Response to Call for Presentations

UGIC 2011

Title: “Is Utah Ready for 4G?*”*

Abstract

Forbes Magazine recently ranked Utah first in the nation for business, including criteria for technology, government efficiency and regulatory sensibility. Toward these aims, improvement in high-speed broadband coverage can be advanced by GIS tools that strengthen relationships between networks and municipal land use controls. In Utah, the Broadband Mapping, Analysis and Planning Project is part of FCC-sponsored national effort that also promotes coverage maps using Esri-based BroadbandStat software. Eventually, the wireless component of connectivity goals may transcend rural/urban investment issues because of combined demand for mobile access and 4G capability. Meanwhile, evolution of GIS-based signal simulation algorithms addresses some issues in wireless ephemera, even as transition from macro to pico/femto cell networks reduces some classical line-of-sight problems. However, using GIS to integrate signal simulation with municipal land use plans can more explicitly link customer density to facility siting policy. Indeed, preventing download bottlenecks can benefit from visualizing wireless signal as a vital, though transparent community infrastructure. This review of wireless-oriented GIS tools also includes recent investigation into the readiness of Utah communities to regulate mobile broadband as something more than cell tower aesthetics. Such cooperation fits with business rankings that measure community participation in the global information age.

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