

Using the Radio Multi-Week Cume Rule*

Instructions for estimating a 2, 3 or 4-week cume from single week data:

Step #1: Obtain the turnover for the station/daypart of interest by dividing the single-week cume audience by the average quarter-hour audience.

For example, if station WAAA has a Monday-Friday 3-7PM Adults 25-49 cume audience of 3000 and an average quarter-hour audience of 300, the turnover is $3000/300 = 10.0$.

If necessary, round the turnover to the nearest whole number (e.g., 13.4 becomes 13).

Step #2: Find the letter A, B, C or D corresponding to the daypart from the table on the next page.

Find the column with the correct turnover number.

Find the multi-week cume factor based on the number of weeks (2, 3 or 4) and the appropriate letter (A, B, C or D).

In the example in *Step #1*, the appropriate letter for Monday-Friday 3-7PM is B. Using a turnover of 10, the multi-week cume factor for three weeks is found to be equal to 1.54.

Step #3: Multiply the multi-week cume factor by the single-week cume to get the multi-week cume.

In the example above, the three-week cume is computed as single-week cume x multi-week cume factor or $3,000 \times 1.54 = 4,620$.

* Adapted from Arbitron's Radio Multi-Week Cume Rule, which is based on copyright data that Arbitron developed from multi-week diary testing in 1985. Multi-week estimates calculated with this formula are not actual Arbitron estimates, but are estimates based on a model.



Radio Multi-Week Cume Rule Slide

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Turnover =>	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35		
Two-Week Cume Factor																																				
A	1.31	1.38	1.43	1.47	1.51	1.55	1.60	1.64	1.69	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B	1.20	1.23	1.25	1.27	1.28	1.29	1.30	1.31	1.32	1.33	1.34	1.34	1.35	1.35	1.36	1.37	1.38	1.39	1.39	1.40	1.41	1.41	1.42	1.43	1.43	1.44	1.45	1.45	1.46	1.47	1.47	1.48	1.49	1.50		
C	1.18	1.21	1.22	1.23	1.24	1.25	1.25	1.26	1.26	1.27	1.27	1.28	1.28	1.28	1.29	1.29	1.29	1.30	1.30	1.30	1.30	1.31	1.31	1.31	1.32	1.32	1.32	1.32	1.33	1.33	1.33	1.33	1.34	1.34		
D	1.18	1.20	1.21	1.22	1.23	1.23	1.24	1.24	1.24	1.25	1.25	1.25	1.26	1.26	1.26	1.26	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.29	1.29	1.29	1.29	1.29	1.29
Three-Week Cume Factor																																				
A	1.49	1.60	1.68	1.76	1.84	1.91	1.99	2.08	2.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B	1.33	1.39	1.42	1.45	1.47	1.49	1.51	1.52	1.54	1.55	1.57	1.58	1.59	1.60	1.62	1.63	1.64	1.66	1.66	1.68	1.69	1.69	1.71	1.72	1.74	1.75	1.76	1.77	1.78	1.80	1.81	1.82	1.83	1.85		
C	1.31	1.35	1.38	1.39	1.41	1.42	1.43	1.44	1.44	1.45	1.46	1.47	1.47	1.48	1.49	1.49	1.49	1.50	1.50	1.50	1.51	1.52	1.52	1.53	1.54	1.54	1.54	1.55	1.55	1.56	1.56	1.57	1.57			
D	1.30	1.33	1.35	1.37	1.38	1.39	1.40	1.41	1.41	1.42	1.42	1.42	1.43	1.44	1.44	1.44	1.45	1.45	1.45	1.46	1.46	1.46	1.47	1.47	1.47	1.47	1.48	1.48	1.48	1.49	1.49	1.49	1.49	1.49	1.49	1.49
Four-Week Cume Factor																																				
A	1.64	1.79	1.90	2.01	2.11	2.21	2.32	2.44	2.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B	1.45	1.52	1.56	1.60	1.63	1.66	1.68	1.70	1.72	1.74	1.76	1.78	1.79	1.81	1.83	1.84	1.86	1.88	1.88	1.91	1.92	1.93	1.95	1.97	1.99	2.00	2.02	2.03	2.05	2.07	2.09	2.10	2.12	2.14		
C	1.42	1.47	1.50	1.53	1.55	1.56	1.58	1.59	1.60	1.61	1.62	1.63	1.63	1.65	1.66	1.66	1.66	1.67	1.67	1.67	1.69	1.70	1.70	1.71	1.72	1.72	1.72	1.73	1.74	1.74	1.75	1.75	1.76	1.76		
D	1.41	1.45	1.48	1.50	1.52	1.53	1.54	1.55	1.55	1.56	1.57	1.57	1.58	1.59	1.59	1.59	1.61	1.61	1.61	1.62	1.62	1.62	1.63	1.63	1.63	1.63	1.65	1.65	1.65	1.66	1.66	1.66	1.66	1.66	1.66	1.66

<u>Daypart</u>	<u>Letter</u>	<u>Daypart</u>	<u>Letter</u>
SAT 6A-10A	A	M-F 6A-10A	B
SUN 6A-10A	A	M-F 10A-3P	B
SAT 3P-7P	A	M-F 3P-7P	B
SUN 3P-7P	A	M-F 7P-MID	B
M-F SINGLE HOURS	A	SAT-SUN 6A-MID	C
SAT 10A-3P	A	M-F 6A-10A & 3P-7P	C
SUN 10A-3P	A	M-F 6A-7P	C
SAT 7P-MID	A	M-F 6A-MID	C
SUN 7P-MID	A		
		M-S 6A-MID	D