



NASA Langley Research Center

Concepts

Climate

Technology

Systems

Vehicles

Our Vision

We define, develop and demonstrate breakthrough systems solutions that enable:

- *On Demand Air Transportation*
- *Understanding, Adapting to, and Mitigating the Earth's Climate System, and*
- *Humans on Mars in the 2030s*

for the benefit of humanity.

Technology

Vehicles

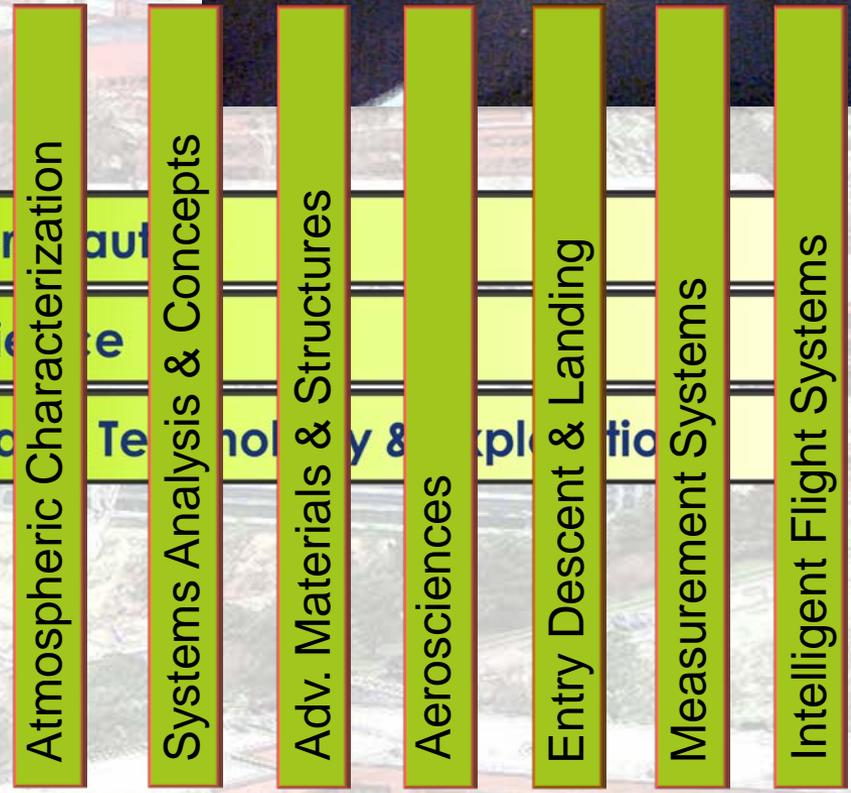
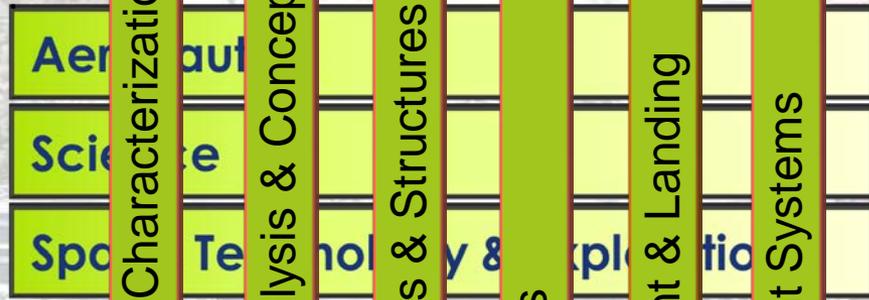
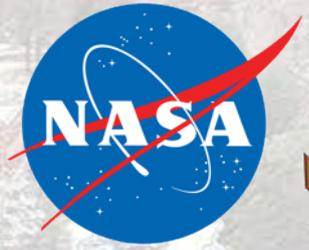
Climate

Systems

Concepts

Our Strategy: *how we fit in*

Technology
Vehicles
Climate
Systems
Concepts





NASA Langley at a Glance (2014)

Langley's Economic Impact (2013)

- National economic output of ~ \$2.9B and generates over 22,000 high-tech jobs
- Virginia economic output of ~ \$1.1B and generates ~ 10,000 high-tech jobs



PY2014 Budget Estimate.....~\$782M
(Awaiting Agency Op Plan Approval)

NASA Langley Budget.....~\$744M
External Business.....~\$38M*

*Pending Official Estimate; \$38m based on FY13 actuals

Workforce.....~**3,600**
Civil Servants.....~1,900
Contractors (on/near-site).....~1,700

Infrastructure/Facilities

166 Buildings.....788 acres
Replacement Value.....~\$3.5B

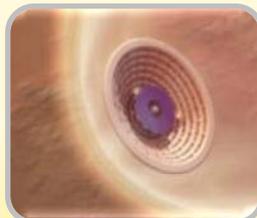
AERONAUTICS
\$186M



SCIENCE
\$169M



SPACE TECH
\$35M



HUMAN EXPLORATION
\$36M



***EDUCATION**
***(PENDING ESTIMATE)**



CROSS-AGENCY SUPPORT PROGRAMS & CONSTRUCTION/ENVIRONMENTAL COMPLIANCE & RESTORATION

Center Management & Operations

(Facilities, Fab, Engineering, Tech Authority, B&P, IRAD, Safety/Mission Assurance, Legal, Finance, Procurement, Human Resources)

Agency Management & Operations

(NASA Engineering & Safety Center, Office of Chief Engineer, Agency IT)

Construction Environmental Compliance & Restoration

(Revitalization Plan)

Aeronautics: *pushing the boundaries*



**Environmentally
Responsible Aviation**



Fixed-Wing



Supersonics



**Systems Analysis,
Integration and Evaluation**

Space Technology and Exploration: *expanding our presence*



Orion



Space Launch System

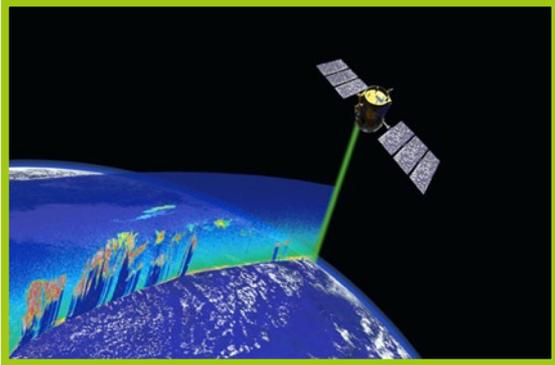


Commercial Space

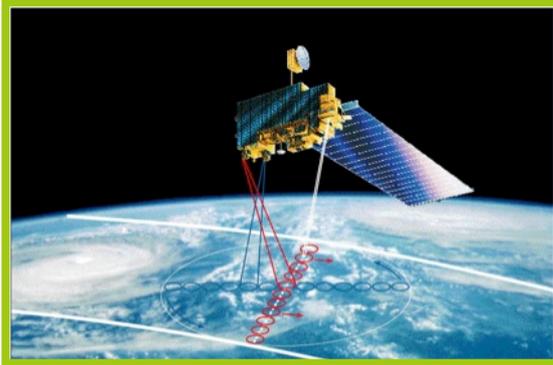


Advanced Exploration Systems

Science: *searching for the answers*



CALIPSO



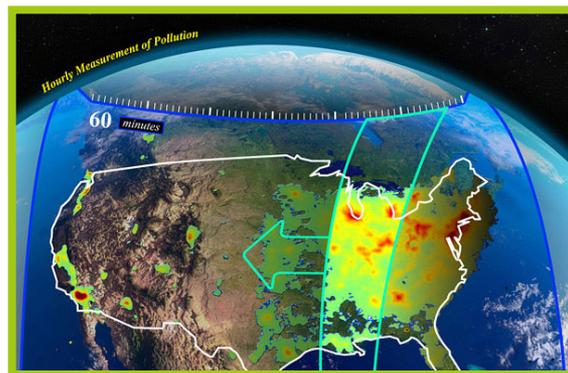
CERES



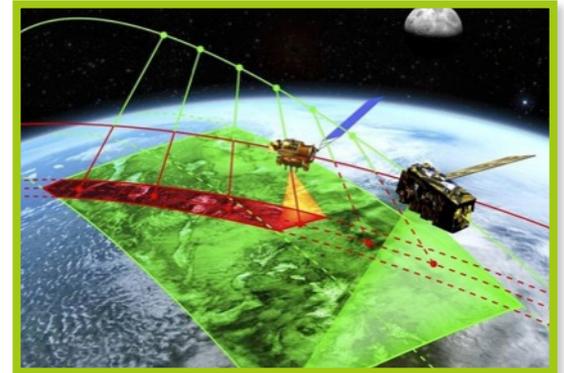
SAGE III



DISCOVER-AQ



TEMPO



CLARREO

ViTAL: *Vibrant Transformation Plan to Advance Langley*

Facilities



People



Digital Transformation



ViTAL: *Facilities*

Integrated Engineering Services Building (IESB)
80% complete with initial occupancy this September



Computational Research Facility (CRF)
State-of-the-art Tier 2 consolidated data center



Compressor Station Replacement
New 8 lb/sec, 6,000 psi compressor and associated infrastructure



Measurement Sciences Laboratory (MSL)
State-of-the-art Laser/Lidar and Electromagnetics lab



ViTAL: *People and Resources*

New Faces

Skills based on future goals

More interns

Comprehensive Digital Transformation

High performance computing

Advanced IT Infrastructure

Modeling, Simulation

Systems Analysis

Big Data Analytics

Machine Intelligence

