



NASA's Strategic Direction

Chief Strategy Officer Summit New York, NY

Associate Deputy Administrator for Strategy and Policy

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NASA

NASA developed the following from guidance given in the National Aeronautics and Space Act of 1958, NASA Authorization Act of 2010, NASA Appropriations Acts of 2011 and 2012, and the National Space Policy of 2010:

Vision

To reach for new heights and reveal the unknown, so that what we do and learn will benefit all humankind.

Mission

Drive advances in science, technology, and exploration to enhance knowledge, education, innovation, economic vitality, and stewardship of Earth.

Strategic Plan Goals

1. Extend and sustain human activities across the solar system.
2. Expand scientific understanding of the Earth and the universe in which we live.
3. Create the innovative new space technologies for our exploration, science, and economic future.
4. Advance aeronautics research for societal benefit
5. Enable program and institutional capabilities to conduct NASA's aeronautics and space activities.
6. Share NASA with the public, educators, and students to provide opportunities to participate in our Mission, foster innovation, and contribute to a strong national economy

Policy Priorities

1. Strengthen NASA's role as an integral component of the Nation's revitalized science, technology and innovation agenda.
2. Make most efficient use of NASA resources through improved project management
3. Enhance interagency, commercial, and international partnerships
4. Structure and implement NASA programs to contribute to national competitiveness
5. Maximize the sustainability and utility of NASA's footprint
6. Structure NASA's education, workforce, and communication efforts to focus on the NASA's ability to contribute to the Nation's innovation agenda

2012 Program Priorities

1. JWST
2. SLS/MPCV
3. ISS and Commercial Crew and Cargo



Top trends facing NASA...

- Talent gap...with aging workforce and increased competitive pipeline for young talent
 - Aging infrastructure...
 - New commercial space companies...
 - Other nations emerging with strong space programs...
 - The reality of budget pressures and competition within federal government for tax dollars...
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Agency Level Strategy Efforts at NASA

Administrator

Sets the Goals and Objectives for the agency

Office of Strategy Formulation

Office of Strategy Formulation coordinates the long term strategy efforts for the agency working with missions directorates and other key offices. It guides the Administrator on setting NASA's strategic goals and objectives. It also conducts studies and analysis that inform agency wide strategic issues and decisions.

Office of Chief of Staff

Office of Evaluation

Executive Council Staff

The Office of the Chief of Staff coordinates the internal work across the agency related to evaluation and management councils. Supports studies and analyses that inform setting agency wide strategy.

Other Offices

Office of Chief Financial Officer

The Office of Chief Financial Officer is responsible for overseeing the annual Planning, Programming, Budget and Execution process for the Agency, and translating strategy into resource requirements working with mission directorates. It also produces the NASA Strategic Plan, and defines how it flows into agency wide performance measurement, working with Office of Strategy Formulation.

Office of Legislative Affairs and Office of Communications

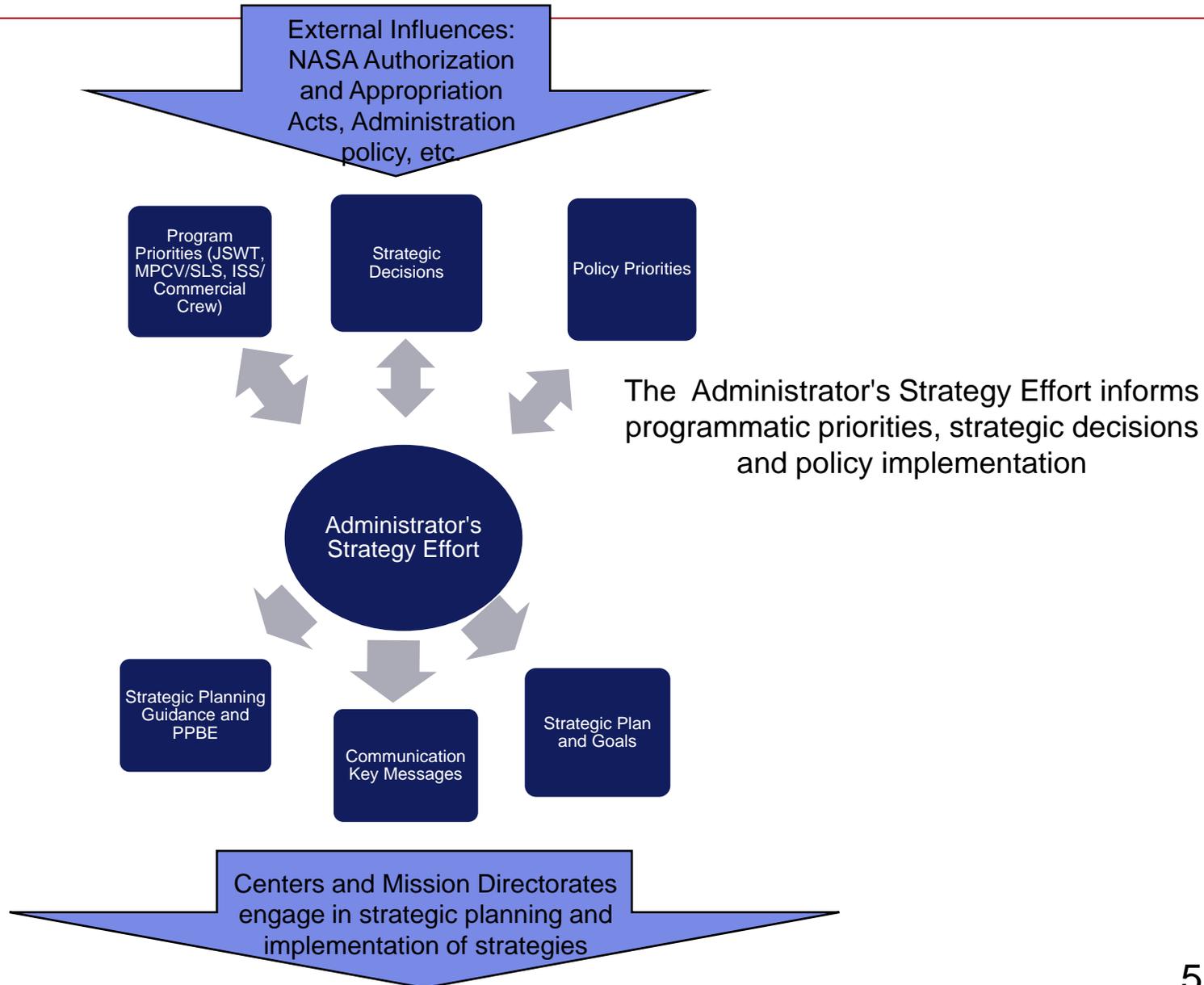
These offices work to ensure that the agency strategy is communicated internally and externally and work with Congress to receive guidance and keep them informed on agency strategy.

Mission Directorates and Centers

These offices conduct strategic planning at the institutional and program level. Centers develop strategies based on their capabilities and the needs of mission directorates. Mission Directorates take external guidance such as legislation, administration policy, and decadal and develop their strategies to achieve the agency goals based on programmatic needs.



Proposed Approach Aligning Strategy and Goals





Goals of the NASA Administrator's Strategy Effort

- Establish an Agency-wide commitment among Agency leaders to develop a common *strategy* for achieving NASA's Vision and Mission.
- Develop strategy process based on scenario-planning work and NASA's Strategy Implementation Planning process using a broad and inclusive communication forum (Strategic Management Council).
- Define strategic priorities and build consensus among Associate Administrators, Center Directors, and other Agency leaders.
- Align Agency-level strategy planning with Mission Directorate and Center Director strategy efforts.
- Build strategic framework using portfolio analysis and infrastructure evaluation to facilitate decision-making.
- Develop a resilient strategy within the framework of possible futures to resolve high-level portfolio and infrastructure issues.
- Utilize Strategy Implementation Planning Process to turn strategy into action by feeding results into NASA's implementation process (PPBE).
- Foster innovation and creativity via application of non-standard solutions and lessons learned to NASA challenges and opportunities.



The 4 Futures and the Strategic Framework

- **The “4 Futures” define the trade space of NASA *why’s* and define the framework for strategic planning and dialogue**
- **NASA leadership recognizes that the elements of all 4 Futures will always be present in the NASA environment:**
 - Trend analysis and discussions with governing councils and NASA focus groups helped identify these four distinct rationales that drive NASA’s future
- **The “4 Futures” are not meant to be mutually exclusive, they create the framework for:**
 - Defining the desired future state of NASA that will allow the Agency to be more flexible and responsive to changes,
 - Raising strategic questions for the agency to address
 - Defining areas of emphasis and focus for NASA portfolio,
 - Shape the strategy with Agency’s stakeholders,
 - Communicate NASA focus and impact to its broader community
 - Strategic planning - by ensuring we make informed decisions.



4 Futures: the realm of driving rationales

US Global Leadership



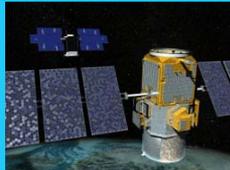
- Contributes to global prestige through use of space as a strategic asset for the Nation
- Signals strength of the Nation's political and economic systems to the world through technological prowess

Human Drive to Explore and Extend Human Presence in Space



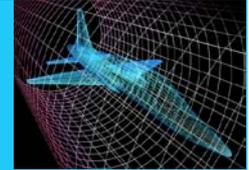
- Enhances the indomitable human spirit to expand our footprint in the Universe
- Allows humankind to create permanent long-term space presence in the solar system
- Bolsters sustainability of life as exploration expands beyond the Earth

Direct Measureable Payback



- Links goals of programs to clear and direct quantifiable benefit
 - Benefits are not indirect or follow-on and should be intuitive to the taxpayer
 - SMART: Specific, measurable, actionable by industry, responsive to taxpayer needs and timely

Seeding Technical Innovation and Expanding Scientific Knowledge



- Advances research and technology agendas to the community at large to enable future discoveries and innovation
- Fulfills role of government to create a scientific public good benefitting all (e.g., asteroid threat detection)
- Answers key scientific questions (e.g., black-hole imaging)



Strategy to Decisions



Framework:

- Probable futures
- Portfolio analysis
- Infrastructure analysis

Strategic studies and analyses
MDs strategic planning

Ext. policy requirements

US Global Space Leadership

Contributes to global leadership through use of space as a strategic asset for the Nation. Strength of the Nation's political and economic systems is the world through technological prowess.

Direct Missionable Payload

Enables global operations to meet and deliver quantifiable benefits. Specific use and delivery of hardware and payloads is mission to the "customer". Specific, measurable, achievable by industry, response to taxpayer needs and energy.

Human, Data to Explore and Control Human Presence in Space

Enhances the sustainable human space to expand our presence in the Universe. Ability to conduct in space (permanent long-term) missions. Balance sustainability of life as exploration expands beyond the Earth.

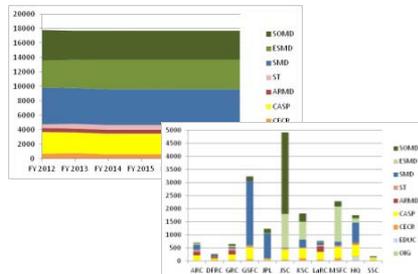
Enabling Scientific Knowledge & Technical Advancements

Advances research and technology opportunities to the community at large to enable future discovery and innovation. Fulfills role of government to create a scientific public good benefiting all of its national and global citizens. Answers key scientific questions (e.g., black-hole imaging).

Portfolio constraints and opportunities analysis:

- Strategic programming tools
- Infrastructure strategies
- Make/buy/partner analysis
- Workforce strategies

Ext. policy constraints



Strategic Implementation Planning Review



- Resource allocations
- Policy influence
- Strategic Planning
- Partnerships



Goals	Status
Establish an Agency-wide commitment among Agency leaders to develop a common strategy for achieving NASA's Vision and Mission	Final agreement in SMC in December
Develop strategy process based on scenario-planning work and NASA's Strategy Implementation Planning process using a broad and inclusive communication forum (SMC)	First results achieved, process improvements are in work
Define strategic priorities and build consensus among Associate Administrators, Center Directors, and other Agency leaders.	Final agreement in SMC in December
Align Agency-level strategy planning with Mission Directorate and Center Director strategy efforts	First alignment reviews conducted successfully
Build strategic framework using portfolio analysis and infrastructure evaluation to facilitate decision-making	Continuous work in progress
Develop a resilient strategy within the framework of possible futures to resolve high-level portfolio and infrastructure issues	Continuous work in progress
Utilize Strategy Implementation Planning Process to turn strategy into action by feeding results into NASA's implementation process (PPBE)	Established for PPBE15
Foster innovation and creativity via application of non-standard solutions and lessons learned to NASA challenges and opportunities	Continuous work in progress