

The Wireless Internet:

T-Mobile Perspectives on the Customer Experience

National Association of Regulatory Utility Commissioners

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Sacramento, CA

Ambre Blatter

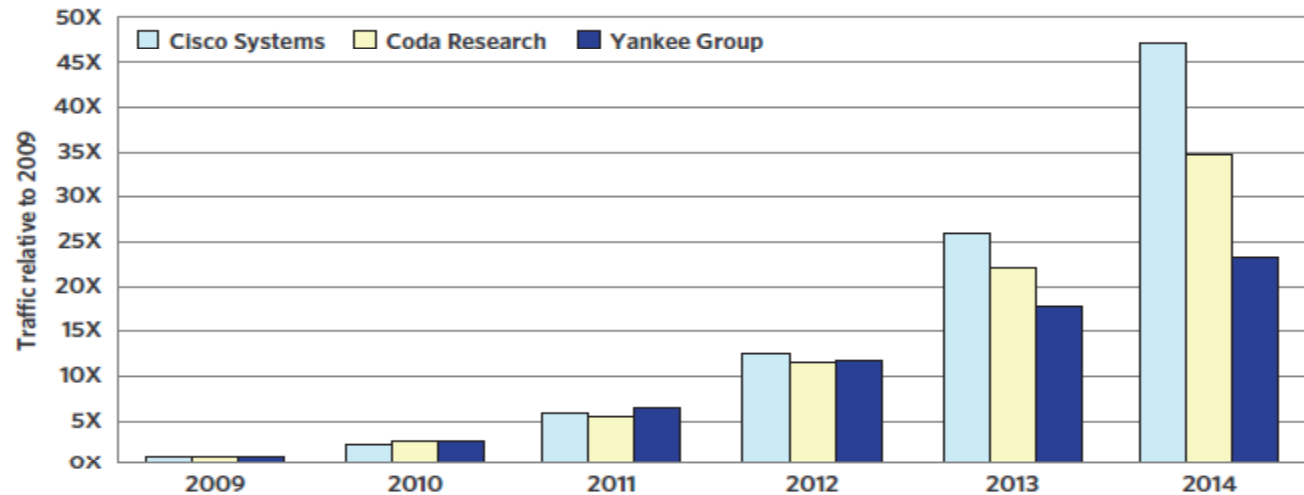
Director, Network Engineering & Operations

T-Mobile USA

 T-Mobile® stick together®

Why Wireless Broadband Matters

*Exhibit 5-A:
Forecasted Mobile
Data Traffic in
North America*

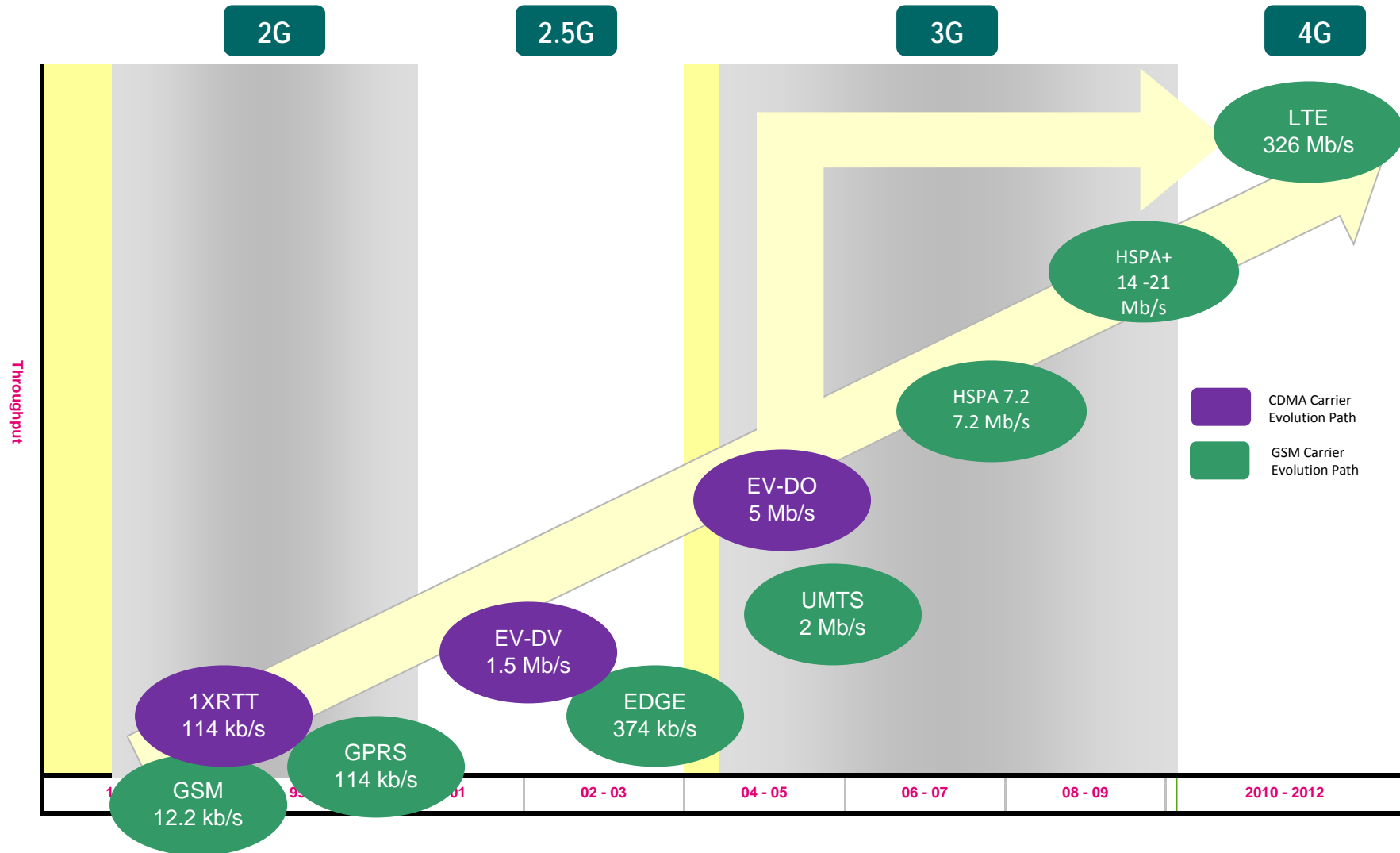


Source: National Broadband Plan, p. 76

The United States should lead the world in mobile innovation, with the fastest and most extensive wireless networks of any nation.

Goal #2, National Broadband Plan

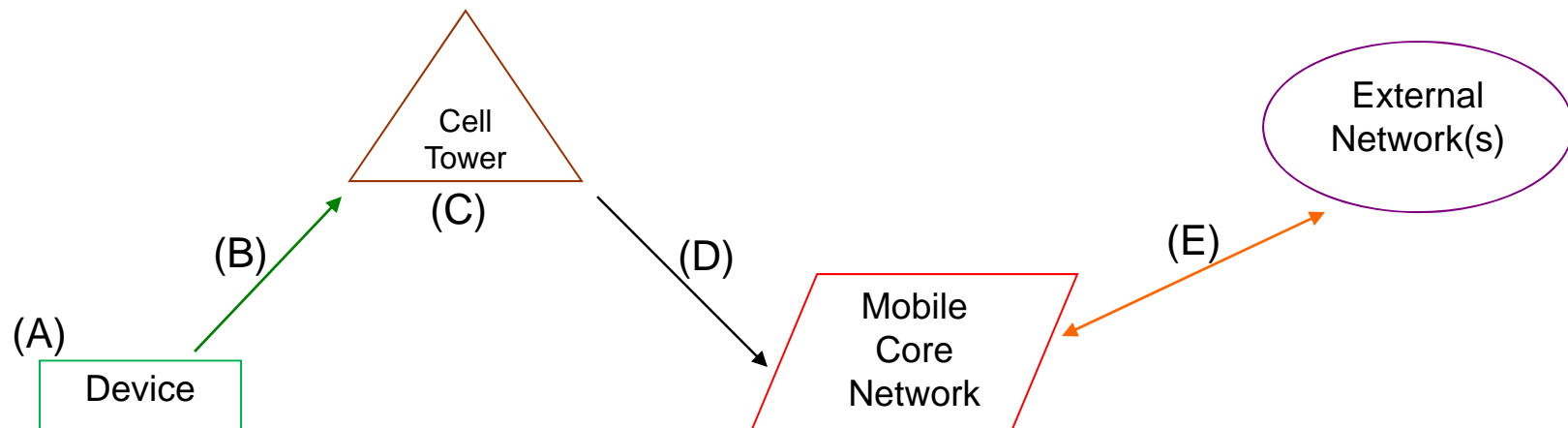
Wireless Data Technology Paths



End-to-End View of Network

- (A) Robust Devices (battery, memory, processor, etc.)
- (B) Spectrum
- (C) Cell Sites
- (D) Backhaul
- (E) Interconnection

... ALL IMPACT THE END USER EXPERIENCE.



The Wireless Data Experience: Complicating Factors

➤ Mobility

- Because customers can change location easily, capacity requirements in a location can change quickly

➤ Spectrum Bandwidth Limitations

- Because radio spectrum has less bandwidth potential than fiber, usage by one customer can more easily affect the experience of other customers

➤ External Factors

- Weather, terrain, foliage all affect the customer experience, and all are variable

The Wireless Data Experience: Policy Implications

Important Determinants of the Wireless Data Experience Include Spectrum, Siting, and Backhaul

- Spectrum availability and use is subject to FCC and Congressional control
- Siting is subject to various types of regulation at the local, state, and national levels
- Backhaul purchased from ILECs is subject to varying levels of control by state utility commissions and the FCC

The Wireless Data Experience: The Question for Policymakers

What Public Policies Will Enhance the Ability of Customers to Experience the Internet on a Mobile Device in an Effective and Meaningful Way?

Thank You!

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