Ball Bank Indicator Worksheet

Draft Version 2

The Ball Bank Indicator Worksheet can be used when determining the advisory speed (of 35 mph or greater) for horizontal curves.

- 1. Enter the relevant information about the roadway segment at the top of the form.
- 2. Sketch a plan view of the roadway segment being tested with each curve labeled numerically.
- 3. For each horizontal curve, record the current posted advisory speed limit. If an advisory speed limit is not posted, record "NP" for "not posted".
- 4. Driving each curve at the posted advisory speed limit, record if the ball bank indicator (BBI) has a reading less than or greater than 12.0.

For curves without an advisory speed limit, drive at a comfortable speed. Record that value next to the "NP". Record if the BBI has a reading less than or greater than 12.0. Repeat 3 times.

Repeat 3 times.

- 5. For curves which have a majority of indicator readings less than 12.0, repeat Step 4 driving 5 mph faster than the posted advisory speed limit. Write this speed and the BBI reading in the next test block. Repeat 3 times. If the majority of the new readings are greater than 12.0, the test is complete for the curve.
 - For curves which have a majority of indicator readings greater than 12.0, repeat Step 4 driving 5 mph slower than the posted advisory speed limit. Write this speed and the BBI reading in the next test block. Repeat 3 times. If the majority of the new readings are less than 12.0, the test is complete for that curve.
- 6. For any curves which are not complete, repeat Step 5 increasing or decreasing the speed by an additional 5 mph as ncessary.

Note: MUTCD 2009 indicates that the advisory speed corresponding to a 12 -degree ball bank indicator reading for speeds of 35 mph and higher. For speeds of 25 to 30 mph, 14 degrees should be used. For speeds of 20 mph or less, 16 degrees should be used





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ate: MM/DD/YY Reference #:							Co	mplete	d By:				
unty:					_ (Current	Speed	Limit:		mph			
udy Road:				from					to				
an-view sketch of road se	egmen	t				Numbe	r each	horizor	ntal cur	ve (HC.	1, HC2,	нсз,	
th major intersecting roa	_					lso note							
esence of Advisory Spee Ballbank Indicator Readi	ngs						limi has a ı	t or the	nt such For eac ; less th	posted sign is th curve	not pre e, note greater	esent (if the than	
Horizontal Curve	1	2	3	4	5	6	7	8	9	10	11	12	
Advisory Speed Limit (or Comf. Speed)													
First Drive @ AS	^		1	1		^	1	^	1		^	^	
	<u> </u>	→	→	→	\	→	→	*	→	1	→	∀	
Second Drive @ AS	<u> </u>	Ų.	Ų.	Ţ	Ų.	Ţ	<u> </u>	<u> </u>	Ţ	Ų.	Ţ	<u> </u>	
Third Drive @ AS	1	1	1	<u></u>	1	^		^	^	1	1	^	
Complete?		✓ /			✓ /	✓ /		∀			✓ /	✓ /	
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Horizontal Curve	1	2	3	4	5	6	7	8	9	10	11	12	
New Driving Speed													
First Drive at Speed		^	1	^	1	1	1	1	^	^	↑	↑	
Above	<u> </u>	<u> </u>	<u> </u>	\downarrow	<u> </u>	\downarrow	\downarrow	\downarrow	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
Second Drive @ AS	<u> </u>	<u>↓</u>	<u>↓</u>	<u>↑</u>	<u>↑</u>		↑	↑ ↓	↑	↑		<u>↓</u>	
Third Drive @ AS	<u> </u>	*	1	1	^	<u> </u>	^	^	^	^	↑	↑	
I I III G DIIVE @ A3	\downarrow	\downarrow	\downarrow	\downarrow	\downarrow	\[\psi \]							
Complete?	√	√	/	/	_	_/	/	_/	_	/	/	/	