2009 Commercial Space Transportation Forecast for Non-Geosynchronous Orbits

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Federal Aviation Administration

### AGENDA

- Market Description
- Methodology
- Satellite/Payload Demand Forecast
- Launch Demand Forecast
- Trends
- Conclusions



#### **Market Description**

- Satellite Manufacturers
  - Swedish Space Corp., Orbital Sciences, MDA, Thales Alenia, et. al.
- Satellite Operators
  - Globalstar, Iridium, ORBCOMM Global, Aprize, O3b, RapidEye, InfoTerra, GeoEye, DigitalGlobe, et. al.
- Launch Vehicles
  - Delta 2, Falcon 1/1e, Rockot, Soyuz 2, Dnepr, Falcon 9, Zenit 3SL, Taurus II, et. al.

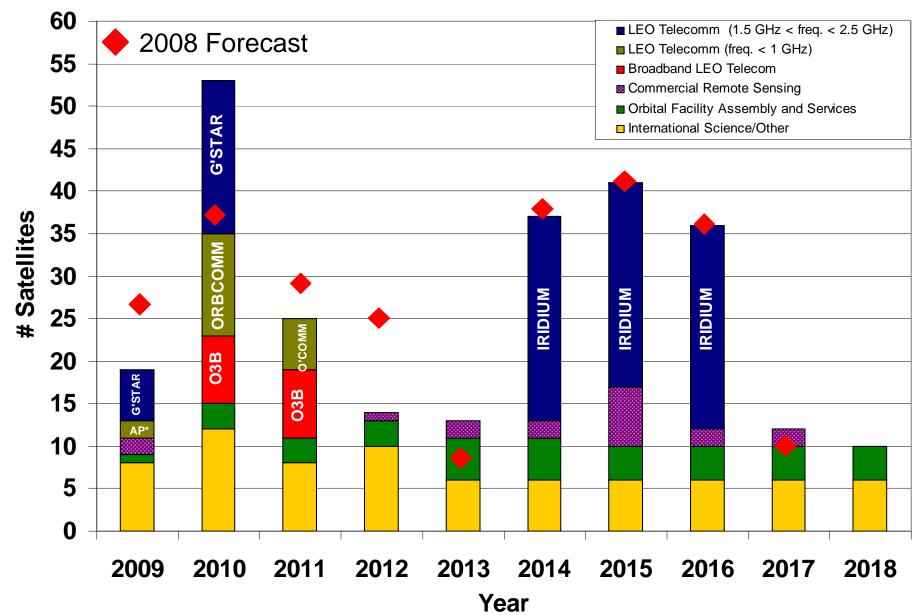


# Methodology

- Data Collection
  - Performed by Futron (Under Contract)
  - Public Sources
  - Direct Communication w/Companies
- Synthesis
  - Tabulate Demand By Est. Launch Year
- Report Reviewed by Industry, Government
- Definition of "Commercial Launch"
  - Internationally Competed and/or FAA licensed



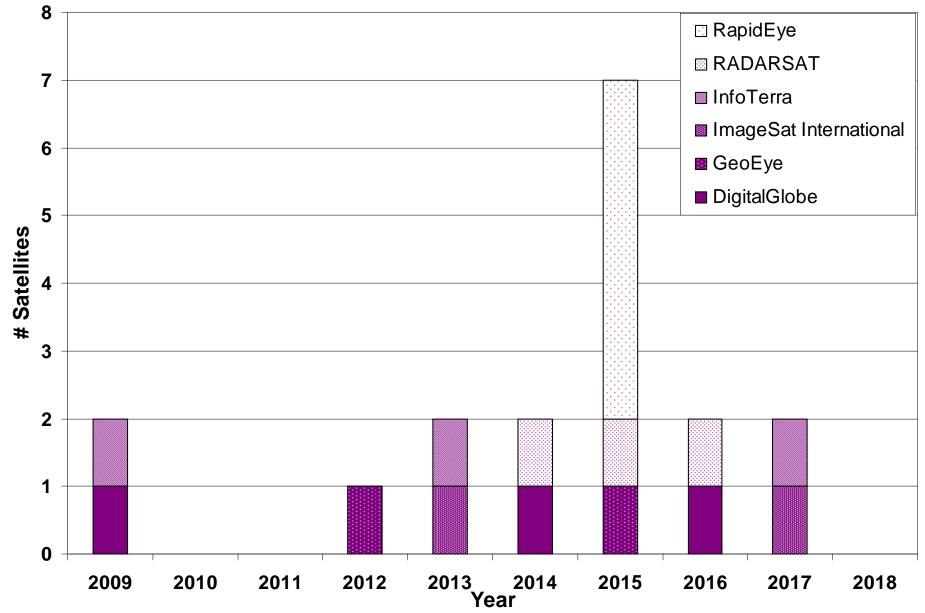
#### **Satellite/Payload Demand Forecast**



Commercial Space Transportation NGSO Launch Forecast



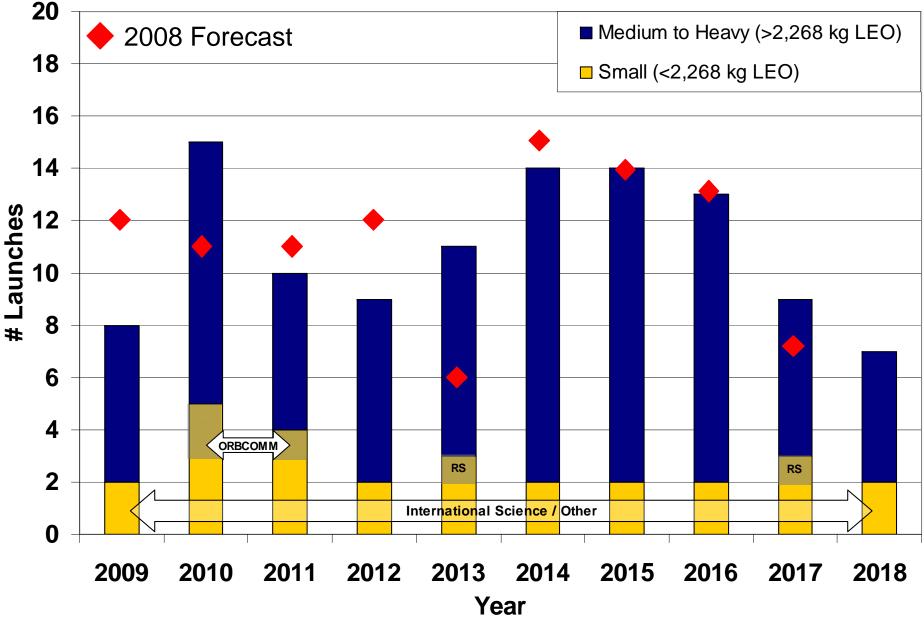
#### **Remote Sensing Demand Forecast**



Commercial Space Transportation NGSO Launch Forecast



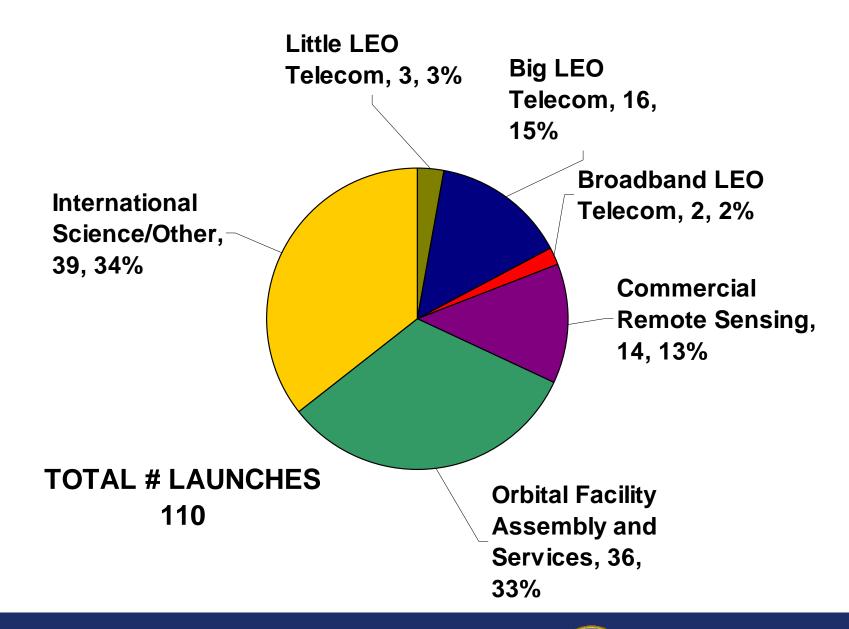
### **Launch Demand Forecast**



Commercial Space Transportation NGSO Launch Forecast



#### 2009-2018 Launch Forecast by Industry Sector



Commercial Space Transportation NGSO Launch Forecast

## **Comparison to 2008 NGSO Forecast**

Parameter	2008 Forecast (2008-2017)	2009 Forecast (2009-2018)
# Sats/Payloads	276	260
# Small Launches	31	27
# Mid-Heavy Launches	81	83
Total # Launches	112	110



## **NGSO Conclusions**

- Long-Term Market Mostly Government
  - 67% is Stable Gov't Demand
  - 33% is Private Demand: 11 Companies (5 Telecom, 6 Remote Sensing)
- Stable Components of Launch Demand
  - Sat/Payload Demand Down Slightly
  - International Science/Other = 2 Small + 1 Medium Launch / Year
  - OFAC = 4 Medium Launch / Year



#### **The Forecast Report...**

- Currently In Final Production
- Available Soon at ast.faa.gov
- For Personalized Service...
  - Send an Email to ken.davidian@faa.gov
  - Give Me Your Business Card
    - Write "Forecast" on the back

