Space Launch System Lift Capabilities



Payload to TLI/Moon	> 27 t (59.5k lbs)	> 27 t (59.5k lbs)	38 t (83.7k lbs)	42 t (92.5k lbs)	> 43 t (94.7k lbs)	> 46 t (101.4k lbs)
Payload Volume	516 ft ³ (14.6 m ³)	8,118 ft ³ (229.9 m ³)	10,100 ft ³ (286 m ³)**	21,930 ft ³ (621.1 m ³)	10,100 ft ³ (286 m ³)**	34,910 ft³ (988 m³)

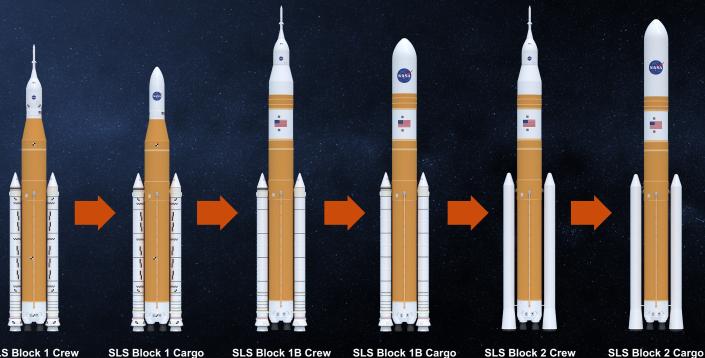
Low Earth Orbit (LEO)

represents a typical 200 km circular orbit at 28.5 degrees inclination

Trans-Lunar Injection

(TLI) is a propulsive maneuver used to set a spacecraft on a trajectory that will cause it to arrive at the Moon. A spacecraft performs **TLI** to begin a lunar transfer from a low circular parking orbit around Earth.

The numbers depicted here indicate the mass capability at the Trans-Lunar Injection point.



SLS Block 1 Crew

SLS Block 1 Cargo

SLS Block 1B Crew

SLS Block 2 Cargo

Maximum Thrust

8.8 M lbs

8.8 M lbs

8.9 M lbs

8.9 M lbs

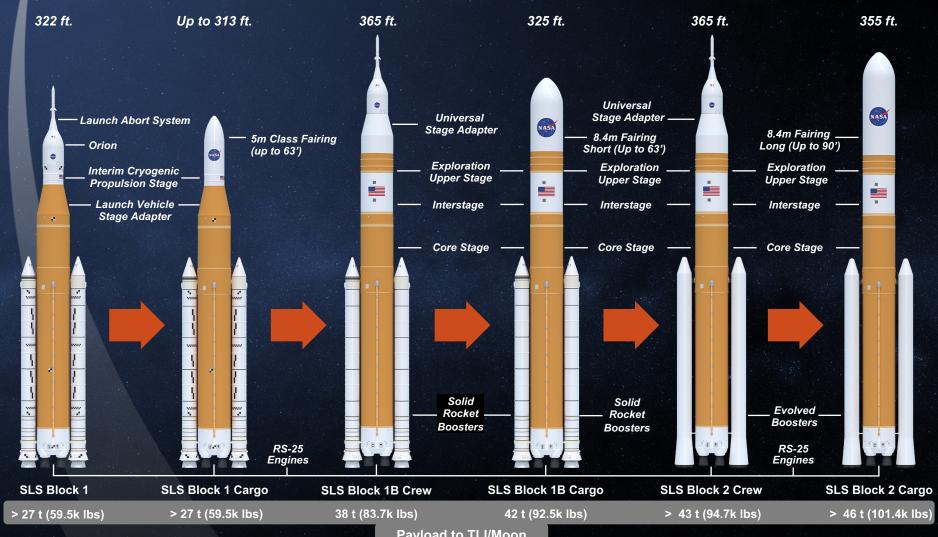
9.5 M lbs

9.5 M lbs

^{**} Not including Orion/Service Module volume

Space Launch System Configurations





Payload to TLI/Moon