



# MSL Budget Status

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# MSL Cost History and Status

PSS—Mars Science Laboratory

- How did MSL get here?
  - August 2006 (Agency approval for development): \$1.63B
  - 1Q-2Q FY07: Continuing Resolution, MEP budget reduction, and Phoenix overguide, forced deferral of some FY07 work into FY08
  - June 2007 (CDR): \$50-100M overguide predicted
  - Aug - Nov 2007 (Descope Effort): \$36M provided of \$75M request
  - December 2007 (JPL initial overguide request): \$91M
  - February 2008
    - HQ solved for \$190M based on Independent Team CTG of ~\$140+M
    - President's Budget: Scout-2 (MAVEN) slipped to 2013; FY09-11 funding deleted
  - FY08: Revised JPL requests totaled \$165M
  - October 2008 (FY09; Revised JPL Request): Add'l \$110M; NASA attached conditions wrt schedule/technical progress, & metrics
  - December 2008: NASA slipped launch due to missing progress metrics; technical risk unacceptable



# MSL Cost History and Status (con't)

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- Cost Status

- No additional funding in FY09 (\$223M)
  - Replan to remain within existing FY09 NOA
    - Prioritized technical risk reduction
    - Significant, rapid workforce draw-down in progress
  - ~20% unencumbered reserve included in FY09
- 2010—14 budget increase in the range of \$400M
  - \$161M operations budget already in MSL FY10-12 budget
  - FY10-11 add'l budget extends development/test phase
  - FY12 add'l budget for Prime Science Phase operations
  - FY13-14 previously unfunded—now Prime Science Phase ops
  - Detailed estimates in development by JPL
    - More reliable budget estimate with decreased schedule pressure, however....
    - Cost risk of de-conflicting JUNO/MSL launch could be as high as \$50M
      - » Atlas V-551, NEPA revisions, PICA (?), etc.



# The Path to Approval

PSS—Mars Science Laboratory

- Dec 22, 2008: Review of FY09 replan by SMD, and approval to begin implementation
- January 27, 2009: SMD “sanity check” of complete replan
- February, 2009:
  - Standing Review Board (SRB) assessment of complete replan
    - Technical/schedule, budget, JUNO/MSL launch conflict
  - Directorate PMC
  - Agency PMC—approval of go-forward plan
- Feb/March, 2009: Submit revised Breach Report with replan to Congress (Section 103 of NASA Authorization Act of 2005, aka “Nunn-McCurdy for NASA”)