



westin building
EXCHANGE

WBX

HARBOR POINTE, WA

Quintilian – RFS 2017 – via GCI/AU cable – WBX (ColoCenters)
Alaska United (East) – IS 2008, 50 Gbps – GCI
PC-1 – IS 2001, 8.4Tbps – NTT – WBX

Alaska United (West) – IS 2008, 960 Gbps – GCI

NEDONNA BEACH, OR

VSNL (TGN) Transpacific – IS 2005, 6Tbps – Japan, Guam – Hillsboro
Trans Pacific Express – IS 2008, 5.12Tbps – China, Taiwan, South Korea, Japan – Hillsboro
Southern Cross – IS 2000, 12.8Tbps – Spark New Zealand, Singtel/Optus, Verizon Bus – Hillsboro – WBX
NorthStar – IS 1999, 200Gbps – Alaska Communications

PACIFIC CITY, OR

NCP – RFS 2017, 80Tbps – Microsoft, China Mobile, China Telecom, China Unicom, Chunghwa Telecom, KT, SoftBank
Hawaiki – RFS 2018, 30Tbps – New Zealand, Australia, Samoa, Pacific City – Hillsboro (Via West)

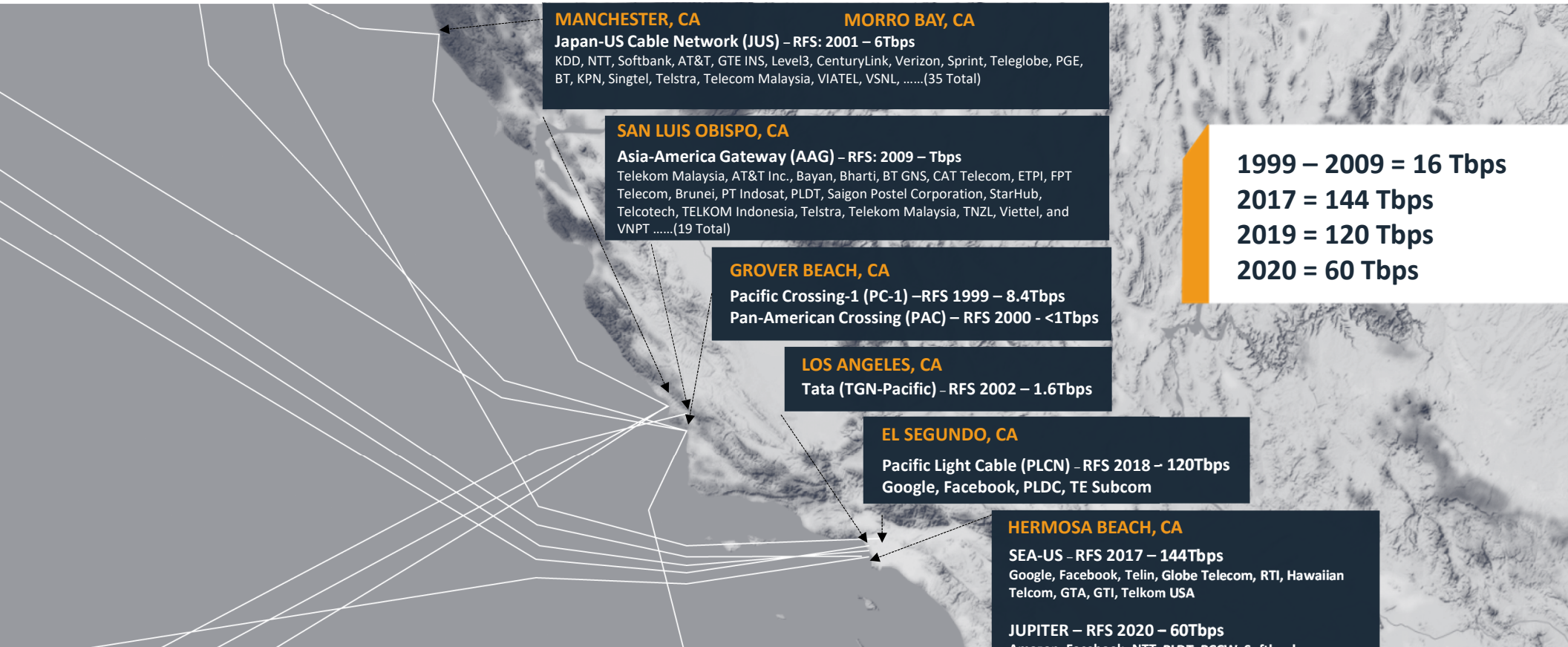
FLORENCE, OR

AKORN – IS 2009, 2.56 Tbps – Alaska Communications

BANDON, OR

FASTER – IS 2016, 60Tbps – Google, KDDI, SingTel, China Telecom, China Mobile, Global Transit – Hillsboro (DRT)
TPC-SCN – IS 1996, 5Gbps – Japan, Guam, Hawaii, US (SLO)
China-US – IS 1999, 2.2Tbps – China, Taiwan, Japan, S Korea, Guam, US (SLO)

1996 – 2009 = 43 Tbps
2016 = 60 Tbps (FASTER)
2017 = 80 Tbps (New Cross Pacific)
2018 = 30 Tbps (Hawaiki)



1999 – 2009 = 16 Tbps
2017 = 144 Tbps
2019 = 120 Tbps
2020 = 60 Tbps



Cascadia FiberNet Inc.

CABLE ROUTE
PLANNING

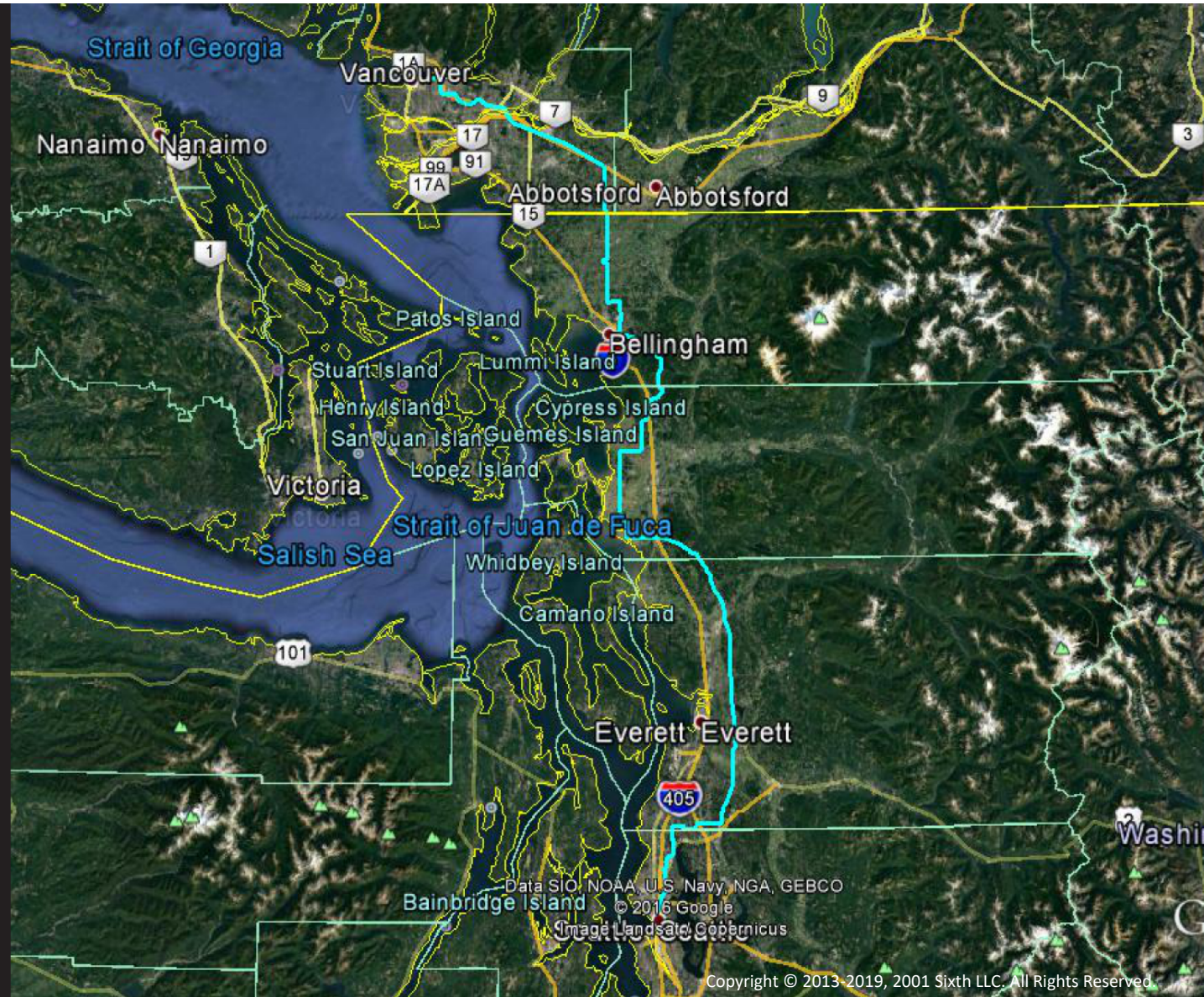
VANCOUVER

TO

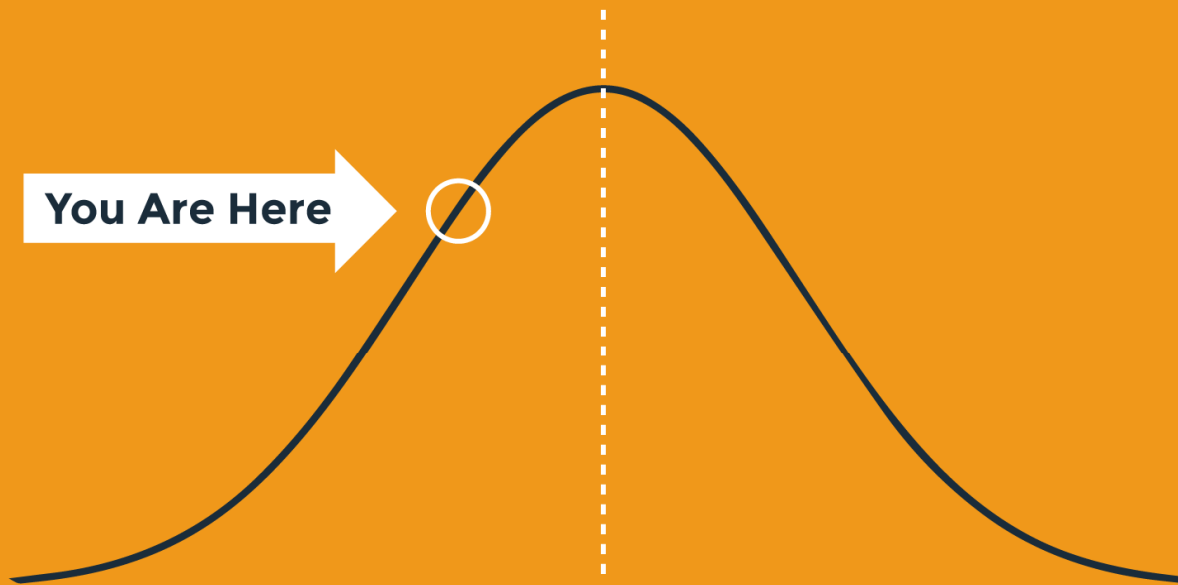
SEATTLE

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THE STATE OF CLOUD COMPUTING



B2B Market Focus

Federal Government
Adoption of Public Cloud

=

Validation &
Acceleration

CONTENT IS A GROWING KING



AUGMENTED
REALITY



IMMERSIVE GAMING



Latency
Sensitive



Cloud
Based

Live
Streaming

LIVE

Multiplayer



100GB IS THE NEW 10GB

THE ARRIVAL OF

5G

ENHANCES 4G

NOT A REPLACEMENT

VOLUME (THROUGHPUT)

CONNECTION DENSITY

**1 MILLION CONNECTIONS VS.
100 THOUSAND PER .4 SQUARE MILES**

HIGH FIBER DEMAND

MOBILE NETWORK GENERATION SPEEDS

| GENERATION | TOP SPEED |
|------------|-----------|
| 2G | 0.3 MBPS |
| 3G | 42 MBPS |
| 4G LTE | 1 GBPS |
| 5G | 10 GBPS |

SATELLITES



GEOSTATIONARY ORBIT (GEO)

35,000 MILES @ 600-800 MILLISECONDS



MEDIUM EARTH ORBIT (MEO)

8,000 MILES @ 125-250 MILLISECONDS

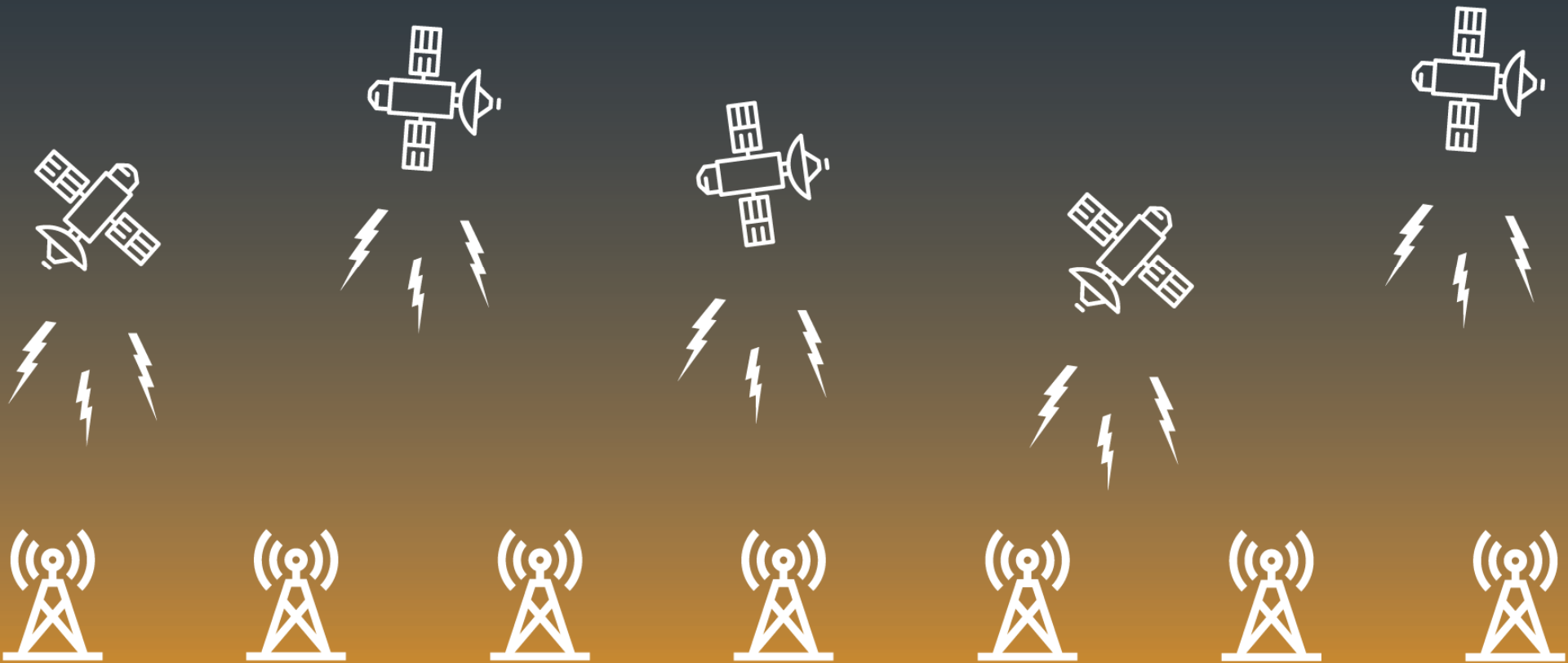


LOW EARTH ORBIT (LEO)

1,200 MILES @ 30-50 MILLISECONDS

LEO VS.
TERRESTRIAL LATENCY
1.3X FASTER¹
NYC - LONDON

5G & LEO WORKING IN TANDEM



5G + LEO = BUSINESS BENEFITS

REMOTE COMMUNITIES



NO-LAG
VIDEO CHAT



NO REQUIREMENT
FOR PERFORMANCE
ACCELERATORS

CELLULAR
BACKHAUL



REAL-TIME
TELEMEDICINE
& IMAGING



REMOTE
TEACHING



REAL-TIME
WEATHER
AND NAVIGATION



SATELLITE
OPERATIONAL
COMMUNICATIONS

AVIATION

MARINE



VOIP AND OTHER
LATENCY-SENSITIVE
COMMUNICATIONS



REAL-TIME
ENGINE
MONITORING



OPERATIONAL
SYSTEMS



CREW
COMMUNICATIONS

ENERGY

GOVERNMENT



UNMANNED
PLATFORMS



MORALE,
WELFARE
& RECREATION

+ UNLOCKING THE POTENTIAL OF AI/AR/VR

THE POWER OF PEERING

IP DISTRIBUTION OFFERS EFFICIENT ACCESS TO:



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