

| Program | Line Item                                                                    | FY 2017 |        | FY 2018 |        |
|---------|------------------------------------------------------------------------------|---------|--------|---------|--------|
|         |                                                                              | Enacted |        | Enacted |        |
|         |                                                                              | 176,500 |        | 188,926 |        |
| a.      | Fire Research and Safety                                                     | \$      | 7,425  |         | 7,200  |
| b.      | Propulsion and Fuel Systems                                                  | \$      | 2,074  |         | 2,100  |
| c.      | Advanced Materials/Structural Safety                                         | \$      | 6,500  |         | 10,500 |
| d.      | Aircraft Icing/Digital System Safety                                         | \$      | 5,102  |         | 9,253  |
| e.      | Continued Airworthiness                                                      | \$      | 9,269  |         | 11,269 |
|         | Aircraft Catastrophic Failure Prevention Research                            | \$      | 1,528  |         | 1,570  |
| f.      | Flightdeck/Maintenance/System Integration Human Factors                      | \$      | 7,305  |         | 7,305  |
| g.      | System Safety Management                                                     | \$      | 6,500  |         | 5,500  |
| h.      | Air Traffic Control/Technical Operations Human Factors                       | \$      | 6,165  |         | 5,800  |
| I.      | Aeromedical Research                                                         | \$      | 8,538  |         | 9,080  |
| j.      | Weather Program                                                              | \$      | 15,476 |         | 15,476 |
| k.      | Unmanned Aircraft Systems Research                                           | \$      | 20,035 |         | 24,035 |
|         | NextGen - Alternative Fuels for General Aviation                             | \$      | 7,000  |         | 7,000  |
| l.      | Commercial Space Transportation Safety                                       | \$      | 2,453  |         | 1,872  |
| m.      | NextGen - Wake Turbulence                                                    | \$      | 8,609  |         | 6,831  |
| n.      | NextGen - Air Ground Integration Human Factors                               | \$      | 8,575  |         | 6,757  |
| o.      | NextGen - Weather Technology in the Cockpit                                  | \$      | 4,059  |         | 3,644  |
| p.      | Information Technology/Cyber Security                                        | \$      | 1,000  |         | 1,000  |
| q.      | NextGen - Flight Data Exchange                                               |         |        |         |        |
| a.      | Environment and Energy                                                       | \$      | 16,013 |         | 18,013 |
| b.      | NextGen - Environmental Research - Aircraft Technologies, Fuels, and Metrics | \$      | 27,174 |         | 29,174 |
| a.      | System Planning and Resource Management                                      | \$      | 2,288  |         | 2,135  |
| b.      | William J. Hughes Technical Center Laboratory Facility                       | \$      | 3,412  |         | 3,412  |

| <b>FY 2019<br/>Enacted</b> | <b>FY 2020<br/>Request</b> |
|----------------------------|----------------------------|
| <b>191,100</b>             | <b>120,000</b>             |
| 7,200                      | 7,562                      |
| 2,100                      | 3,708                      |
| 14,720                     | 1,799                      |
| 9,253                      | 7,450                      |
| 11,269                     | 10,006                     |
| 1,570                      | 0                          |
| 7,305                      | 5,973                      |
| 5,500                      | 4,309                      |
| 5,800                      | 5,474                      |
| 9,080                      | 9,575                      |
| 15,476                     | 6,391                      |
| 24,035                     | 7,546                      |
| 1,900                      | 0                          |
| 2,500                      | 5,971                      |
| 6,831                      | 3,697                      |
| 6,757                      | 1,717                      |
| 3,644                      | 1,963                      |
| 1,232                      | 2,675                      |
| 1,035                      | 1,005                      |
| 18,013                     | 15,103                     |
| 29,174                     | 12,500                     |
| 2,135                      | 2,717                      |
| 4,571                      | 2,859                      |