

APPENDIX A: THE 2009 MSA-READING STRATIFIED RANDOM SAMPLING

Since the deadline for the students' score reports made it difficult for Pearson to use almost 100% of the 2009 population as the calibration and equating data set, MSDE and NPC recommended that Pearson use equating samples instead of the 2009 population. Pearson chose Local Education Agency (LEA) as one of the most important variables for random stratification. It should be noted that this method has been applied since the 2006 assessment.

Based on each LEA percentage of the 2009 population, Pearson randomly selected nearly 3,000 students from first-wave documents (i.e., 30% of the statewide population) within each grade, and the item responses of these selected students were used for the 2009 calibration and equating. It should be acknowledged that each student's answer document from the first-wave were randomly distributed and completely scored in the Pearson performance scoring system (i.e., E-Pen scoring system). Please refer to Section 1.7 for detailed information about performance scoring procedures.

To verify that the equating sample was representative of the statewide examinee population in terms of LEA, gender, and ethnicity, the distributions of LEA, gender, and ethnicity of the 2009 samples were compared with those of the 2009 population. The results are shown in this appendix. The percentages of students from the LEAs were all within 3.5 percentage points of the target values across all grades. The percentages of students from the five major ethnic groups were all within 2.0 percentage points of the target values across all grades. The percentages of male and female students were within 2.0 percentage points of the target values across all grades. Consequently, we concluded that the 2009 equating samples were representative of the 2009 statewide examinee population in terms of LEA, gender, and ethnicity.

Table A.1 2009 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 3 LEA

LEA	Operational Form A				Operational Form B			
	2009 Pop.	2009	% of 2009	% of	2009 Pop.	2009	% of 2009	% of
	%	S. R. S.	S. R. S.	Differ.	%	S. R. S.	S. R. S.	Differ.
1	1.08	32	1.11	-0.03	1.08	32	1.11	-0.03
2	8.97	269	9.37	-0.40	8.97	269	9.36	-0.39
3	12.35	371	12.92	-0.57	12.35	371	12.91	-0.56
4	1.93	58	2.02	-0.09	1.93	58	2.02	-0.09
5	0.68	20	0.70	-0.02	0.68	20	0.70	-0.02
6	3.28	98	3.41	-0.13	3.28	98	3.41	-0.13
7	1.89	57	1.98	-0.09	1.89	57	1.98	-0.09
8	2.98	0	0.00	2.98	2.98	0	0.00	2.98
9	0.55	16	0.56	-0.01	0.55	16	0.56	-0.01
10	4.78	143	4.98	-0.20	4.78	143	4.98	-0.20
11	0.53	16	0.56	-0.03	0.53	16	0.56	-0.03
12	4.76	143	4.98	-0.22	4.76	143	4.98	-0.22
13	5.81	174	6.06	-0.25	5.81	174	6.06	-0.25
14	0.28	8	0.28	0.00	0.28	8	0.28	0.00
15	16.56	497	17.31	-0.75	16.56	497	17.3	-0.74
16	14.46	434	15.11	-0.65	14.46	434	15.11	-0.65
17	0.91	0	0.00	0.91	0.91	0	0.00	0.91
18	1.91	57	1.98	-0.07	1.91	57	1.98	-0.07
19	0.35	0	0.00	0.35	0.35	1	0.03	0.32
20	0.49	15	0.52	-0.03	0.49	15	0.52	-0.03
21	2.76	83	2.89	-0.13	2.76	83	2.89	-0.13
22	1.96	59	2.05	-0.09	1.96	59	2.05	-0.09
23	0.72	22	0.77	-0.05	0.72	22	0.77	-0.05
24	0.07	2	0.07	0.00	0.07	2	0.07	0.00
30	9.94	298	10.38	-0.44	9.94	298	10.37	-0.43
Total	100.00	2,872	100.00	0.00	100.00	2,873	100.00	0.00

Note. 1. Allegany; 2. Anne Arundel; 3. Baltimore; 4. Calvert; 5. Caroline; 6. Carroll; 7. Cecil; 8. Charles; 9. Dorchester; 10. Frederick; 11. Garrett; 12. Harford; 13. Howard; 14. Kent; 15. Montgomery; 16. Prince George's; 17. Queen Anne's; 18. St. Mary's; 19. Somerset; 20. Talbot; 21. Washington; 22. Wicomico; 23. Worcester; 24. LEA 24; 30. Baltimore City

Table A.2 2009 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 3 Ethnicity

Race	Operational Form A				Operational Form B			
	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.
1	0.42	13	0.45	-0.04	0.42	13	0.45	-0.04
2	6.27	184	6.41	-0.13	6.27	192	6.68	-0.41
3	37.47	1087	37.85	-0.38	37.47	1070	37.24	0.23
4	45.91	1326	46.17	-0.26	45.91	1319	45.91	0.00
5	9.83	260	9.05	0.77	9.83	276	9.61	0.22
Miss	0.10	2	0.07	0.03	0.10	3	0.10	-0.01
Total	100.00	2,872	100.00	0.00	100.00	2,873	100.00	0.00

Note. 1. American Indian; 2. Asian American; 3. African American; 4. White; 5. Hispanic; Miss: Missing

Table A.3 2009 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 3 Gender

Gender	Operational Form A				Operational Form B			
	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.
F	51.26	1426	49.65	1.61	51.26	1494	52.00	-0.74
M	48.68	1443	50.24	-1.56	48.68	1378	47.96	0.72
Miss	0.06	3	0.10	-0.04	0.06	1	0.03	0.03
Total	100.00	2,872	100.00	0.00	100.00	2,873	100.00	0.00

Note. F. Female; M. Male; Miss: Missing

Table A.4 2009 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 4 LEA

LEA	Operational Form A				Operational Form B			
	2009 Pop.	2009	% of 2009	% of	2009 Pop.	2009	% of 2009	% of
	%	S. R. S.	S. R. S.	Differ.	%	S. R. S.	S. R. S.	Differ.
1	1.08	32	1.11	-0.03	1.08	32	1.11	-0.03
2	8.89	267	9.25	-0.36	8.89	267	9.25	-0.36
3	12.66	380	13.17	-0.51	12.66	380	13.17	-0.51
4	2.05	61	2.11	-0.06	2.05	61	2.11	-0.06
5	0.60	18	0.62	-0.02	0.60	18	0.62	-0.02
6	3.19	96	3.33	-0.14	3.19	96	3.33	-0.14
7	1.96	59	2.04	-0.08	1.96	59	2.04	-0.08
8	2.89	0	0.00	2.89	2.89	0	0.00	2.89
9	0.50	15	0.52	-0.02	0.50	15	0.52	-0.02
10	4.74	142	4.92	-0.18	4.74	142	4.92	-0.18
11	0.53	16	0.55	-0.02	0.53	16	0.55	-0.02
12	4.68	140	4.85	-0.17	4.68	140	4.85	-0.17
13	5.82	175	6.06	-0.24	5.82	175	6.06	-0.24
14	0.25	7	0.24	0.01	0.25	7	0.24	0.01
15	16.44	493	17.08	-0.64	16.44	493	17.08	-0.64
16	14.47	434	15.04	-0.57	14.47	434	15.04	-0.57
17	0.92	0	0.00	0.92	0.92	0	0.00	0.92
18	1.98	60	2.08	-0.10	1.98	60	2.08	-0.10
19	0.33	10	0.35	-0.02	0.33	10	0.35	-0.02
20	0.48	14	0.49	-0.01	0.48	14	0.49	-0.01
21	2.69	81	2.81	-0.12	2.69	81	2.81	-0.12
22	1.94	58	2.01	-0.07	1.94	58	2.01	-0.07
23	0.78	24	0.83	-0.05	0.78	24	0.83	-0.05
24	0.14	4	0.14	0.00	0.14	4	0.14	0.00
30	9.99	300	10.40	-0.41	9.99	300	10.40	-0.41
Total	100.00	2,886	100.00	0.00	100.00	2,886	100.00	0.00

Note. 1. Allegany; 2. Anne Arundel; 3. Baltimore; 4. Calvert; 5. Caroline; 6. Carroll; 7. Cecil; 8. Charles; 9. Dorchester; 10. Frederick; 11. Garrett; 12. Harford; 13. Howard; 14. Kent; 15. Montgomery; 16. Prince George's; 17. Queen Anne's; 18. St. Mary's; 19. Somerset; 20. Talbot; 21. Washington; 22. Wicomico; 23. Worcester; 24. LEA 24; 30. Baltimore City

Table A.5 2009 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 4 Ethnicity

Race	Operational Form A				Operational Form B			
	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.
1	0.39	7	0.24	0.15	0.39	7	0.24	0.15
2	5.91	174	6.03	-0.12	5.91	182	6.31	-0.39
3	38.13	1078	37.35	0.77	38.13	1090	37.77	0.36
4	46.13	1353	46.88	-0.76	46.13	1341	46.47	-0.34
5	9.34	273	9.46	-0.12	9.34	263	9.11	0.23
Miss	0.10	1	0.03	0.07	0.10	3	0.10	0.00
Total	100.00	2,886	100.00	0.00	100.00	2,886	100.00	0.00

Note. 1. American Indian; 2. Asian American; 3. African American; 4. White; 5. Hispanic; Miss: Missing

Table A.6 2009 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 4 Gender

Gender	Operational Form A				Operational Form B			
	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.
F	51.32	1462	50.66	0.66	51.32	1496	51.84	-0.52
M	48.60	1423	49.31	-0.70	48.60	1386	48.02	0.58
Miss	0.08	1	0.03	0.05	0.08	4	0.14	-0.06
Total	100.00	2,886	100.00	0.00	100.00	2,886	100.00	0.00

Note. F. Female; M. Male; Miss: Missing

Table A.7 2009 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 5 LEA

LEA	Operational Form A				Operational Form B			
	2009 Pop.	2009	% of 2009	% of	2009 Pop.	2009	% of 2009	% of
	%	S. R. S.	S. R. S.	Differ.	%	S. R. S.	S. R. S.	Differ.
1	1.12	34	1.19	-0.07	1.12	34	1.19	-0.07
2	8.80	264	9.28	-0.48	8.80	264	9.28	-0.48
3	12.30	369	12.97	-0.67	12.30	369	12.97	-0.67
4	2.07	62	2.18	-0.11	2.07	62	2.18	-0.11
5	0.60	0	0.00	0.60	0.60	0	0.00	0.60
6	3.38	101	3.55	-0.17	3.38	101	3.55	-0.17
7	2.01	60	2.11	-0.10	2.01	60	2.11	-0.10
8	3.14	0	0.00	3.14	3.14	0	0.00	3.14
9	0.46	14	0.49	-0.03	0.46	14	0.49	-0.03
10	4.83	145	5.09	-0.26	4.83	145	5.09	-0.26
11	0.52	15	0.53	-0.01	0.52	15	0.53	-0.01
12	4.81	144	5.06	-0.25	4.81	144	5.06	-0.25
13	6.21	186	6.54	-0.33	6.21	186	6.54	-0.33
14	0.24	0	0.00	0.24	0.24	0	0.00	0.24
15	16.39	492	17.29	-0.90	16.39	492	17.29	-0.90
16	14.53	436	15.32	-0.79	14.53	436	15.32	-0.79
17	0.89	0	0.00	0.89	0.89	0	0.00	0.89
18	1.92	58	2.04	-0.12	1.92	58	2.04	-0.12
19	0.27	0	0.00	0.27	0.27	0	0.00	0.27
20	0.48	14	0.49	-0.01	0.48	14	0.49	-0.01
21	2.68	81	2.85	-0.17	2.68	81	2.85	-0.17
22	1.87	56	1.97	-0.10	1.87	56	1.97	-0.10
23	0.76	23	0.81	-0.05	0.76	23	0.81	-0.05
24	0.16	5	0.18	-0.02	0.16	5	0.18	-0.02
30	9.58	287	10.08	-0.50	9.58	287	10.08	-0.50
Total	100.00	2,846	100.00	0.00	100.00	2,846	100.00	0.00

Note. 1. Allegany; 2. Anne Arundel; 3. Baltimore; 4. Calvert; 5. Caroline; 6. Carroll; 7. Cecil; 8. Charles; 9. Dorchester; 10. Frederick; 11. Garrett; 12. Harford; 13. Howard; 14. Kent; 15. Montgomery; 16. Prince George's; 17. Queen Anne's; 18. St. Mary's; 19. Somerset; 20. Talbot; 21. Washington; 22. Wicomico; 23. Worcester; 24. LEA 24; 30. Baltimore City

Table A.8 2009 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 5 Ethnicity

Race	Operational Form A				Operational Form B			
	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.
1	0.37	11	0.39	-0.02	0.37	4	0.14	0.23
2	5.96	181	6.36	-0.40	5.96	156	5.48	0.48
3	38.04	1125	39.53	-1.49	38.04	1103	38.76	-0.71
4	46.52	1291	45.36	1.15	46.52	1329	46.70	-0.18
5	9.00	238	8.36	0.64	9.00	250	8.78	0.22
Miss	0.11	0	0.00	0.11	0.11	4	0.14	-0.03
Total	100.00	2,846	100.00	0.00	100.00	2,846	100.00	0.00

Note. 1. American Indian; 2. Asian American; 3. African American; 4. White; 5. Hispanic; Miss: Missing

Table A.9 2009 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 5 Gender

Gender	Operational Form A				Operational Form B			
	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.
F	51.01	1429	50.21	0.79	51.01	1426	50.11	0.90
M	48.93	1416	49.75	-0.83	48.93	1418	49.82	-0.90
Miss	0.07	1	0.04	0.03	0.07	2	0.07	0.00
Total	100.00	2,846	100.00	0.00	100.00	2,846	100.00	0.00

Note. F. Female; M. Male; Miss: Missing

Table A.10 2009 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 6 LEA

LEA	Operational Form A				Operational Form B			
	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.
1	1.12	34	1.26	-0.14	1.12	34	1.26	-0.14
2	8.90	267	9.90	-1.00	8.90	267	9.89	-0.99
3	12.01	306	11.35	0.66	12.01	307	11.37	0.64
4	2.18	65	2.41	-0.23	2.18	65	2.41	-0.23
5	0.69	21	0.78	-0.09	0.69	21	0.78	-0.09
6	3.36	101	3.74	-0.38	3.36	101	3.74	-0.38
7	1.98	59	2.19	-0.21	1.98	59	2.19	-0.21
8	3.37	0	0.00	3.37	3.37	0	0.00	3.37
9	0.61	18	0.67	-0.06	0.61	18	0.67	-0.06
10	4.91	147	5.45	-0.54	4.91	147	5.45	-0.54
11	0.49	2	0.07	0.42	0.49	2	0.07	0.42
12	4.82	145	5.38	-0.56	4.82	145	5.37	-0.55
13	6.22	94	3.49	2.73	6.22	92	3.41	2.81
14	0.28	0	0.00	0.28	0.28	0	0.00	0.28
15	16.46	494	18.32	-1.86	16.46	494	18.30	-1.84
16	14.59	438	16.24	-1.65	14.59	438	16.23	-1.64
17	0.95	0	0.00	0.95	0.95	0	0.00	0.95
18	2.02	61	2.26	-0.24	2.02	61	2.26	-0.24
19	0.32	9	0.33	-0.01	0.32	9	0.33	-0.01
20	0.52	15	0.56	-0.04	0.52	15	0.56	-0.04
21	2.78	83	3.08	-0.30	2.78	83	3.08	-0.30
22	1.67	50	1.85	-0.18	1.67	50	1.85	-0.18
23	0.78	24	0.89	-0.11	0.78	24	0.89	-0.11
24	0.15	5	0.19	-0.04	0.15	5	0.19	-0.04
30	8.71	259	9.60	-0.89	8.71	262	9.71	-1.00
32	0.13	0	0.00	0.13	0.13	0	0.00	0.13
Total	100.00	2,697	100.00	0.00	100.00	2,699	100.00	0.00

Note. 1. Allegany; 2. Anne Arundel; 3. Baltimore; 4. Calvert; 5. Caroline; 6. Carroll; 7. Cecil; 8. Charles; 9. Dorchester; 10. Frederick; 11. Garrett; 12. Harford; 13. Howard; 14. Kent; 15. Montgomery; 16. Prince George's; 17. Queen Anne's; 18. St. Mary's; 19. Somerset; 20. Talbot; 21. Washington; 22. Wicomico; 23. Worcester; 24. LEA 24; 30. Baltimore City; 32. The Seed school

Table A.11 2009 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 6 Ethnicity

Race	Operational Form A				Operational Form B			
	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.
1	0.38	8	0.30	0.09	0.38	2	0.07	0.31
2	5.99	146	5.41	0.58	5.99	167	6.19	-0.20
3	37.51	1020	37.82	-0.31	37.51	1010	37.42	0.09
4	46.82	1268	47.02	-0.20	46.82	1257	46.57	0.24
5	9.12	250	9.27	-0.15	9.12	261	9.67	-0.55
Miss	0.18	5	0.19	-0.01	0.18	2	0.07	0.10
Total	100.00	2,697	100.00	0.00	100.00	2,699	100.00	0.00

Note. 1. American Indian; 2. Asian American; 3. African American; 4. White; 5. Hispanic; Miss: Missing

Table A.12 2009 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 6 Gender

Gender	Operational Form A				Operational Form B			
	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.
F	51.07	1342	49.76	1.31	51.07	1373	50.87	0.20
M	48.82	1352	50.13	-1.31	48.82	1324	49.06	-0.23
Miss	0.11	3	0.11	0.00	0.11	2	0.07	0.03
Total	100.00	2,697	100.00	0.00	100.00	2,699	100.00	0.00

Note. F. Female; M. Male; Miss: Missing

Table A.13 2009 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 7 LEA

LEA	Operational Form A				Operational Form B			
	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.
1	1.02	31	1.19	-0.17	1.02	31	1.19	-0.17
2	8.87	266	10.24	-1.37	8.87	266	10.21	-1.34
3	12.13	286	11.01	1.12	12.13	288	11.05	1.08
4	2.16	65	2.50	-0.34	2.16	65	2.49	-0.33
5	0.58	0	0.00	0.58	0.58	0	0.00	0.58
6	3.52	106	4.08	-0.56	3.52	106	4.07	-0.55
7	1.96	59	2.27	-0.31	1.96	59	2.26	-0.30
8	3.31	0	0.00	3.31	3.31	0	0.00	3.31
9	0.53	16	0.62	-0.09	0.53	16	0.61	-0.08
10	4.92	148	5.70	-0.78	4.92	148	5.68	-0.76
11	0.54	5	0.19	0.35	0.54	5	0.19	0.35
12	4.83	145	5.58	-0.75	4.83	145	5.56	-0.73
13	6.33	105	4.04	2.29	6.33	107	4.11	2.22
14	0.22	0	0.00	0.22	0.22	0	0.00	0.22
15	16.75	502	19.33	-2.58	16.75	502	19.26	-2.51
16	14.58	438	16.87	-2.29	14.58	438	16.81	-2.23
17	1.04	0	0.00	1.04	1.04	0	0.00	1.04
18	1.99	60	2.31	-0.32	1.99	60	2.30	-0.31
19	0.34	1	0.04	0.30	0.34	0	0.00	0.34
20	0.53	16	0.62	-0.09	0.53	16	0.61	-0.08
21	2.70	81	3.12	-0.42	2.70	81	3.11	-0.41
22	1.54	46	1.77	-0.23	1.54	46	1.77	-0.23
23	0.76	23	0.89	-0.13	0.76	23	0.88	-0.12
24	0.22	7	0.27	-0.05	0.22	7	0.27	-0.05
30	8.63	191	7.35	1.28	8.63	197	7.56	1.07
Total	100.00	2,597	100.00	0.00	100.00	2,606	100.00	0.00

Note. 1. Allegany; 2. Anne Arundel; 3. Baltimore; 4. Calvert; 5. Caroline; 6. Carroll; 7. Cecil; 8. Charles; 9. Dorchester; 10. Frederick; 11. Garrett; 12. Harford; 13. Howard; 14. Kent; 15. Montgomery; 16. Prince George's; 17. Queen Anne's; 18. St. Mary's; 19. Somerset; 20. Talbot; 21. Washington; 22. Wicomico; 23. Worcester; 24. LEA 24; 30. Baltimore City

Table A.14 2009 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 7 Ethnicity

Race	Operational Form A				Operational Form B			
	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.
1	0.32	15	0.58	-0.26	0.32	8	0.31	0.02
2	5.86	157	6.05	-0.18	5.86	155	5.95	-0.08
3	37.10	970	37.35	-0.25	37.10	1013	38.87	-1.78
4	47.66	1210	46.59	1.07	47.66	1191	45.70	1.96
5	8.85	243	9.36	-0.51	8.85	238	9.13	-0.28
Miss	0.20	2	0.08	0.13	0.20	1	0.04	0.17
Total	100.00	2,597	100.00	0.00	100.00	2,606	100.00	0.00

Note. 1. American Indian; 2. Asian American; 3. African American; 4. White; 5. Hispanic; Miss: Missing

Table A.15 2009 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 7 Gender

Gender	Operational Form A				Operational Form B			
	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.
F	50.44	1344	51.75	-1.31	50.44	1286	49.35	1.09
M	49.41	1251	48.17	1.23	49.41	1318	50.58	-1.17
Miss	0.16	2	0.08	0.08	0.16	2	0.08	0.08
Total	100.00	2,597	100.00	0.00	100.00	2,606	100.00	0.00

Note. F. Female; M. Male; Miss: Missing

Table A.16 2009 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 8 LEA

LEA	Operational Form A				Operational Form B			
	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.
1	1.07	32	1.17	-0.10	1.07	32	1.18	-0.11
2	9.02	271	9.94	-0.92	9.02	271	9.96	-0.94
3	12.29	369	13.54	-1.25	12.29	369	13.56	-1.27
4	2.26	68	2.49	-0.23	2.26	68	2.50	-0.24
5	0.63	19	0.70	-0.07	0.63	19	0.70	-0.07
6	3.48	104	3.82	-0.34	3.48	104	3.82	-0.34
7	1.97	59	2.16	-0.19	1.97	59	2.17	-0.20
8	3.43	0	0.00	3.43	3.43	0	0.00	3.43
9	0.50	15	0.55	-0.05	0.50	15	0.55	-0.05
10	5.01	150	5.50	-0.49	5.01	150	5.51	-0.50
11	0.57	4	0.15	0.42	0.57	3	0.11	0.46
12	4.89	147	5.39	-0.50	4.89	147	5.40	-0.51
13	6.60	109	4.00	2.60	6.60	105	3.86	2.74
14	0.25	0	0.00	0.25	0.25	0	0.00	0.25
15	16.47	494	18.12	-1.65	16.47	494	18.16	-1.69
16	14.40	432	15.85	-1.45	14.40	432	15.88	-1.48
17	0.93	0	0.00	0.93	0.93	0	0.00	0.93
18	1.91	57	2.09	-0.18	1.91	57	2.09	-0.18
19	0.37	11	0.40	-0.03	0.37	11	0.40	-0.03
20	0.51	15	0.55	-0.04	0.51	15	0.55	-0.04
21	2.51	75	2.75	-0.24	2.51	75	2.76	-0.25
22	1.48	45	1.65	-0.17	1.48	45	1.65	-0.17
23	0.75	23	0.84	-0.09	0.75	23	0.85	-0.10
24	0.29	9	0.33	-0.04	0.29	9	0.33	-0.04
30	8.41	218	8.00	0.41	8.41	218	8.01	0.40
Total	100.00	2,726	100.00	0.00	100.00	2,721	100.00	0.00

Note. 1. Allegany; 2. Anne Arundel; 3. Baltimore; 4. Calvert; 5. Caroline; 6. Carroll; 7. Cecil; 8. Charles; 9. Dorchester; 10. Frederick; 11. Garrett; 12. Harford; 13. Howard; 14. Kent; 15. Montgomery; 16. Prince George's; 17. Queen Anne's; 18. St. Mary's; 19. Somerset; 20. Talbot; 21. Washington; 22. Wicomico; 23. Worcester; 24. LEA 24; 30. Baltimore City

Table A.17 2009 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 8 Ethnicity

Race	Operational Form A				Operational Form B			
	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.
1	0.39	6	0.22	0.17	0.39	11	0.40	-0.01
2	5.65	159	5.83	-0.18	5.65	171	6.28	-0.63
3	37.48	972	35.66	1.83	37.48	1004	36.90	0.58
4	47.96	1322	48.50	-0.54	47.96	1303	47.89	0.07
5	8.36	261	9.57	-1.22	8.36	228	8.38	-0.02
Miss	0.16	6	0.22	-0.06	0.16	4	0.15	0.01
Total	100.00	2,726	100.00	0.00	100.00	2,721	100.00	0.00

Note. 1. American Indian; 2. Asian American; 3. African American; 4. White; 5. Hispanic; Miss: Missing

Table A.18 2009 MSA-Reading Population and Stratified Random Sampling (S.R.S.): Grade 8 Gender

Gender	Operational Form A				Operational Form B			
	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.	2009 Pop. %	2009 S. R. S.	% of 2009 S. R. S.	% of Differ.
F	50.79	1362	49.96	0.82	50.79	1372	50.42	0.36
M	49.10	1360	49.89	-0.79	49.10	1348	49.54	-0.45
Miss	0.12	4	0.15	-0.03	0.12	1	0.04	0.08
Total	100.00	2,726	100.00	0.00	100.00	2,721	100.00	0.00

Note. F. Female; M. Male; Miss: Missing