



SPACE LAUNCH DELTA 45



SPACEPORTS OF THE FUTURE *INFRASTRUCTURE*

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Spaceport Development*

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Project Scope & Deliverables



- The U.S. Space Force's Range of the Future 2028 Strategic Intent identified the requirement to increase launch posture over the next 10 years. Infrastructure must be improved to meet this new requirement.
- **Primary Goals:**
 - Range must be able to support launching EVERY day.
 - Range must be able to support multiple launches per day.
 - Range must eliminate all critical day restrictions.
 - Establish infrastructure redundancy and resiliency.
 - Reduce personnel impacts associated with launch and landing activities.
 - Quick execution projects by completing environmental planning upfront.
- **Study Deliverables:**
 - District Plans: Cape Canaveral Space Force Station & Patrick Space Force Base
 - Infrastructure Roadmap (IR)
 - Environmental Assessments (EA): Cape Canaveral Space Force Station & Patrick Space Force Base

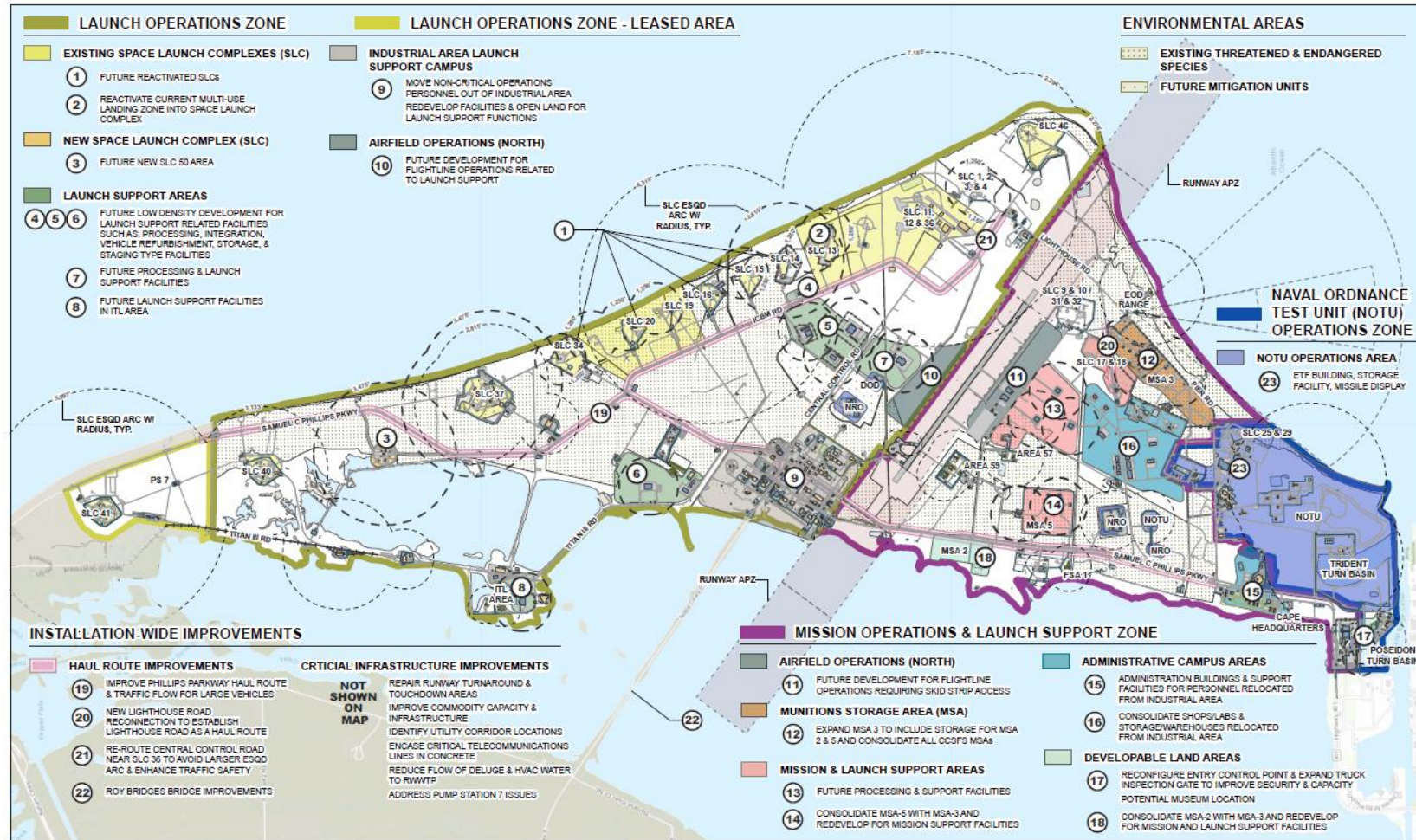
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CCSFS District Plan



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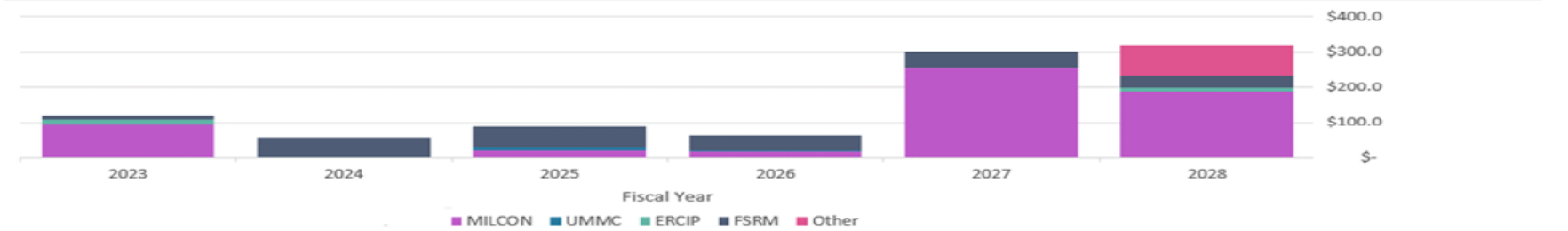
SLD 45 INFRASTRUCTURE ROADMAP PROJECT SUMMARY



FY 2023 9 Projects: \$118,542,964	FY 2024 14 Projects: \$57,656,989	FY 2025 15 Projects: \$84,682,000	FY 2026 15 Projects: \$63,300,572	FY 2027 18 Projects: \$299,146,904	FY 2028 12 Projects: \$306,973,000	FY 2029 = 2032 4 Projects: \$589,982,059
Military Construction (MILCON) SMDT 22-3034 Consolidated Communications Center		Military Construction (MILCON) DBEH 22-7748 Install Wastewater Force Main, ICBM Road DBEH 22-7749 Install Water Main, ICBM Road	Military Construction (MILCON) DBEH 22-7788 Construct Phelps Parkway Half Road	Military Construction (MILCON) DBEH 22-7808 Construct Consolidated Launch Support Facility DBEH 22-7775 Construct Consolidated Shop/Laboratory Facility DBEH 22-7788 Construct Consolidated Storage & Warehouse Facility	Military Construction (MILCON) DBEH 22-7778 Consolidate Munitions Storage DBEH 22-7789 Construct Water Storage Tanks DBEH 22-7773 Construct Consolidated Base Support Complex DBEH 22-7784 Widen ICBM Road, Glenn Sub to DCS Sub SMDT 22-1108 Relocate Lift Station, 8860	Military Construction (MILCON) SMDT 22-1106 Construct BLD 46 Headquarters DBEH 22-7777 Construct Redundant Operations Center Other* DBEH 22-7778 Construct Processing Facility DBEH 22-7781 Construct Secure Area Perimeter
ERCIP DBEH 18-1571 Construct Redundant Water Distribution to North Launch Area DBEH 07-1688 Repair Electrical "C" Line from OH to ULS, B21803		UMMC DBEH 22-7788 Install Redundant Power Distribution at 9WSA and SLC-4	UMMC DBEH 22-7788 Expand Trunk Inspection Gate	ERCIP DBEH 22-7788 Install Redundant Power Distribution, Trident Wharf	ERCIP DBEH 22-7781 Install Redundant Power, ICBM Road	
Facility Sustainment/Restoration/Modernization (FSRM) NSOC 18-1634 Construct Final Denial Barrier, North Gate SMDT 16-1046 Repair Generator, 81487 SMDT 18-1104 Repair Generator, 8429 DBEH 02-1826 Repair Electrical Line "B" Supporting Launch Complexes SMDT 18-1116 Construct Bore-sight Tower & Equipment Building, 81483 LAGE 18-1584 Repair Missile Guidance Station, 82001	Facility Sustainment/Restoration/Modernization (FSRM) DBEH 18-1528 Relocate Weather Operations, 89807 DBEH 22-7788PC Repair Communications Duct Banks, Phase 1 SMDT 18-1511 Modify Deluge Pump Station & Discharge Piping, 829150 SMDT 21-1581 Repair & Certify Weather Tower Fall Protection NSOC 18-1545 Repair Weather Towers Multiple SMDT 21-1011 Repair Lightning Protection, 8980 SMDT 22-1015 Repair Generator, 8962 SMDT 08-1927 Repair Lift Station Holding Tank, 8962 DBEH 20-1688 Repair Lift Stations, Various DBEH 12-1886 Repair Lift Stations, Multi DBEH 18-1517 Repair Cable & Splines in Feeder from North Substation DBEH 16-1528 Repair Water Lines, MACA Area DBEH 07-1588 Repair OCBFS Runways, 89994 DBEH 12-1786 Upgrade SCADA Control System at WWTP	Facility Sustainment/Restoration/Modernization (FSRM) DBEH 22-7788PC Repair Communications Duct Banks, Phase 2 DBEH 22-7788PC Repair Communications Duct Banks, Phase 3 DBEH 22-7787 Repair Phelps Parkway, 82001 SMDT 14-1044 Repair Generator, 8860 DBEH 02-1808 Increase Equalization Basin Capacity RWWTP, 864781 DBEH 16-1578 Repair Fire Detention System, 84460 DBEH 22-7746 Add/Alter Cooling Towers, Multi DBEH 22-7786 Extend Lighthouse Road NSOC 22-1820 Repair 18.14 Radar Access Road DBEH 22-7788 Repair Titan III Road DBEH 22-7782 Replace Generators at South Generator Plant, 861730 SMDT 08-1008 Convert Space for Airfield Lighting Tower, 8802	Facility Sustainment/Restoration/Modernization (FSRM) DBEH 22-7788PC Repair Communications Duct Banks, Phase 4 DBEH 22-7788PC Repair Communications Duct Banks, Phase 5 DBEH 17-1881 Renovate Hangar K, B61738 DBEH 18-1528 Repair Water Main, OCBFS South Boundary, 82001 SMDT 10-1882 Repair Emergency Power SFS HQ, 81918 DBEH 22-7784 Modify Pump Station 3, 84460 DBEH 18-1588 Replace Lift Stations, Multi DBEH 18-1527 Update Power Distribution SCADA, Multi DBEH 22-7788 Repair Electrical, Multi DBEH 17-1882 Convert Power Distribution Line "B-Line", from OH to ULS, B21803 DBEH 22-7748 Expand Power Distribution SCADA, Multi DBEH 16-1568 Repair Digital Fire Alarm Panels, Multi DBEH 18-1586 Repair Outdoor Maintenance/Storage, 891808	Facility Sustainment/Restoration/Modernization (FSRM) DBEH 22-7788PC Repair Communications Duct Banks, Phase 6 DBEH 22-7788PC Repair Communications Duct Banks, Phase 7 DBEH 22-7788PC Repair Communications Duct Banks, Phase 8 DBEH 22-7788 Repair Power Distribution Line, 8-Line OH to ULS, B21803 DBEH 22-7746 Repair Transformers, Multi DBEH 17-1738 Repair Roads and Parking DBEH 22-7781 Repair Delta Mariner Wharf, 88640 DBEH 16-1528 Repair Water Main, MOTU Pica 820111 DBEH 22-7772 Construct Relief Bridges, Titan III Road SMDT 18-1008 Repair Water Distribution System, PFB SMDT 14-1028 Install Wastewater SCADA, Multi SMDT 14-1001 Repair Emergency Power, 8438 SMDT 22-1101 Renovate Administrative Space, 8428	Facility Sustainment/Restoration/Modernization (FSRM) DBEH 22-7786 Replace Power Distribution Switches, Multi DBEH 22-7741 Convert Unpaired Overruns OCBFS, 89808 SMDT 22-1102 Demolish Supply and Equipment Warehouse, 8884 DBEH 12-1582 Renovations to Hangar AF Other* Support NSOC Repair/Upgrade to Ray Bridges Bridge SMDT 22-1102 Renovate ICBM RW Headquarters	
UNDER CONST: \$106,291,539 REMAINING: \$12,251,425	UNDER CONST: \$4,168,749 REMAINING: \$53,488,240	PROJECTED: \$84,682,000	PROJECTED: \$63,300,572	PROJECTED: \$299,146,904	REMAINING: \$306,973,000	REMAINING: \$589,982,059

- IR Project Key**
- Project Development
 - In Design
 - Ready to Solicit
 - In Solicitation
 - Under Construction
 - Complete

PROJECT COSTS BY FUNDING MECHANISM	MILCON: \$989,836,000	UMMC: \$10,192,000	ERCIP: \$24,151,425	FSRM: \$246,094,004	Other*: \$250,011,059	*NOTE: Other is for tracking purposes only, not a part of this program.
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Design and Construction Today



Project #	% Complete	Project Name
DBEH 22-7768	0%	Charrette - Construct Philips Parkway Haul Route
DBEH 19-1508	40%	Design – Relocate Weather Station to SLC - 17
DBEH 22-7740	35%	Design - Install Water Main, ICBM Rd
DBEH 22-7743	35%	Design - Install Wastewater Main, ICBM Rd
DBEH 22-7760	15%	Design - Install Redundant Power Distro, CCSFS (USACE)
DBEH 22-7763	30%	Design - Install Emergency Generator at MOC (USACE)
DBEH 17-1568	1%	Rpr CCSFS Runway, B50305
KSCC 19-1511	6%	Modify Deluge Pump Suction and Discharge, Pump Station 7
SXHT 22-1015	10%	Repair Generator, B962
DBEH 12-1765	95%	Upgrade SCADA Controls at RWWTP
JJAE 18-1504	1%	Repair Missile Guidance Station, B28001
KSCC 19-1534	70%	Construct Final Denial Barrier, North Gate
SXHT 14-1045	1%	Repair Generator, B1497
SXHT 16-1104	1%	Repair Generator, B423
SXHT 16-1115	62%	Construct Boresight Tower & Equipment Building, B1653
DBEH 02-1675	1%	Repair 'B-Line' Supporting Launch Complexes
DBEH 19-1517	81%	Repair Cable & Splices in Feeder from North Substation
DBEH 20-1563	89%	Repair Lift Stations, Various
KSCC 18-1543	100%	Repair Weather Towers, Multi

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Coming Soon to a Range Near You



Project #	Stage	Project Name
KSCC 15-1587	Preparing Construction Solicitation	Repair & Certify Weather Tower Fall Protection
SXHT 02-3004	Preparing Design Solicitation	Consolidated Comm Center
SXHT 08-1127	Preparing Construction Solicitation	Repair Lift Station 650 Holding Tank
SXHT 21-1011	Preparing Construction Solicitation	Repair Lightning Protection, B969
DBEH 10-1565	Design Solicitation in Work	Repair Optics Maintenance / Storage, B01606 (Hangar G)
DBEH 12-1690	Preparing Construction Solicitation	Replace Lift Stations, Multiple Across CCSFS
DBEH 15-1539	Construction Solicitation in Work	Repair Water Lines, MACA Area
DBEH 22-7759	Design Solicitation In Work	(Design) CCSFS Comm Duct Bank Survey and Design
DBEH 22-7767	Design Solicitation In Work	(Charrette) Repair Phillips Pkwy, B20201
SXHT 00-1028	Solicitation In Work	Convert Space for Airfield Lighting Vault

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New Biological Restrictions



Tricolored Bat:

- Avoid tree trimming/clearing 1 May – 15 July to minimize impact during bat maternity season
- Avoid tree trimming/clearing when ambient day time temperatures are 45 degrees Fahrenheit or below

Prescribed Burning:

- Implement a minimum of 450-acre average (up from 300) of prescribed fire within occupiable Florida scrub-jay habitat over a six-year rolling period (down from 10-year) to maintain current habitat conditions.

Southeastern Beach Mouse:

- Implement 135.9 acres of beach mouse habitat mitigation at a 1:1 ratio
- If existing mitigation areas are impacted, the ratio will double to 2:1. If these areas are impacted in the future, the mitigation ratio will double again.

Florida Scrub-Jay:

- Avoid construction during Florida scrub-jay nesting season from 1 March – 30 June to the maximum extent practicable in areas known to be occupied by scrub-jays.
- The total acreage of restoration shall be a minimum of 118 acres and should be within a contiguous area to the greatest extent practicable (based on a 2:1 ratio). If existing mitigation areas are impacted the ratio will double to 4:1 and if these areas are impacted again, it will double further.

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A night-time photograph of a spaceport facility, likely the Kennedy Space Center, with various buildings and launch pads illuminated. A prominent, bright, glowing arc of light curves across the dark sky. The background is filled with a field of stars and streaks of light, suggesting a cosmic or futuristic theme.

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