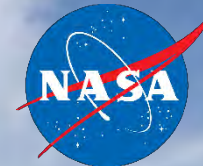


National Aeronautics and
Space Administration



LAUNCHING FORWARD

Bob Cabana, Director
Kennedy Space Center



TRANSITION TO THE MULTI-USER SPACEPORT

The retirement of the Shuttle Program in 2011 marked the beginning of the Multi-User Spaceport a fundamental nexus between KSC's past and future

Since 2011, KSC has enabled a more diverse user base through outgrants and transfers of more than \$1.1 billion of assets NASA owned in 2011 to non-NASA stakeholders

The divestment of assets without diminishing capability changed KSC from a single program focus to a multi-user spaceport. Now, NASA is able to use new (and growing) launch capabilities to lower cost and achieve mission success



Premier Multi-User Spaceport



KSC ROADMAP

Updated 1 26 21

| | 2021 | 2022 | 2023 | 2024 | 2025 |
|--|------|------|------|------|------|
|--|------|------|------|------|------|

Exploration Research & Technology



International Space Station



Commercial Crew



Launch Services



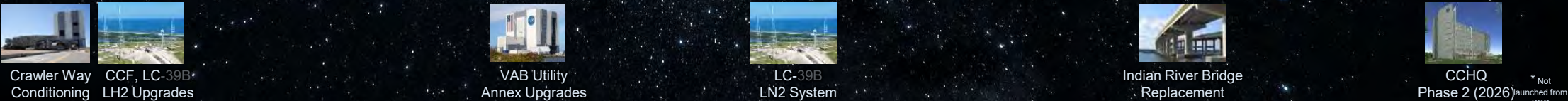
Lunar Gateway



Exploration Ground Systems



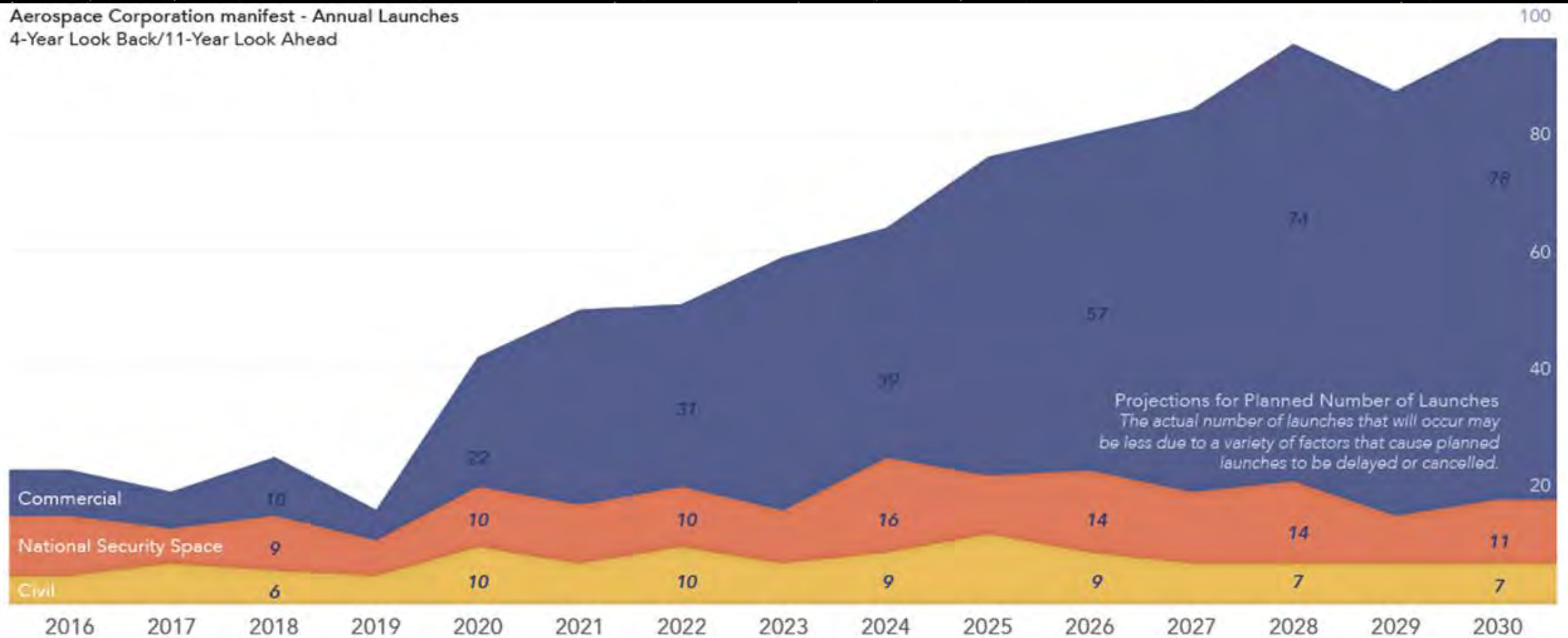
Multi user Spaceport



* Not launched from KSC

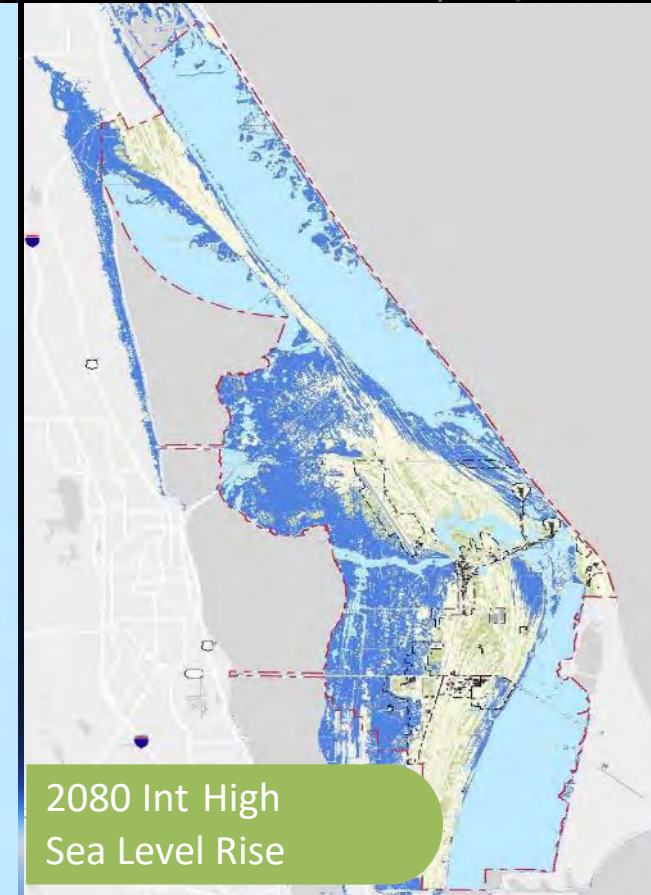
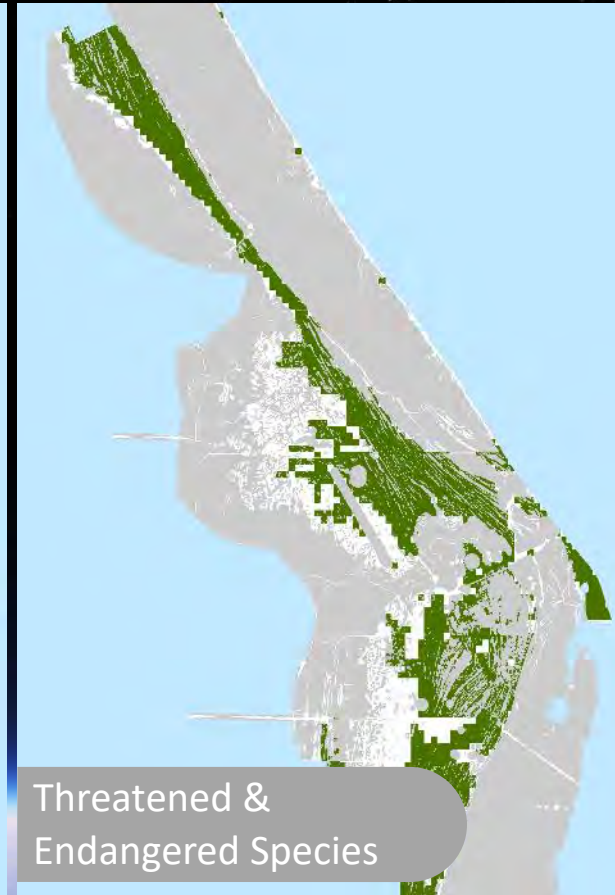
EASTERN RANGE LAUNCH MANIFEST - 10-YEAR

Aerospace Corporation manifest - Annual Launches
4-Year Look Back/11-Year Look Ahead



DEVELOPMENT CONSIDERATIONS

While KSC encompasses 140K+ acres, the amount of land that is suitable for development is considerably less due a number of natural, man-made, and predicted development constraints



CONSIDERATIONS OVERLAY MAP

QUANTITY-DISTANCE (QD) ARCS

Numerous facilities on KSC require buffer distances to ensure that nearby facilities and employees are protected from explosive materials

THREATENED AND ENDANGERED SPECIES

KSC is home to 14 federally listed species including the 2nd largest habitat of the endangered Florida Scrub Jay in the world. Its habitat, public recreational opportunities, and other environmentally sensitive areas are actively managed by the US Fish and Wildlife Service

SEA LEVEL RISE

Due to its proximity to the Atlantic Ocean and rising seas, future development in areas forecasted to experience future flooding should be avoided

WETLANDS

KSC is designated as a wildlife refuge and located on a barrier island with ~96k acres of wetlands. Mitigation opportunities to offset development on wetlands have become increasingly scarce



SPACEPORT GROWTH BOUNDARIES

Taking all constraints into account, only 7,500 acres is available to accommodate future development

Spaceport Growth Boundaries (SGBs) identifies future developable property unencumbered by constraints

- Expands on KSC districts produced during Vision Workshop and developable land uses identified in 2014 Master Plan and EIS
- Aligns with infill development strategy and increases NASA cost savings
- Concentrates future non NASA development in Space Commerce Way District near Exploration Park

Programmatic EA produced in parallel with Vision Plan

- Assesses broad, cumulative impacts of future land use change and development on KSC
- Fulfills Agency NEPA (National Environmental Policy Act) requirement to incorporate visioning process and federal partners (US F&W) input
- Landmark approach due to KSC's expansive and unique property



