

AT&T Wireless Broadband

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Mobile Broadband - Present and Future

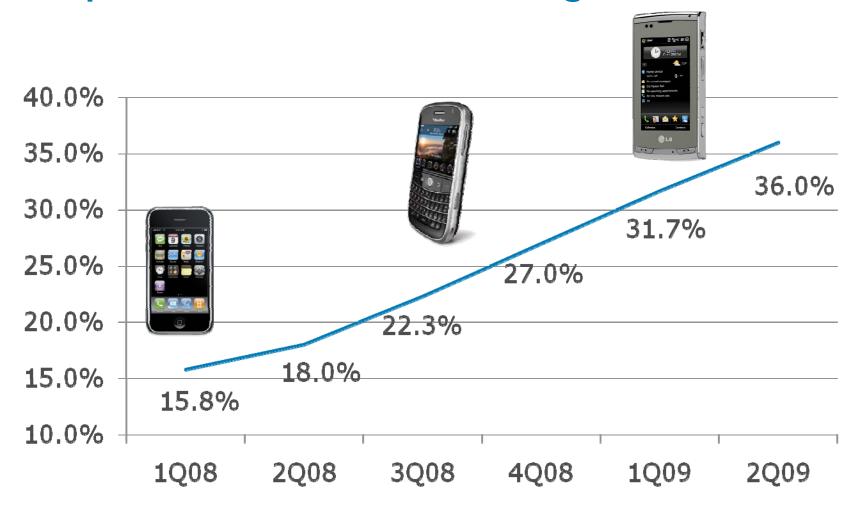
- 1 The **demand for data** on wireless networks **is exploding** at incredible rates and will continue on that trajectory for the foreseeable future; and
- 2 Technology by itself is not the solution

Therefore, the National Broadband Plan must be designed to encourage and facilitate the efficient use of networks as well as the on-going substantial private-sector investment that will be necessary to meet growing demand, such as:

- a. Allowing for the use of strong network mgmt tools to manage capacity constraints
- b. Ensuring that spectrum policies are efficient
- c. Reducing the potential for interference
- d. Avoiding requirements that will make networks less efficient



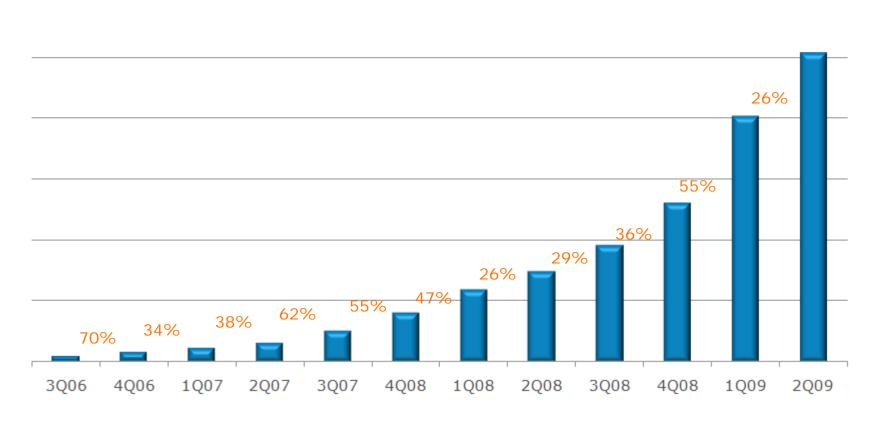
Postpaid Subscribers with Integrated Devices





Data Usage on AT&T Mobility Network

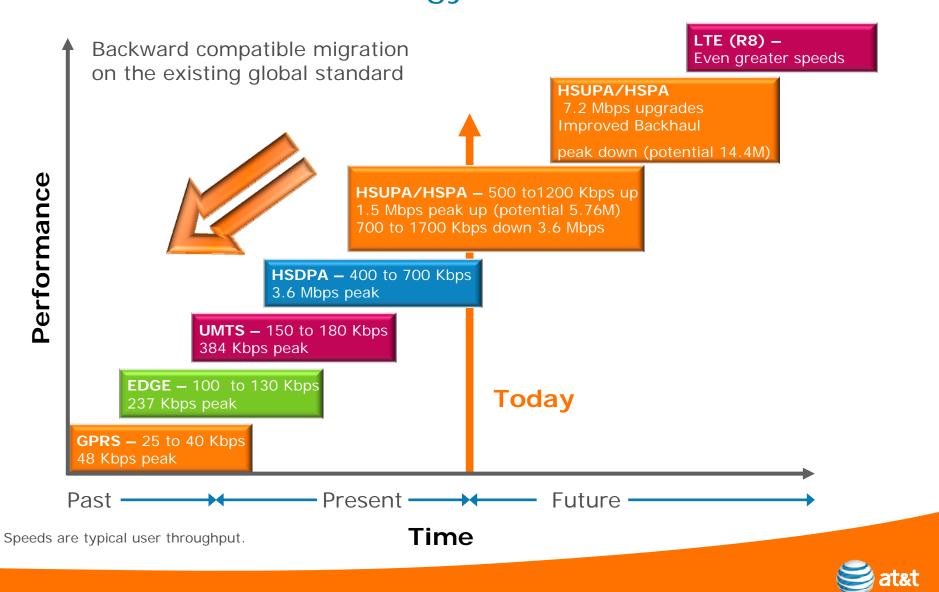
4932% growth over 12 quarters



Percentages represent quarter-over-quarter growth



AT&T's Mobile Network Evolution Continue 3GPP Technology Path



LTE Advantages

Long Term Evolution offers:	
Higher Data Rates	 Average user throughput: 3-4 times (DL), 2-3 times (UL) HSPA reference Cell-edge user throughput: 2-3 times (DL & UL) HSPA reference
Low Latency	 User plane: Less than 10 ms (RAN RTT) Control plane: Less than 100 ms (idle → active)
High Spectral Efficiency	Three times HSPA R6 baselineImproved performance for broadcast service
Simplicity	• Less signaling, auto-configuration of eNodeB

Note: LTE speeds are affected by:

- Availability of contiguous blocks of spectrum
 - Nearby band interference
 - Antenna configuration
 - Vehicle motion
 - Users in a cell
 - Terrain



Committed to improving network quality



We're focused on delivering the industry's best wireless experience

- We've invested \$20 billion+ over four years on network upgrades, spectrum and acquisitions
- We plan to spend \$17-\$18 billion in capital this year focusing on extending and enhancing wireless and wired networks
- We plan to bring 3G service to 20 new markets, and to add approximately 2,000 new cell sites



Connect people to their world, everywhere they live and work, and do it better than anyone else.

