

Broadband Satellite Perspective on mmWave Spectrum Use

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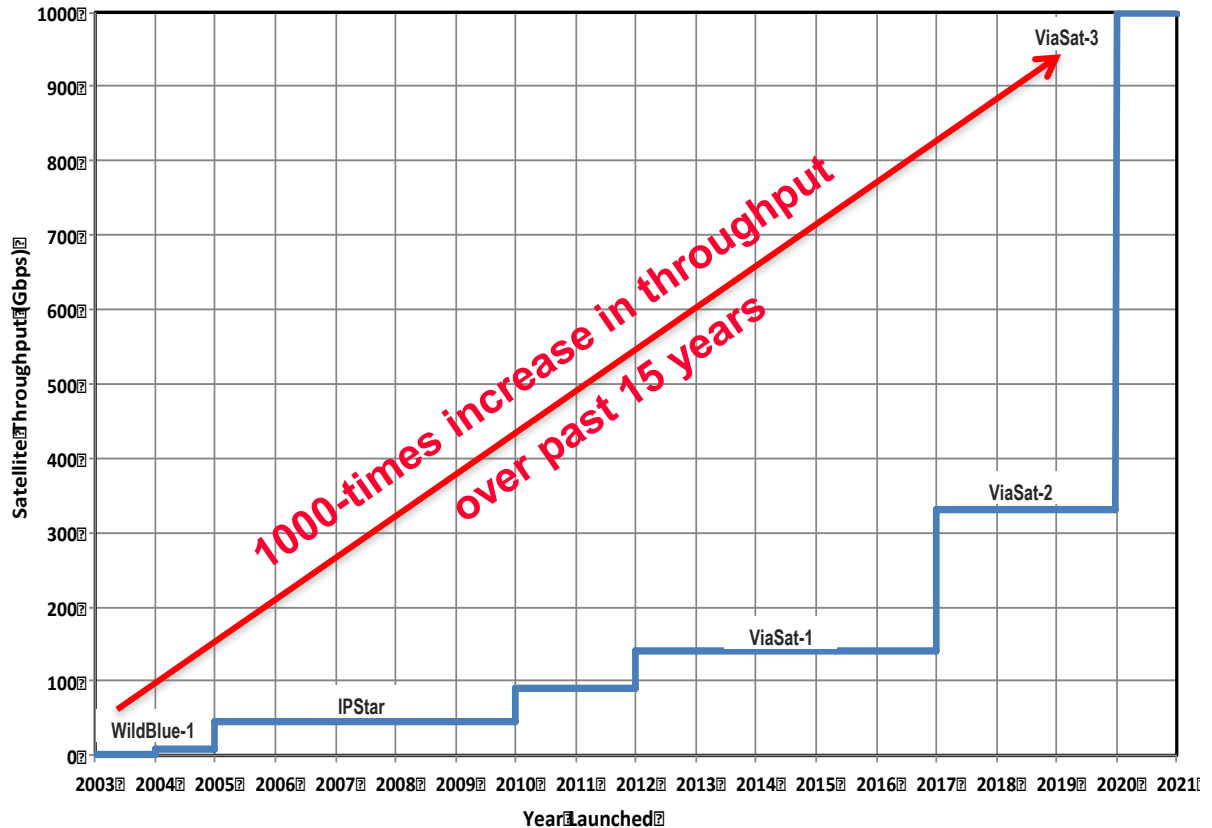
Ka-band High Throughput Satellites Have Revolutionized Broadband



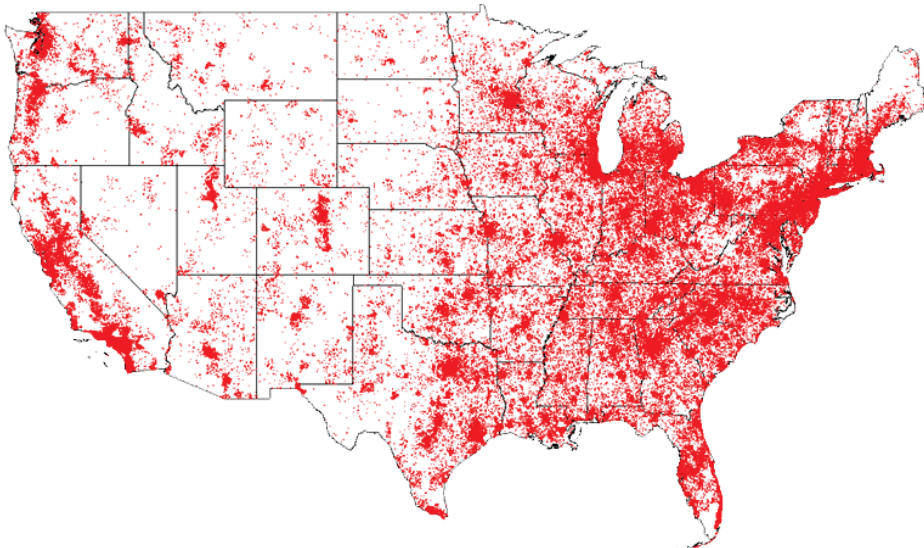
ViaSat HTS Satellite



Nearly 700,000 Customers



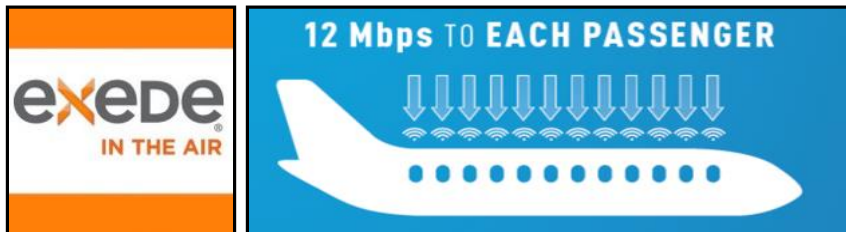
Satellite Broadband Customers Are Everywhere



ViaSat Broadband Subscriber Density

- » Over 30% of current Exede customers have switched from DSL and cable
- » Will deliver >100 Mbps residential service on ViaSat-3, enabling 4K UHD video streaming and competition with fiber
- » ViaSat-3 will provide up to 1 Gbps speeds for maritime services, aviation and corporate enterprise applications

Satellite Delivers Unparalleled In-flight WiFi and Mobility Performance



Current customers include JetBlue, United, Virgin America, El Al and Qantas

- » ViaSat serves over 1,100 commercial, government and business aircraft
- » WiFi is offered free to passengers on JetBlue and Virgin America
- » Supports video streaming (Netflix, Amazon Prime, YouTube, etc.)
- » ViaSat-3 satellites will provide global coverage, supporting each aircraft with hundreds of Mbps of in-flight connectivity services and video streaming

Access to Ka-band Spectrum is Critical to the Continued Growth of Satellite Broadband

ViaSat-1



- » 140 Gbps capacity
- » 17 gateways
- » 7.3 m antennas

ViaSat-2



- » Double ViaSat-1 capacity
- » More than 40 site licensed aggregation and interconnection facilities
- » 4.1 m antennas

ViaSat-3



- » >1 Tbps capacity
- » Hundreds of site licensed aggregation and interconnection facilities
- » Even smaller antennas

ViaSat believes that shared use in the 28 GHz band with terrestrial is feasible and necessary to achieve the full potential of satellite broadband in mmWave spectrum