25 Gb/s for DC

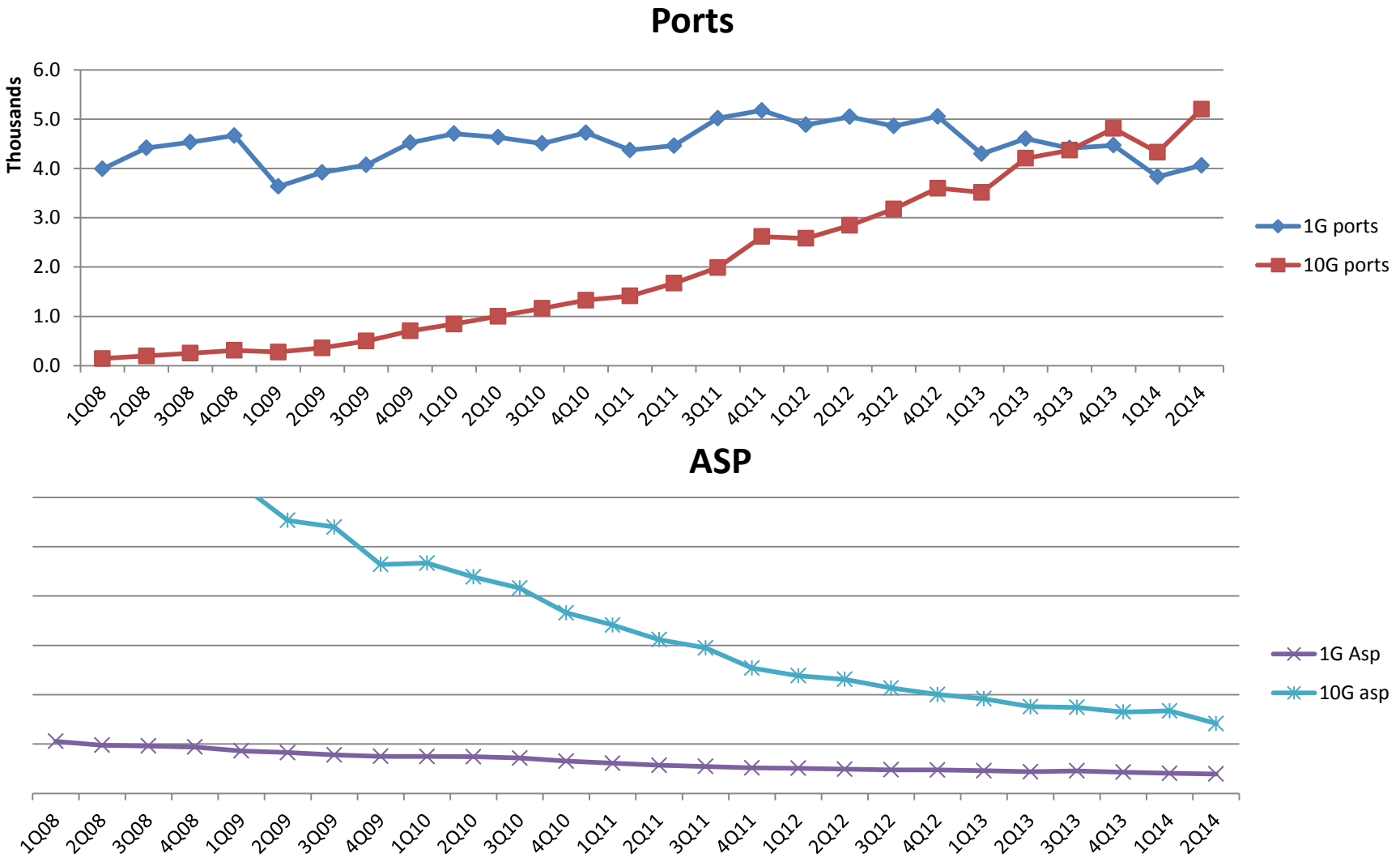
Higher Speeds for Enterprise BASE-T Access

October 2014

25G for Data Center

- Historically Ethernet speed transitions have been slow
  - 5+ years for cross-over from lower speed to higher speed
  - 10X speed bumps have led to higher cost/power premiums
- But 10G->25G transitions should be much faster
  - Speed differential of only 2.5X closer to Fiber Channel and Infiniband transitions of 2x
  - Established precedent of fast transitions in Fiber Channel space
  - Low cost premium over 10G could trigger a fast transition to 25G
- 25G is Win for Customers and Vendors
  - Customers adopt it sooner at a lower cost premium
  - Vendors/suppliers recoup their investments faster

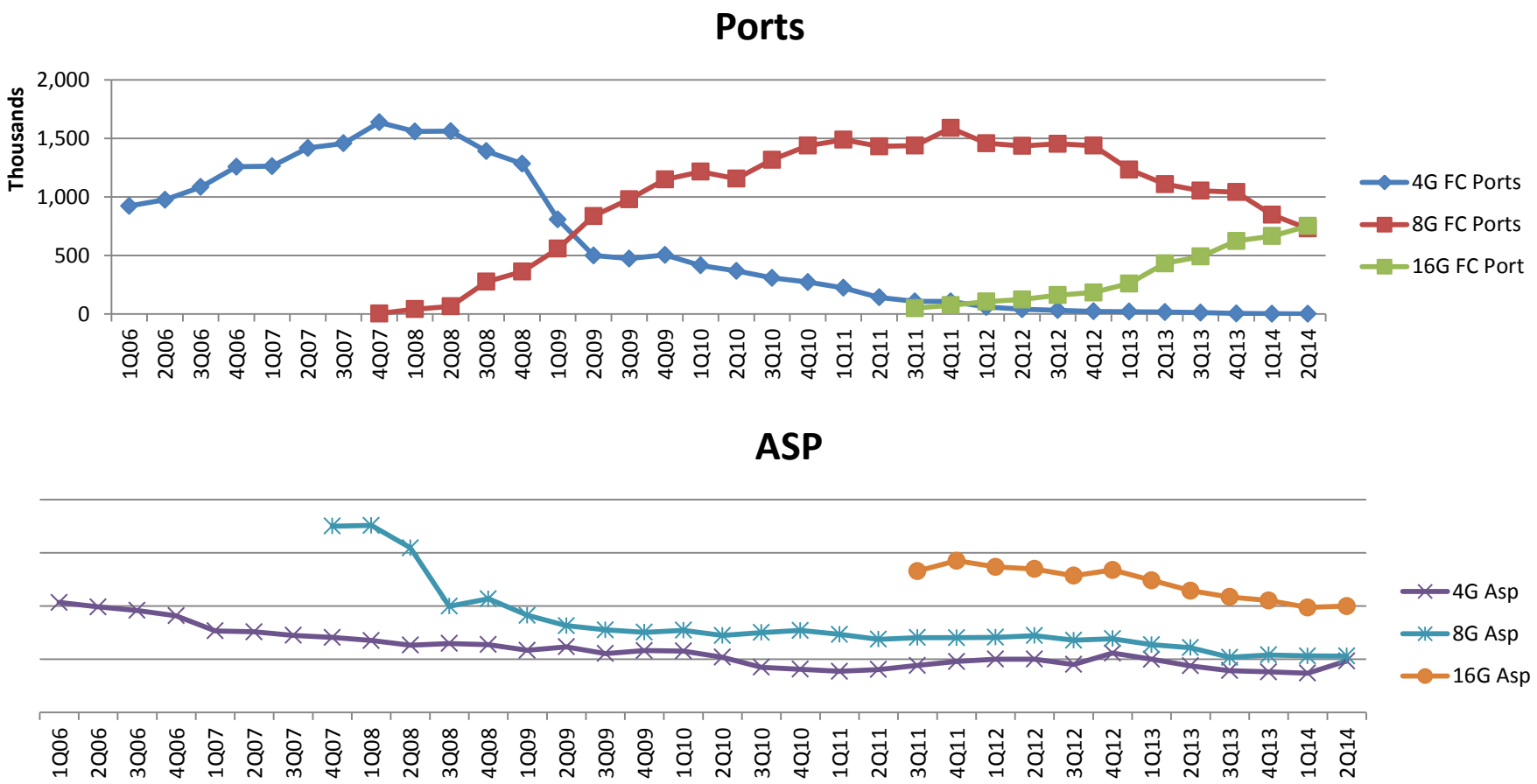
Ethernet in DC Market Transitions



Source: Dell 'Oro Ethernet Switching Report 2014

- Higher speed adoption and Transitions go hand in hand with ASP drops.

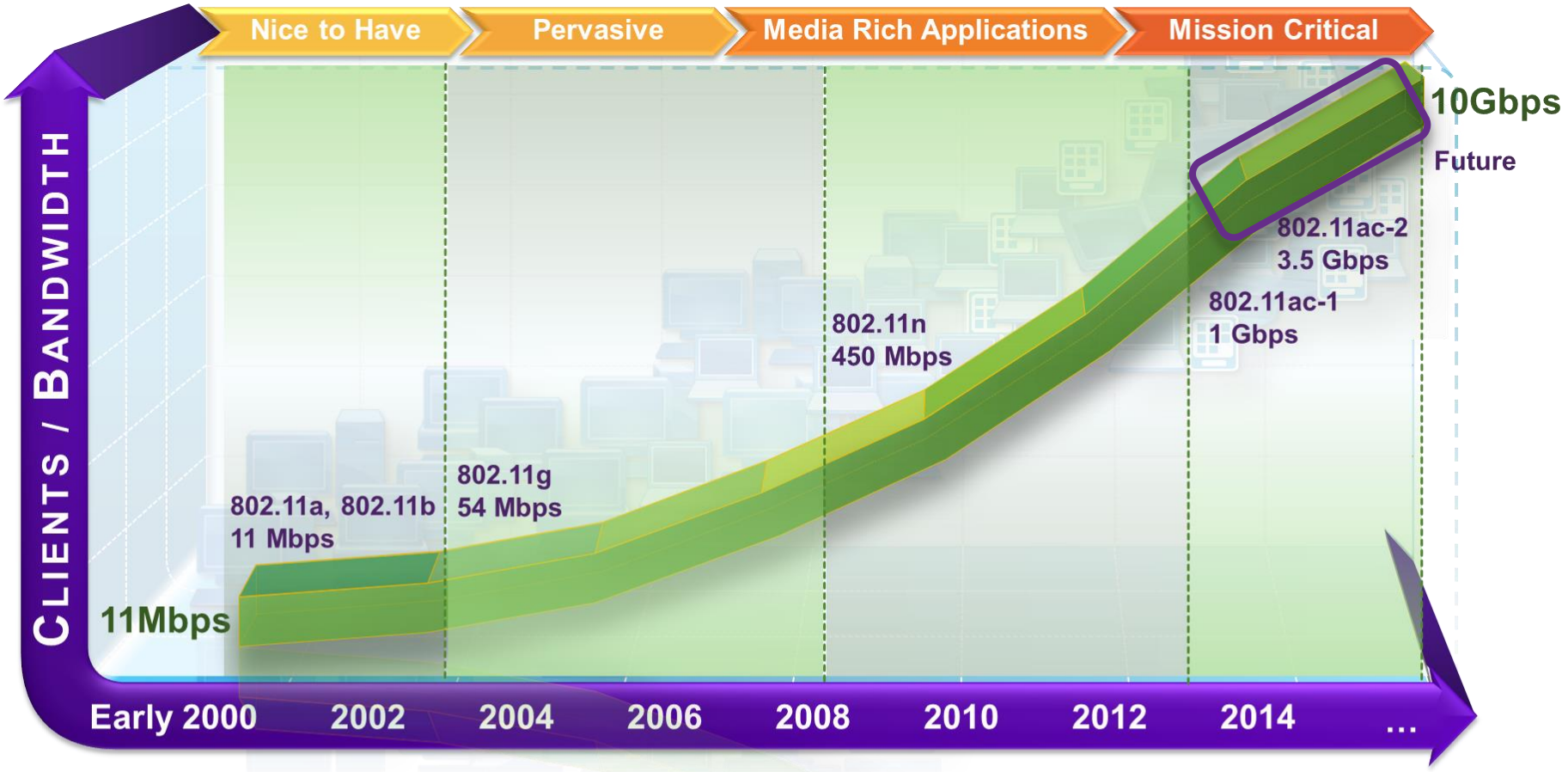
Fiber Channel Market Transitions



Source: Dell 'Oro Fiber Channel Report 2014

- Higher speed adoption and Transitions go hand in hand with ASP drops. Fastest transition when under 50% premium.

Enterprise Wireless Evolution



Enterprise Access Evolution

- Wireless APs are low footprint devices (cost, power, heat)
- 802.11ac Wave 2 drives Ethernet bandwidth beyond 1Gb/s
- Market needs Ethernet rates between 1Gb/s and 10Gb/s
  - Target speeds of 2.5Gb/s and 5Gb/s
  - Provide BASE-T Ethernet features (e.g., PoE, Autoneg, EEE)
  - Leverage Installed base of structured cable (mostly Cat 5e/6)

Summary

- 25G makes sense for data center deployments
  - Lower Cost Premiums lead to faster adoption in data center
- 2.5Gb/s and 5Gb/s for Enterprise BASE-T Access
  - Leverage installed base of structured cabling
  - Enable simpler and faster adoption of 802.11ac Wave 2