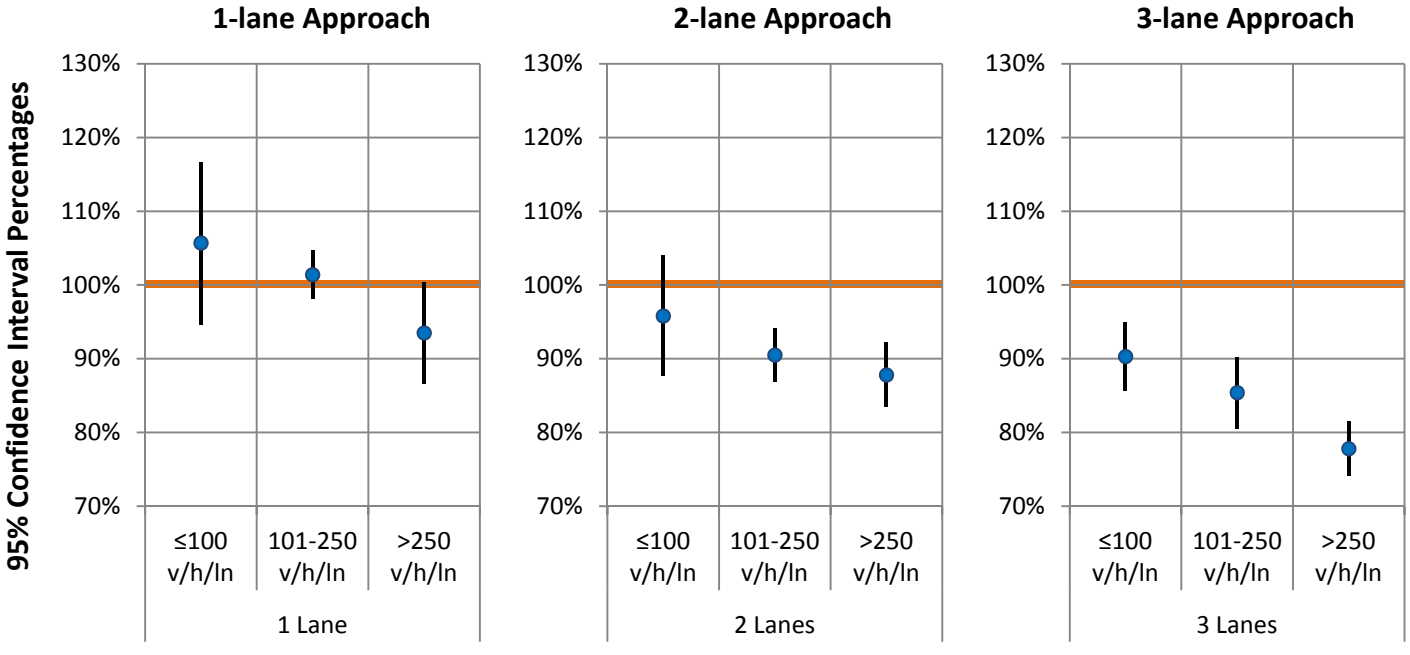
Number of Approach Lanes	Low Volume (≤100 veh/hr/lane)			Medium Volume (101-250 veh/hr/lane)			High Volume (>250 veh/hr/lane)		
	Lower 95% CI	**Mean**	Upper 95% CI	Lower 95% CI	**Mean**	Upper 95% CI	Lower 95% CI	**Mean**	Upper 95% CI
1	94.7	**105.7**	116.6	98.1	**101.4**	104.7	86.6	**93.5**	100.4
2	87.6	**95.8**	104.0	86.9	**90.5**	94.1	83.5	**87.8**	92.2
3	85.7	**90.3**	95.0	80.5	**85.4**	90.2	74.1	**77.8**	81.5

Source: Report No. UT-16.05 - May 2016
Table 5-2 – Combined Mean Accuracy
Table 5-4 – Combined 95% Confidence Interval of the Mean
https://www.udot.utah.gov/main/uconowner.gf?n=28384521790001597

Radar Wavetronix Advance – Mean Multiplication Factors

Number of Approach Lanes	Low Volume (≤100 veh/hr/lane)	Medium Volume (101-250 veh/hr/lane)	High Volume (>250 veh/hr/lane)
	Mean Multiplication Factor	Mean Multiplication Factor	Mean Multiplication Factor
1	0.946	0.986	1.070
2	1.044	1.105	1.139
3	1.107	1.171	1.285

Source: Report No. UT-16.05 - May 2016
Table 5-5 – Mean Multiplication Factors
https://www.udot.utah.gov/main/uconowner.gf?n=28384521790001597



Detector Accuracy Information

Note: Accuracy has not been confirmed at individual sites.

Radar Wavetronix Advance – Vehicle Speed Accuracy

Mean Speed Accuracy

- The mean speed accuracy of the radar Wavetronix Advance SmartSensor is +/- 2 mph.
- Since speeds are often rounded to the nearest 5 mph, the mean speed measured by the Advance sensor can be used for traffic engineering studies without any adjustment.

85th Percentile Speed Accuracy

- The 85th percentile speed accuracy of the radar Wavetronix Advance SmartSensor is +/- 1.5 mph.
- Since speeds are often rounded to the nearest 5 mph, the 85th percentile speed measured by the Advance sensor can be used for traffic engineering studies without any adjustment.

Source: Report No. UT-16.05 - May 2016
https://www.udot.utah.gov/main/uconowner.gf?n=28384521790001597

Inductive Loops

- UDOT does not have data on inductive loop accuracy. However, inductive loops are usually highly accurate and are considered the gold standard for accuracy & reliability.

Video Detection

- UDOT does not have data on video detection accuracy.

Sensys Networks Magnetometers

- UDOT does not have data on the accuracy of detection by Sensys Networks.