## Appendix I

## Differential Item Functioning Results

Table I-1. 2017 Next-Generation MCAS and MCAS-Alt Technical Report: Number of Items Classified as "Low" or "High" DIF, Overall and by Group Favored - ELA


| Grade | Group |  | $\begin{aligned} & \text { Item } \\ & \text { Type } \end{aligned}$ | Number of Items | Number "Low" |  |  | Number "High" |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reference | Focal |  |  | Total | Favoring |  | Total | Favoring |  |
|  |  |  |  |  |  | Reference | Focal |  | Reference | Focal |
| 4 | White | Hispanic | MC | 18 | 4 | 4 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Special Education | Special Education | MC | 18 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 4 | 3 | 3 | 0 | 0 | 0 | 0 |
| 5 | Male | Female | MC | 18 | 4 | 4 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 6 | 2 | 0 | 2 | 0 | 0 | 0 |
|  | Not LEPFLEP | LEPFLEP | MC | 18 | 3 | 3 | 0 | 1 | 1 | 0 |
|  |  |  | OR | 4 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Economically Disadvantaged | Economically Disadvantaged | MC | 18 | 4 | 4 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | White | African American | MC | 18 | 5 | 5 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 4 | 2 | 2 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | Hispanic | MC | 18 | 5 | 5 | 0 | 1 | 1 | 0 |
|  |  |  | OR | 4 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Special Education | Special Education | MC | 18 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 6 | 2 | 2 | 0 | 0 | 0 | 0 |
| 6 | Male | Female | MC | 18 | 3 | 3 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 6 | 2 | 0 | 2 | 0 | 0 | 0 |
|  | Not LEPFLEP | LEPFLEP | MC | 18 | 7 | 7 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 4 | 2 | 2 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Economically Disadvantaged | Economically Disadvantaged | MC | 18 | 2 | 2 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 6 | 0 | 0 | 0 | 0 | 0 | 0 |


| Grade | Group |  | Item <br> Type | Number of Items | Number "Low" |  |  | Number "High" |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reference | Focal |  |  | ot | Favoring |  | Total | Favoring |  |
|  |  |  |  |  | ota | Reference | Focal |  | Reference | Focal |
| 6 | White | African American | MC | 18 | 6 | 6 | 0 | 1 | 1 | 0 |
|  |  |  | OR | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | Hispanic | MC | 18 | 7 | 7 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Special Education | Special Education | MC | 18 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | Male | Female | MC | 18 | 3 | 3 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 6 | 2 | 0 | 2 | 0 | 0 | 0 |
|  | Not LEPFLEP | LEPFLEP | MC | 18 | 6 | 6 | 0 | 2 | 2 | 0 |
|  |  |  | OR | 4 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Economically Disadvantaged | Economically Disadvantaged | MC | 18 | 4 | 4 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | White | African American | MC | 18 | 6 | 6 | 0 | 1 | 1 | 0 |
|  |  |  | OR | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | Hispanic | MC | 18 | 8 | 8 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Special Education | Special Education | MC | 18 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 6 | 2 | 2 | 0 | 0 | 0 | 0 |
| 8 | Male | Female | MC | 18 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 4 | 2 | 2 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 6 | 2 | 0 | 2 | 0 | 0 | 0 |
|  | Not LEPFLEP | LEPFLEP | MC | 18 | 5 | 5 | 0 | 1 | 1 | 0 |
|  |  |  | OR | 4 | 2 | 2 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 6 | 0 | 0 | 0 | 0 | 0 | 0 |


| Grade | Group |  | Item <br> Type | Number of Items | Number "Low" |  |  | Number "High" |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reference | Focal |  |  | Total | Favoring |  | Total | Favoring |  |
|  |  |  |  |  |  | Reference | Focal |  | Reference | Focal |
| 8 |  |  | MC | 18 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Economically Disadvantaged | Economically Disadvantaged | OR | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | White | African American | MC | 18 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 4 | 2 | 2 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | Hispanic | MC | 18 | 2 | 2 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 4 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Special Education | Special Education | MC | 18 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 6 | 0 | 0 | 0 | 0 | 0 | 0 |

Table I-2. 2017 Next-Generation MCAS and MCAS-Alt Technical Report: Number of Items Classified as "Low" or "High" DIF, Overall and by Group Favored - Mathematics

| Grade | Group |  | Item <br> Type | Number of Items | Number "Low" |  |  | Number "High" |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reference | Focal |  |  | Total Favoring |  |  | Total | Favoring |  |
|  |  |  |  |  | Tota | Reference | Focal |  | Reference | Focal |
| 3 | Male | Female | MC | 24 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 21 | 1 | 1 | 0 | 0 | 0 | 0 |
|  | Not LEPFLEP | LEPFLEP | MC | 24 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 21 | 4 | 4 | 0 | 0 | 0 | 0 |
|  | Not Economically Disadvantaged | Economically Disadvantaged | MC | 24 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | White | African American | MC | 24 | 4 | 2 | 2 | 0 | 0 | 0 |
|  |  |  | OR | 21 | 8 | 7 | 1 | 0 | 0 | 0 |
|  |  | Hispanic | MC | 24 | 2 | 2 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 21 | 5 | 5 | 0 | 0 | 0 | 0 |
|  | Not Special Education | Special Education | MC | 24 | 2 | 2 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | Male | Female | MC | 21 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 22 | 1 | 0 | 1 | 0 | 0 | 0 |
|  | Not LEPFLEP | LEPFLEP | MC | 21 | 2 | 1 | 1 | 0 | 0 | 0 |
|  |  |  | OR | 22 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Economically Disadvantaged | Economically Disadvantaged | MC | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 22 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | White | African American | MC | 21 | 4 | 3 | 1 | 2 | 1 | 1 |
|  |  |  | OR | 22 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  | Hispanic | MC | 21 | 4 | 2 | 2 | 0 | 0 | 0 |
|  |  |  | OR | 22 | 1 | 0 | 1 | 0 | 0 | 0 |
|  | Not Special Education | Special Education | MC | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 22 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | Male | Female | MC | 23 | 3 | 3 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 22 | 4 | 3 | 1 | 0 | 0 | 0 |
|  | Not LEPFLEP | LEPFLEP | MC | 23 | 2 | 1 | 1 | 0 | 0 | 0 |
|  |  |  | OR | 22 | 1 | 1 | 0 | 0 | 0 | 0 |


| Grade | Group |  | Item Type | Number of Items | Number "Low" |  |  | Number "High" |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reference | Focal |  |  | Total | Favoring |  | Total | Favoring |  |
|  |  |  |  |  | Total | Reference | Focal |  | Reference | Focal |
| 5 | Not Economically Disadvantaged | Economically Disadvantaged | MC | 23 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Economically Disadvantaged | Economically Disadvantaged | OR | 22 | 1 | 1 | 0 | 0 | 0 | 0 |
|  | White | African American | MC | 23 | 5 | 3 | 2 | 0 | 0 | 0 |
|  |  |  | OR | 22 | 4 | 3 | 1 | 0 | 0 | 0 |
|  |  | Hispanic | MC | 23 | 5 | 4 | 1 | 0 | 0 | 0 |
|  |  |  | OR | 22 | 3 | 2 | 1 | 0 | 0 | 0 |
|  | Not Special Education | Special Education | MC | 23 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 22 | 1 | 1 | 0 | 0 | 0 | 0 |
| 6 | Male | Female | MC | 17 | 2 | 1 | 1 | 0 | 0 | 0 |
|  |  |  | OR | 22 | 3 | 1 | 2 | 0 | 0 | 0 |
|  | Not LEPFLEP | LEPFLEP | MC | 17 | 2 | 1 | 1 | 0 | 0 | 0 |
|  |  |  | OR | 22 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Economically Disadvantaged | Economically Disadvantaged | MC | 17 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 22 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | White | African American | MC | 17 | 2 | 2 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 22 | 2 | 1 | 1 | 0 | 0 | 0 |
|  |  | Hispanic | MC | 17 | 1 | 0 | 1 | 0 | 0 | 0 |
|  |  |  | OR | 22 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Special Education | Special Education | MC | 17 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 22 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | Male | Female | MC | 18 | 3 | 2 | 1 | 0 | 0 | 0 |
|  |  |  | OR | 20 | 1 | 0 | 1 | 0 | 0 | 0 |
|  | Not LEPFLEP | LEPFLEP | MC | 18 | 5 | 3 | 2 | 1 | 1 | 0 |
|  |  |  | OR | 20 | 2 | 1 | 1 | 0 | 0 | 0 |
|  | Not Economically Disadvantaged | Economically Disadvantaged | MC | 18 | 2 | 2 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 20 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | White | African American | MC | 18 | 3 | 2 | 1 | 1 | 0 | 1 |
|  |  |  | OR | 20 | 2 | 2 | 0 | 0 | 0 | 0 |
|  |  | Hispanic | MC | 18 | 5 | 3 | 2 | 0 | 0 | 0 |
|  |  |  | OR | 20 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Special Education | Special Education | MC | 18 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 20 | 0 | 0 | 0 | 0 | 0 | 0 |


| Grade | Group |  | Item <br> Type | Number of Items | Number "Low" |  |  | Number "High" |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reference | Focal |  |  | Total | Favoring |  | Total | Favoring |  |
|  |  |  |  |  |  | Reference | Focal |  | Reference | Focal |
| 8 | Male | Female | MC | 18 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 18 | 1 | 0 | 1 | 0 | 0 | 0 |
|  | Not LEPFLEP | LEPFLEP | MC | 18 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 18 | 1 | 1 | 0 | 0 | 0 | 0 |
|  | Not Economically Disadvantaged | Economically Disadvantaged | MC | 18 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 18 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | White | African American | MC | 18 | 2 | 2 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 18 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | Hispanic | MC | 18 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 18 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Special Education | Special Education | MC | 18 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 18 | 0 | 0 | 0 | 0 | 0 | 0 |

