

NASA IT Strategic Plan Summary

NASA's Mission Directorates

- Aeronautics Research
- Human Exploration and Operations
- Science
- Space Technology
- Mission Support



IT Vision

Manage IT as a strategic resource to securely unleash the power of data.

IT Mission

Enable the secure use of data to accomplish NASA's Mission.

IT Values

Customer Driven (Responsive, Make IT Easy!) ✦ Continuously Learning (Insight Driven)
Accountable (Transparent) ✦ Trusted Partner

Mission-Oriented Strategic Outcomes

Share results & data
R

Increase quality & effectiveness
Q

Accelerate results
A

Increase safety & integrity
S

Increase cost-effectiveness
C

Drive discovery & concepts
D



Goal 1: Excellence

Partner with customers to consistently deliver excellence and enable mission success.

R Q A S



Goal 2: Data

Capitalize on data management, access, and innovation.

R Q A S C D



Goal 3: Cybersecurity

Safeguard NASA's data and IT assets.

R Q S



Goal 4: Value

Maximize business value by optimizing IT.

Q S C



Goal 5: People

Care for our people today and prepare them for tomorrow.

R Q A S C D

Objectives

1.1 Increase customer satisfaction.

- ☐ Implement a Customer Experience Index (FY 2018)
- ☐ Baseline customer experience (FY 2019)
- ☐ Incrementally increase customer experience (FY 2021)

1.2 Increase end-to-end usability and effectiveness.

- ☐ Develop a transition plan to a device-agnostic architecture (CY 2018)
- ☐ Design NASA's network strategy (FY 2019)

1.3 Enable responsive, actionable service performance improvement.

- ☐ Establish service reliability, availability, and resiliency metrics (CY 2018)
- ☐ Improve customer experience through voice of the customer and automated system feedback (FY 2020)

Objectives

2.1 Enable transformation of NASA's data into insights.

- ☐ Analyze enterprise-wide data tools (FY 2018)
- ☐ 70% of catalogued data in NASA Data Centers searchable (FY 2020)
- ☐ 35% of catalogued data in NASA Data Centers securely accessible by enterprise analytical suite (FY 2021)

2.2 Increase secure data accessibility and data management through innovation to address capability gaps and improve operations.

- ☐ Test and operationalize six IT/process data innovations in a phased approach in alignment with Agency needs and priorities (FY 2021)

Objectives

3.1 Reduce the risk to data and information systems.

- ☐ 95% HW/SW asset mgmt (FY 2018)
- ☐ 85% multi-factor authentication to network (FY 2018)
- ☐ Implement Agency-wide continuous monitoring (FY 2019)
- ☐ Only authorized devices and software access NASA's data & networks (FY 2019)
- ☐ Mission and business owners have cyber risk profile for their assets (FY 2020)
- ☐ Strategically manage highest priority cyber risks (FY 2021)

3.2 Prioritize and mitigate cybersecurity risks based on a framework.

- ☐ COOP/DR plans for high-risk cybersecurity systems (FY 2019)

3.3 Improve cybersecurity education and practices.

- ☐ Innovate on cyber training (FY 2019)
- ☐ 50% of applicable employees complete role-based training (FY 2021)

Objectives

4.1 Empower data-driven decisions and operating model choices.

- ☐ Enterprise vendor mgmt capability (FY 2020)
- ☐ Enterprise software life cycle mgmt capability (FY 2021)

4.2 Increase effectiveness of investment analysis and prioritization.

- ☐ \$50M of NASA cost avoidance/savings (FY 2017-18)
- ☐ Business cases have measurable outcomes for all new major IT investments (FY 2019) and for 35% of NASA's IT investment budget (FY 2020)
- ☐ Benchmark NASA's spending on IT capabilities (FY 2019)
- ☐ Execute IT investment mgmt process for 20% of NASA's IT portfolio (FY 2022)

4.3 Increase effectiveness of IT strategy execution.

- ☐ 85% of projects execute in conformance with approved project plans (annual)

Objectives

5.1 Care for our people and encourage mission-oriented performance.

- ☐ List critical positions within IT functional areas (FY 2018)
- ☐ Define IT operating model (FY 2019)
- ☐ Complete NASA's IT workforce strategy (FY 2019)
- ☐ Reorient IT budget year 2022 request to align to NASA's enterprise mission support operating model (FY 2020)
- ☐ Execute transition of NASA IT to Agency's enterprise mission support operating model (FY 2022)

5.2 Attract & retain diverse, high-quality people.

- ☐ Enhance diversity and inclusion (FY 2018)
- ☐ Develop market-informed pay for mission critical IT positions (FY 2021)

5.3 Prepare our people to achieve NASA's vision.

- ☐ Implement IT workforce strategy (FY 2021)