3.1 Earth-Moon L<sub>1</sub> Halo Orbit 8 With Staging Orbit Direct 7.5 "Hohmann" Transfer Lowest 25%  $\Delta v$  with Staging Orbit Lowest 25%  $\Delta v$  Direct 7 Lowest 25% TOF with Staging Orbit Lowest 25% TOF Direct 6.5  $\Delta v \, [\mathrm{km/s}]$ 6 5.5 5 4.5 4 2.5 3.5 4.5 5.5 6.5 3 6 TOF [yrs]