APPENDIX H

DIFFERENTIAL ITEM FUNCTIONING RESULTS

Table H-1. 2017 Legacy MCAS: Number of Items Classified as "Low" or "High" DIF, Overall and by Group Favored – ELA Grade 10

| Group | | Item Type | Number of Items | Number "Low" | | | Number "High" | | |
Reference	Focal			Total	Favoring Reference	Favoring Focal	Total	Favoring Reference	Favoring Focal
Male	Female	MC	36	8	8	0	0	0	0
		OR	6	1	0	1	0	0	0
No Disability	Disability	MC	36	1	1	0	0	0	0
		OR	6	0	0	0	0	0	0
Not LEPFLEP	LEPFLEP	MC	36	10	9	1	3	3	0
		OR	6	0	0	0	0	0	0
Not Economically Disadvantaged	Economically Disadvantaged	MC	36	0	0	0	0	0	0
		OR	6	0	0	0	0	0	0
White	African American	MC	36	6	5	1	0	0	0
		OR	6	0	0	0	0	0	0
	Hispanic	MC	36	6	5	1	0	0	0
		OR	6	0	0	0	0	0	0

Table H-2. 2017 Legacy MCAS: Number of Items Classified as "Low" or "High" DIF, Overall and by Group Favored – Mathematics Grade 10

| Group | | Item Type | Number of Items | Number "Low" | | | Number "High" | | |
Reference	Focal			Total	Favoring Reference	Favoring Focal	Total	Favoring Reference	Favoring Focal
Male	Female	MC	32	1	1	0	0	0	0
		OR	10	0	0	0	0	0	0
No Disability	Disability	MC	32	0	0	0	0	0	0
		OR	10	0	0	0	0	0	0
Not LEPFLEP	LEPFLEP	MC	32	5	2	3	2	2	0
		OR	10	1	1	0	0	0	0
Not Economically Disadvantaged	Economically Disadvantaged	MC	32	0	0	0	0	0	0
		OR	10	0	0	0	0	0	0
White	African American	MC	32	4	2	2	0	0	0
		OR	10	0	0	0	0	0	0
	Hispanic	MC	32	2	1	1	0	0	0
		OR	10	0	0	0	0	0	0

Table H-3. 2017 Legacy MCAS: Number of Items Classified as "Low" or "High" DIF, Overall and by Group Favored – Science

Grade	Group Reference	Group Focal	Item Type	Number of Items	Number "Low" Total	Favoring Reference	Favoring Focal	Number "High" Total	Favoring Reference	Favoring Focal
5	Male	Female	MC	38	6	5	1	1	0	1
			OR	4	1	0	1	0	0	0
	Not LEPFLEP	LEPFLEP	MC	38	1	1	0	0	0	0
			OR	4	0	0	0	0	0	0
	Not Economically Disadvantaged	Economically Disadvantaged	MC	38	1	1	0	0	0	0
			OR	4	0	0	0	0	0	0
	White	African American	MC	38	6	5	1	1	1	0
			OR	4	0	0	0	0	0	0
	White	Hispanic	MC	38	3	2	1	0	0	0
			OR	4	1	1	0	0	0	0
8	Male	Female	MC	38	4	3	1	1	1	0
			OR	4	0	0	0	0	0	0
	Not LEPFLEP	LEPFLEP	MC	38	5	3	2	0	0	0
			OR	4	1	1	0	0	0	0
	Not Economically Disadvantaged	Economically Disadvantaged	MC	38	0	0	0	0	0	0
			OR	4	0	0	0	0	0	0
	White	African American	MC	38	2	2	0	0	0	0
			OR	4	1	1	0	0	0	0
	White	Hispanic	MC	38	2	2	0	0	0	0
			OR	4	1	1	0	0	0	0

Table H-4. 2017 Legacy MCAS: Number of Items Classified as "Low" or "High" DIF, Overall and by Group Favored – High School Biology

| Group | | Item Type | Number of Items | Number "Low" | | | Number "High" | | |
| Reference | Focal | | | Total | Favoring | | Total | Favoring | |
					Reference	Focal		Reference	Focal
Male	Female	MC	40	2	2	0	0	0	0
		OR	5	1	0	1	0	0	0
No Disability	Disability	MC	40	1	1	0	0	0	0
		OR	5	1	1	0	0	0	0
Not LEPFLEP	LEPFLEP	MC	40	7	4	3	1	1	0
		OR	5	0	0	0	0	0	0
Not Economically Disadvantaged	Economically Disadvantaged	MC	40	0	0	0	0	0	0
		OR	5	0	0	0	0	0	0
White	African American	MC	40	2	2	0	0	0	0
		OR	5	0	0	0	0	0	0
	Hispanic	MC	40	2	1	1	0	0	0
		OR	5	0	0	0	0	0	0

Table H-5. 2017 Legacy MCAS: Number of Items Classified as "Low" or "High" DIF, Overall and by Group Favored – High School Chemistry

| Group | | Item Type | Number of Items | Number "Low" | | | Number "High" | | |
| Reference | Focal | | | Total | Favoring | | Total | Favoring | |
					Reference	Focal		Reference	Focal
Male	Female	MC	40	8	5	3	4	3	1
		OR	5	1	0	1	0	0	0
No Disability	Disability	MC	40	0	0	0	0	0	0
		OR	5	0	0	0	0	0	0
Not LEPFLEP	LEPFLEP	MC	40	0	0	0	0	0	0
		OR	5	0	0	0	0	0	0
Not Economically Disadvantaged	Economically Disadvantaged	MC	40	2	2	0	0	0	0
		OR	5	0	0	0	0	0	0
White	African American	MC	40	13	9	4	3	3	0
		OR	5	0	0	0	0	0	0
	Hispanic	MC	40	0	0	0	0	0	0
		OR	5	0	0	0	0	0	0

Table H-6. 2017 Legacy MCAS: Number of Items Classified as "Low" or "High" DIF, Overall and by Group Favored – High School Introductory Physics

Group Reference	Group Focal	Item Type	Number of Items	Number "Low" Total	Favoring Reference	Favoring Focal	Number "High" Total	Favoring Reference	Favoring Focal
Male	Female	MC	40	9	6	3	0	0	0
Male	Female	OR	5	0	0	0	0	0	0
No Disability	Disability	MC	40	1	1	0	0	0	0
No Disability	Disability	OR	5	0	0	0	0	0	0
Not LEPFLEP	LEPFLEP	MC	40	4	3	1	0	0	0
Not LEPFLEP	LEPFLEP	OR	5	0	0	0	0	0	0
Not Economically Disadvantaged	Economically Disadvantaged	MC	40	0	0	0	0	0	0
Not Economically Disadvantaged	Economically Disadvantaged	OR	5	0	0	0	0	0	0
White	African American	MC	40	3	2	1	0	0	0
White	African American	OR	5	1	1	0	0	0	0
White	Hispanic	MC	40	0	0	0	0	0	0
White	Hispanic	OR	5	0	0	0	0	0	0

Table H-7. 2017 Legacy MCAS: Number of Items Classified as "Low" or "High" DIF, Overall and by Group Favored – High School Technology/Engineering

Group Reference	Group Focal	Item Type	Number of Items	Number "Low" Total	Favoring Reference	Favoring Focal	Number "High" Total	Favoring Reference	Favoring Focal
Male	Female	MC	40	10	8	2	1	1	0
Male	Female	OR	5	1	0	1	0	0	0
No Disability	Disability	MC	40	2	2	0	0	0	0
No Disability	Disability	OR	5	0	0	0	0	0	0
Not LEPFLEP	LEPFLEP	MC	40	11	9	2	9	9	0
Not LEPFLEP	LEPFLEP	OR	5	1	0	1	0	0	0
Not Economically Disadvantaged	Economically Disadvantaged	MC	40	0	0	0	0	0	0
Not Economically Disadvantaged	Economically Disadvantaged	OR	5	0	0	0	0	0	0
White	African American	MC	40	12	7	5	1	1	0
White	African American	OR	5	0	0	0	0	0	0
White	Hispanic	MC	40	8	6	2	1	1	0
White	Hispanic	OR	5	0	0	0	0	0	0