

APPENDIX W

RED-LINE AND YELLOW-LINE THRESHOLDS FOR ROUTE

SELECTION SEARCH TASKS, TABLE FORMAT

Table W.1. Red-line and Yellow-line Thresholds for route selection Search tasks, table format.

IVIS Tasks			Young Drivers									Middle Age Drivers									Older Drivers									All Drivers					
Presentation Format	Density Level		Red-line Threshold						Yellow-line Threshold			Red-line Threshold						Yellow-line Threshold			Red-line Threshold														
			Task skipped	Threshold exceeded	Total exceeded	Below threshold	Missing data	Total	Minimum speed	Max. steering velocity	Mirror glances	Task skipped	Threshold exceeded	Total exceeded	Below threshold	Missing data	Total	Minimum speed	Max. steering velocity	Mirror glances	Task skipped	Threshold exceeded	Total exceeded	Below threshold	Missing data	Total									
Table	L	# Subj.	0	0	0	10	2	12	0	0	0	0	2	2	8	2	12	0	0	X	1	1	2	8	2	12	1	X	1	1	3	4	26	6	36
		Prop.	.00	.00	.00	.83	.17	1.0				.00	.17	.17	.67	.17	1.0				.08	.08	.17	.67	.17	1.0				.03	.08	.11	.72	.17	1.0
	M	# Subj.	0	1	1	9	2	12	X	X	0	0	1	1	10	1	12	0	0	X	1	2	3	7	2	12	1	X	1	1	4	5	26	5	36
		Prop.	.00	.08	.08	.75	.17	1.0				.00	.08	.08	.83	.08	1.0				.08	.17	.25	.58	.17	1.0				.03	.11	.14	.72	.14	1.0
	H	# Subj.	1	0	1	9	2	12			X	0	1	1	10	1	12	0	0	X	4	4	8	2	2	12	4	X	X	5	5	10	21	5	36
		Prop.	.08	.00	.08	.75	.17	1.0				.00	.08	.08	.83	.08	1.0				.33	.33	.67	.17	.17	1.0				.14	.14	.28	.58	.14	1.0

Table W.2 Proportion of drivers from all age groups combined who exceeded the Red-line Threshold for route selection Search tasks, table format.

IVIS Tasks		Skipped Tasks			Number of Eye Glances					Peak Eye Glance Length					Task Completion Time					Lane Deviations			
Density Level		Not presented, safety concern	Not presented, below red-line	Skipped by driver	1 - 4 glances	5 - 8 glances	9+ glances	Missing data	Total	Less than or equal to 2.0	2.0 > secs. ≤ 2.5	Greater than 2.5 secs.	Missing data	Total	Greater than 13 secs.	13 > secs. ≤ 20	Greater than 20 secs.	Missing data	Total	No deviations	1+ deviations	Missing data	Total
	L																						
Prop.		0.00	0.19	0.03	0.56	0.03	0.00	0.19	1.00	0.47	0.03	0.08	0.19	1.00	0.61	0.00	0.00	0.17	1.00	0.58	0.03	0.17	1.00
M	# Subj.	0	3	1	23	3	0	6	36	21	3	2	6	36	25	1	1	5	36	26	1	5	36
	Prop.	0.00	0.08	0.03	0.64	0.08	0.00	0.17	1.00	0.58	0.08	0.06	0.17	1.00	0.69	0.03	0.03	0.14	1.00	0.72	0.03	0.14	1.00
H	# Subj.	4	0	1	23	1	1	6	36	16	5	4	6	36	24	2	0	5	36	26	0	5	36
	Prop.	0.11	0.00	0.03	0.64	0.03	0.03	0.17	1.00	0.44	0.14	0.11	0.17	1.00	0.67	0.06	0.00	0.14	1.00	0.72	0.00	0.14	1.00

Table W.3. Proportion of young drivers who exceeded the Red-line Threshold for route selection Search tasks, table format.

IVIS Tasks		Skipped Tasks			Number of Eye Glances					Peak Eye Glance Length					Task Completion Time					Lane Deviations			
Density Level		Not presented, safety concern	Not presented, below red-line	Skipped by driver	1 - 4 glances	5 - 8 glances	9+ glances	Missing data	Total	Less than or equal to 2.0	2.0 > secs. ≤ 2.5	Greater than 2.5 secs.	Missing data	Total	Greater than 13 secs.	13 > secs. ≤ 20	Greater than 20 secs.	Missing data	Total	No deviations	1+ deviations	Missing data	Total
	Prop.	0.00	0.25	0.00	0.58	0.00	0.00	0.17	1.00	0.58	0.00	0.00	0.17	1.00	0.58	0.00	0.00	0.17	1.00	0.58	0.00	0.17	1.00
<i>M</i>	# Subj.	0	1	0	8	1	0	2	12	8	0	1	2	12	8	1	0	2	12	9	0	2	12
	Prop.	0.00	0.08	0.00	0.67	0.08	0.00	0.17	1.00	0.67	0.00	0.08	0.17	1.00	0.67	0.08	0.00	0.17	1.00	0.75	0.00	0.17	1.00
<i>H</i>	# Subj.	1	0	0	8	1	0	2	12	8	1	0	2	12	8	1	0	2	12	9	0	2	12
	Prop.	0.08	0.00	0.00	0.67	0.08	0.00	0.17	1.00	0.67	0.08	0.00	0.17	1.00	0.67	0.08	0.00	0.17	1.00	0.75	0.00	0.17	1.00

Table W.4. Proportion of middle age drivers who exceeded the Red-line Threshold for route selection Search tasks, table format.

IVIS Tasks		Skipped Tasks			Number of Eye Glances					Peak Eye Glance Length					Task Completion Time					Lane Deviations			
Density Level		Not presented, safety concerned	Not presented, below red-line	Skipped by driver	1 - 4 glances	5 - 8 glances	9+ glances	Missing data	Total	Less than or equal to 2.0	2.0 > secs. ≤ 2.5	Greater than 2.5 secs.	Missing data	Total	Greater than 13 secs.	13 > secs. ≤ 20	Greater than 20 secs.	Missing data	Total	No deviations	1+ deviations	Missing data	Total
	Prop.	0.00	0.25	0.00	0.50	0.00	0.00	0.25	1.00	0.33	0.00	0.17	0.25	1.00	0.58	0.00	0.00	0.17	1.00	0.58	0.00	0.17	1.00
<i>M</i>	# Subj.	0	1	0	8	1	0	2	12	6	2	1	2	12	10	0	0	1	12	10	0	1	12
	Prop.	0.00	0.08	0.00	0.67	0.08	0.00	0.17	1.00	0.50	0.17	0.08	0.17	1.00	0.83	0.00	0.00	0.08	1.00	0.83	0.00	0.08	1.00
<i>H</i>	# Subj.	0	0	0	10	0	0	2	12	5	4	1	2	12	11	0	0	1	12	11	0	1	12
	Prop.	0.00	0.00	0.00	0.83	0.00	0.00	0.17	1.00	0.42	0.33	0.08	0.17	1.00	0.92	0.00	0.00	0.08	1.00	0.92	0.00	0.08	1.00

Table W.5. Proportion of older drivers who exceeded the Red-line Threshold for route selection Search tasks, table format.

IVIS Tasks		Skipped Tasks			Number of Eye Glances					Peak Eye Glance Length					Task Completion Time					Lane Deviations			
Density Level		Not presented, safety concern	Not presented, below red-line	Skipped by driver	1 - 4 glances	5 - 8 glances	9+ glances	Missing data	Total	Less than or equal to 2.0	2.0 > secs. ≤ 2.5	Greater than 2.5 secs.	Missing data	Total	Greater than 13 secs.	13 > secs. ≤ 20	Greater than 20 secs.	Missing data	Total	No deviations	1+ deviations	Missing data	Total
	L	# Subj.	0	1	1	7	1	0	2	12	6	1	1	2	12	8	0	0	2	12	7	1	2
Prop.		0.00	0.08	0.08	0.58	0.08	0.00	0.17	1.00	0.50	0.08	0.08	0.17	1.00	0.67	0.00	0.00	0.17	1.00	0.58	0.08	0.17	1.00
M	# Subj.	0	1	1	7	1	0	2	12	7	1	0	2	12	7	0	1	2	12	7	1	2	12
	Prop.	0.00	0.08	0.08	0.58	0.08	0.00	0.17	1.00	0.58	0.08	0.00	0.17	1.00	0.58	0.00	0.08	0.17	1.00	0.58	0.08	0.17	1.00
H	# Subj.	3	0	1	5	0	1	2	12	3	0	3	2	12	5	1	0	2	12	6	0	2	12
	Prop.	0.25	0.00	0.08	0.42	0.00	0.08	0.17	1.00	0.25	0.00	0.25	0.17	1.00	0.42	0.08	0.00	0.17	1.00	0.50	0.00	0.17	1.00

Table W.6. Paired T value results for Yellow-line Thresholds for route selection Search tasks, table format.

		Variable	N	Mean	Std. Error	T value	P value
Low (3x2)	Young	MNSPEED	7	-0.42	1.59	-0.26	0.80
		MXSTER	7	-3.91	3.30	-1.18	0.28
		NMIRROR	7	0.46	0.19	2.41	0.05
	Middle Age	MNSPEED	7	-1.66	1.66	-1.00	0.36
		MXSTER	7	0.66	3.34	0.20	0.85
		NMIRROR	6	0.88	0.15	5.65	0.00
	Older	MNSPEED	8	2.21	1.65	1.33	0.22
		MXSTER	8	-8.82	2.94	-3.00	0.02
		NMIRROR	8	0.42	0.26	1.61	0.15
Medium (3x3)	Young	MNSPEED	9	4.10	1.34	3.06	0.02
		MXSTER	9	-8.43	3.29	-2.57	0.03
		NMIRROR	9	0.28	0.16	1.75	0.12
	Middle Age	MNSPEED	10	-0.38	1.75	-0.21	0.84
		MXSTER	10	-4.19	3.51	-1.19	0.26
		NMIRROR	9	0.83	0.18	4.71	0.00
	Older	MNSPEED	8	3.07	1.36	2.26	0.06
		MXSTER	8	-7.72	2.03	-3.80	0.01
		NMIRROR	8	-0.33	0.44	-0.76	0.47
High (5x4)	Young	MNSPEED	9	-0.75	0.76	-0.98	0.36
		MXSTER	9	-3.24	2.59	-1.25	0.25
		NMIRROR	9	0.50	0.21	2.40	0.04
	Middle Age	MNSPEED	11	-1.75	1.05	-1.67	0.13
		MXSTER	11	-6.79	4.18	-1.62	0.14
		NMIRROR	10	0.75	0.23	3.22	0.01
	Older	MNSPEED	6	-0.37	2.65	-0.14	0.89
		MXSTER	6	-14.92	5.14	-2.90	0.03
		NMIRROR	6	0.78	0.24	3.28	0.02