

Impacts of farming big data for society, farmers, policy and research

Terry Griffin, Ph.D. CCA

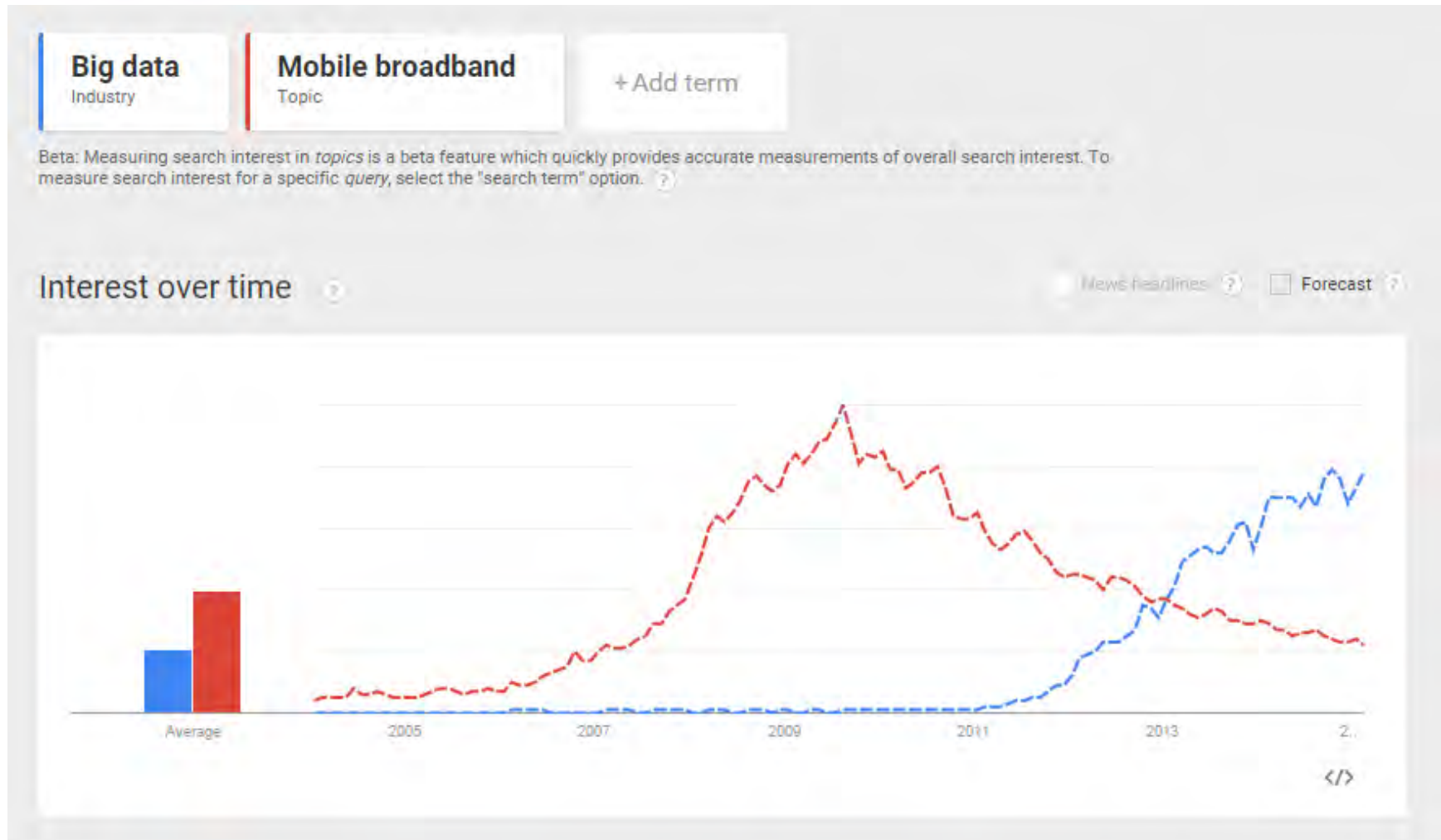
Cropping Systems Economist and Assistant Professor

Department of Agricultural Economics

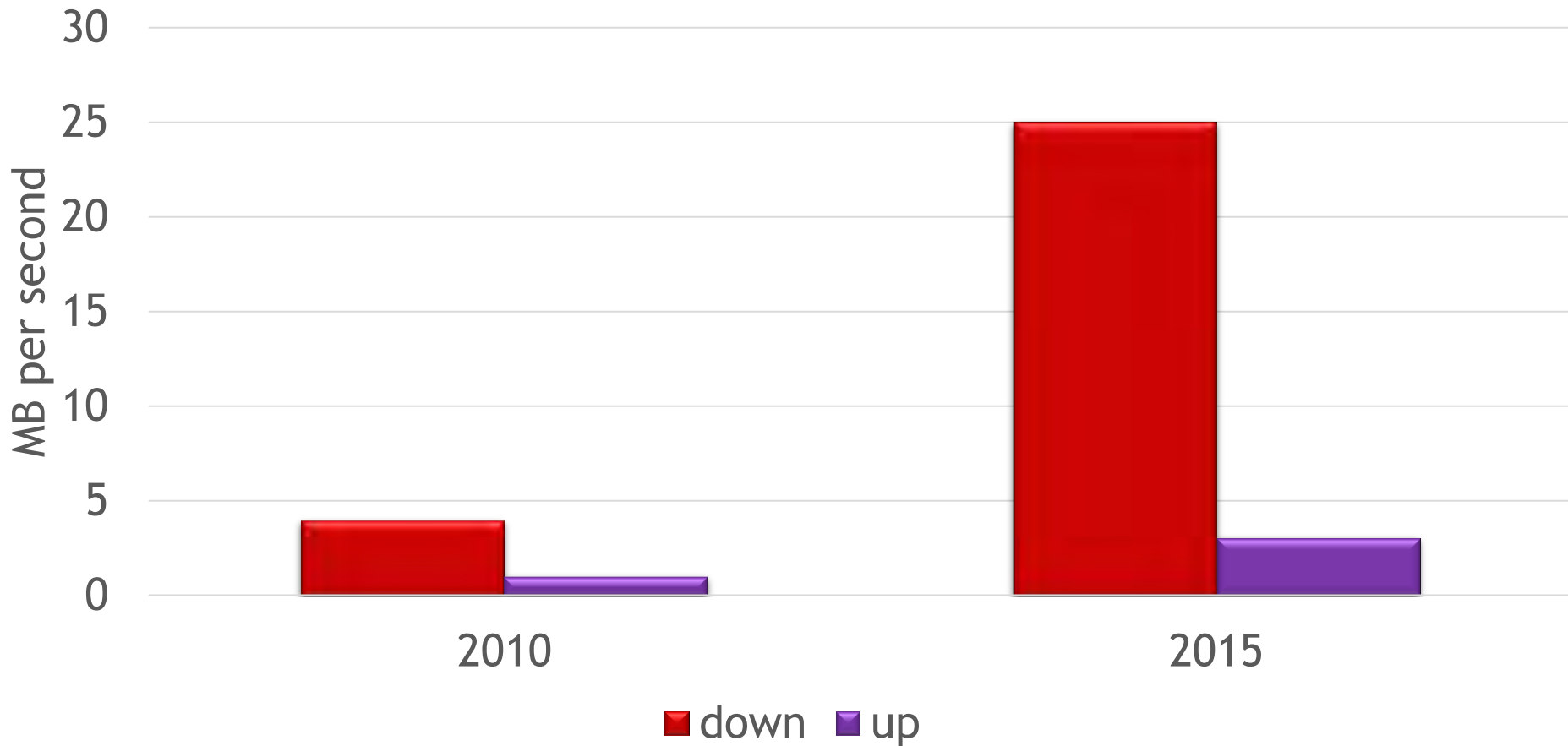
Kansas State University

@Space_Plowboy

Soil Big Data
Canberra, Australia
25 June 2014
#soilbigdata2015

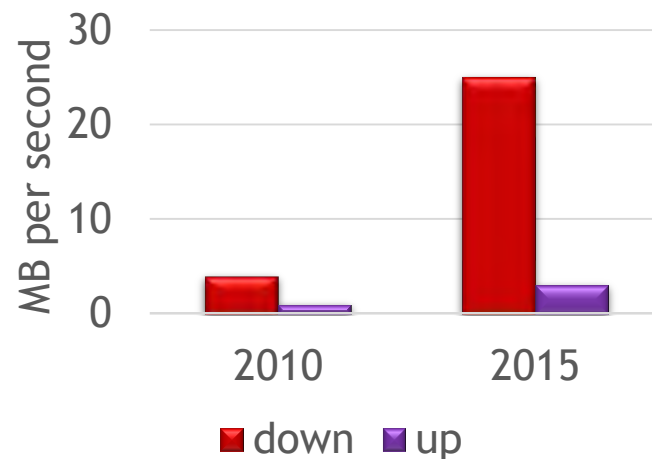


Are FCC-Defined Broadband Speed Enough?



Is Broadband Speeds Enough?

- UAV imagery example (Buschermohle, U of Tennessee)
 - 16 ha with 17 pictures ~ 111 MB (almost 7 MB/ha)
 - 37 ha, 152 pictures ~450MB (almost 12 MB/ha)
- Other sensor and prescription data (Shearer, tOSU)
 - Spraying 0.7 MB/ha
 - Planting 13 MB/ha
 - Yield data 10 MB/ha
 - Soil /Fertility Data 1.6 MB/ha
 - Prescription files 0.02 MB/ha





Scott Kelly @StationCDRKelly · Jun 23

#Aurora I don't think I will ever see another quite like you again. #YearInSpace

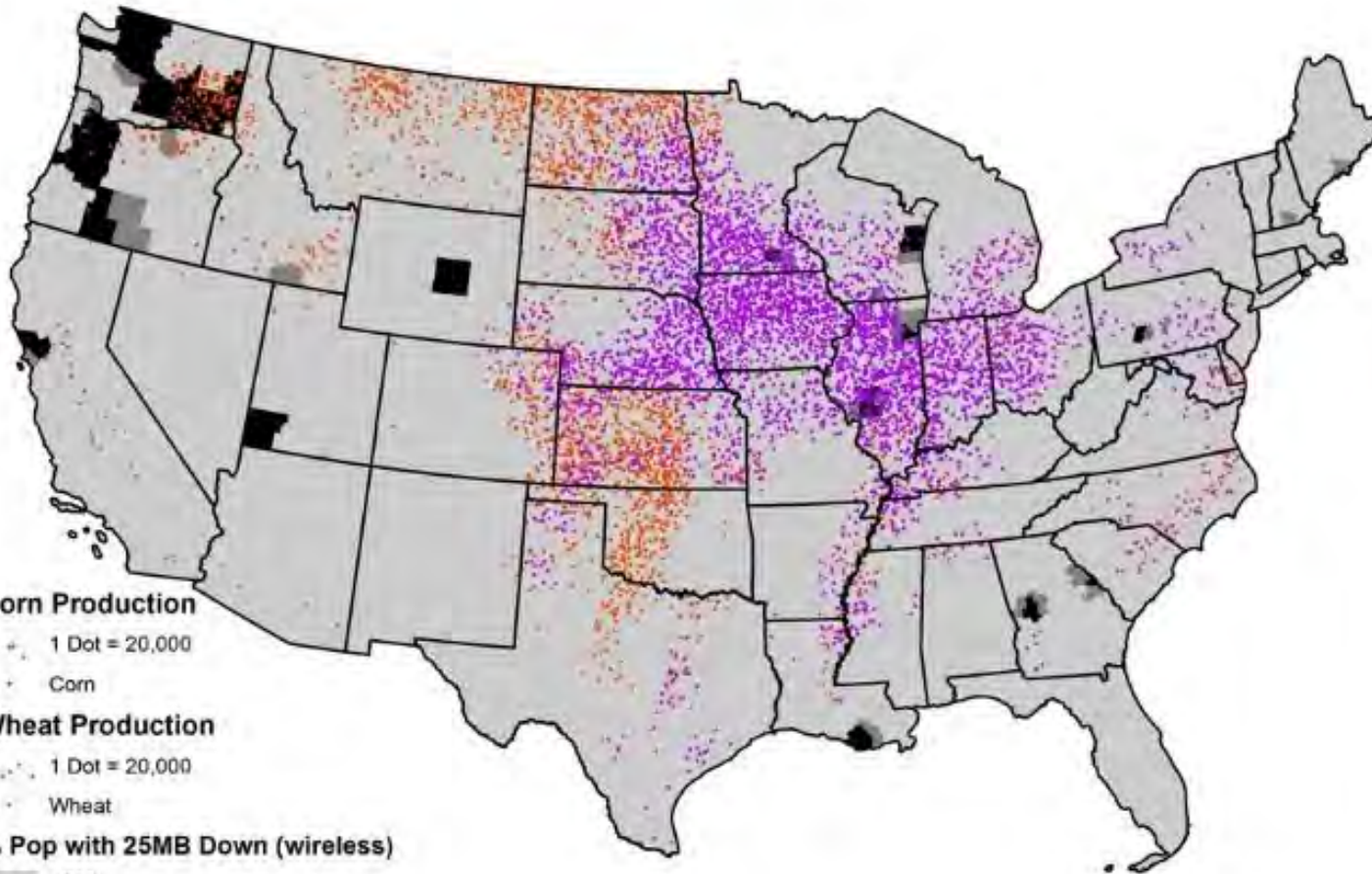


2K



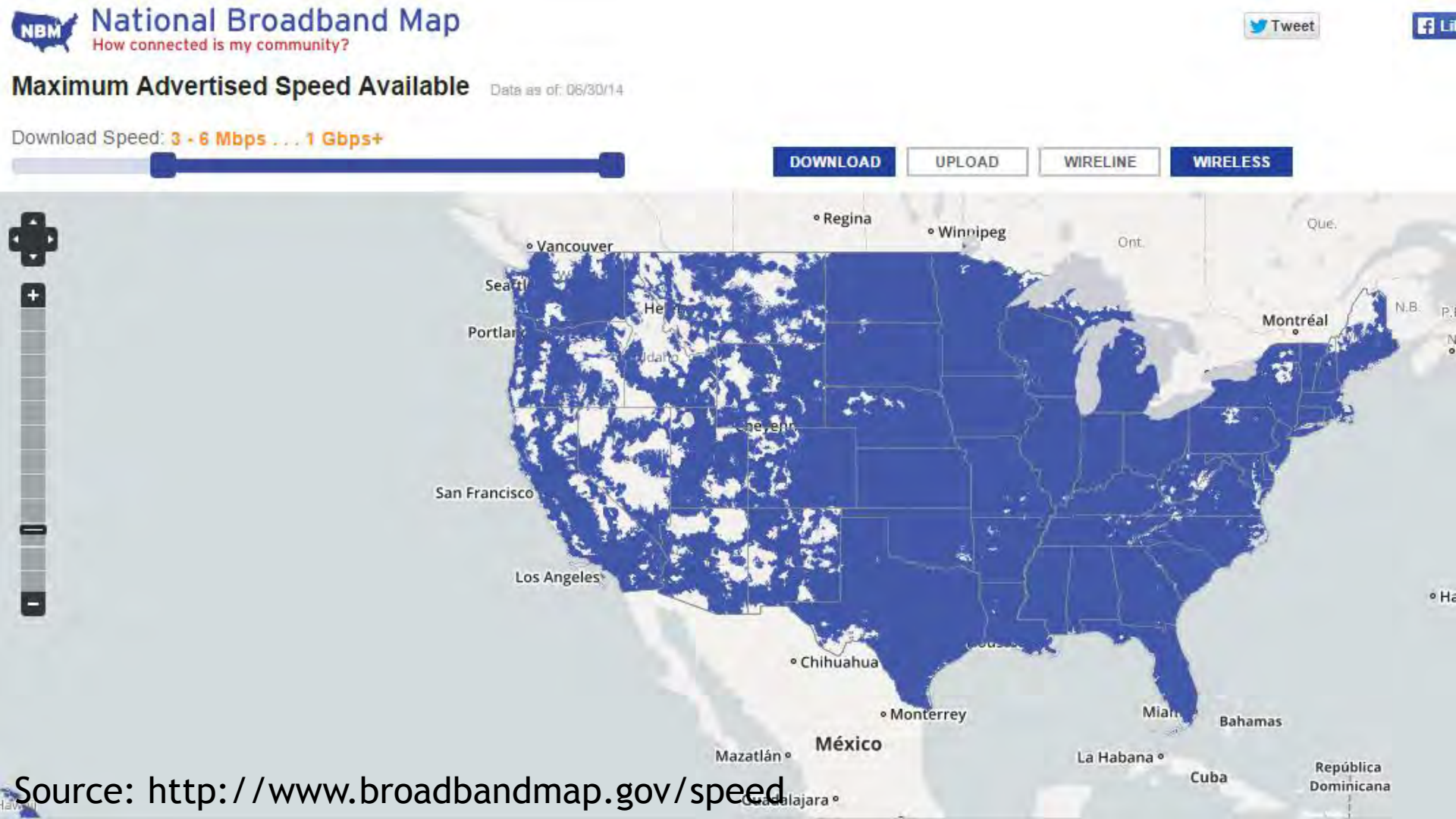
2.8K





Source: Whitacre, Mark, & Griffin 2014

FCC Broadband Definition: 2010 to 2014



Source: <http://www.broadbandmap.gov/speed>

FCC Broadband Definition: 2015

NBM National Broadband Map
How connected is my community?

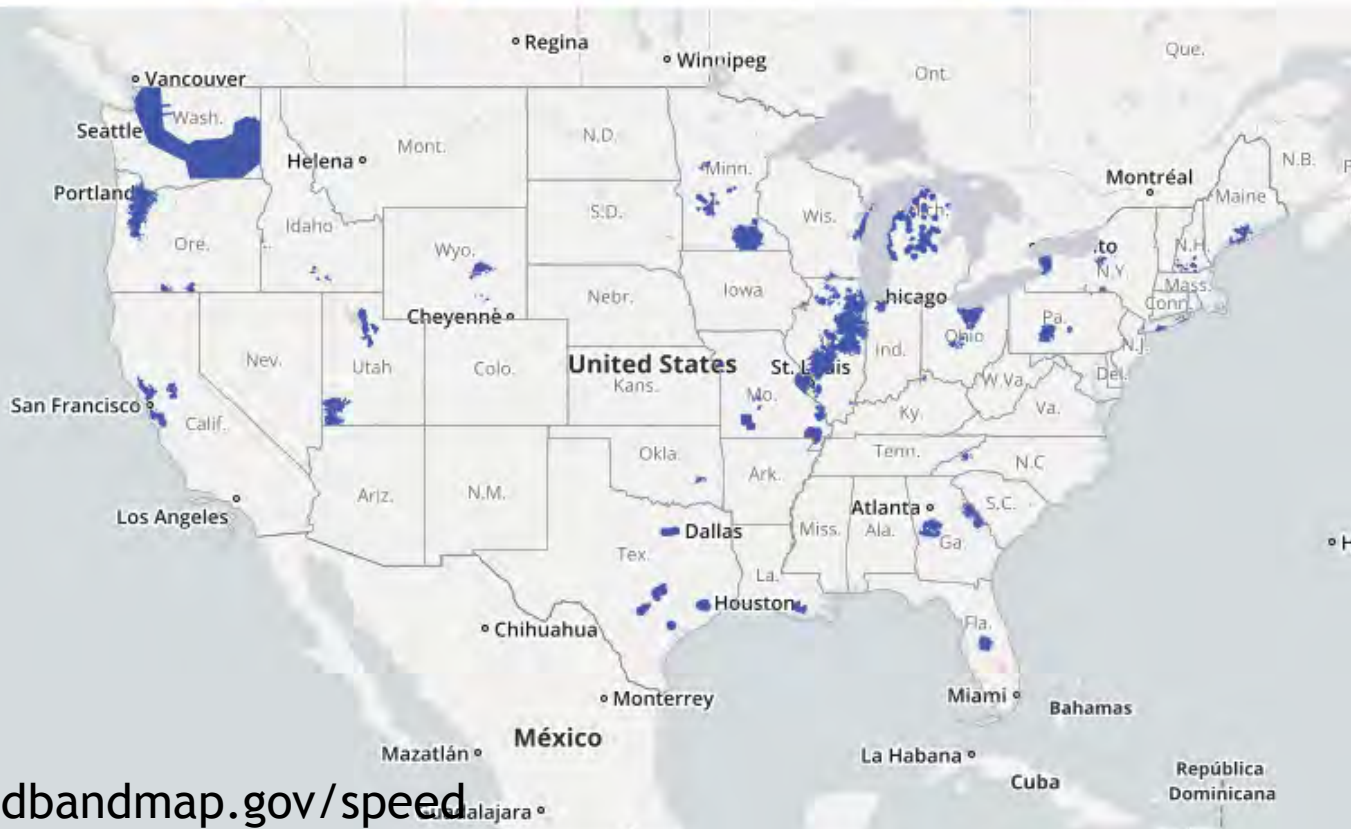


Maximum Advertised Speed Available Data as of: 06/30/14

Download Speed: **25 - 50 Mbps . . . 1 Gbps+**

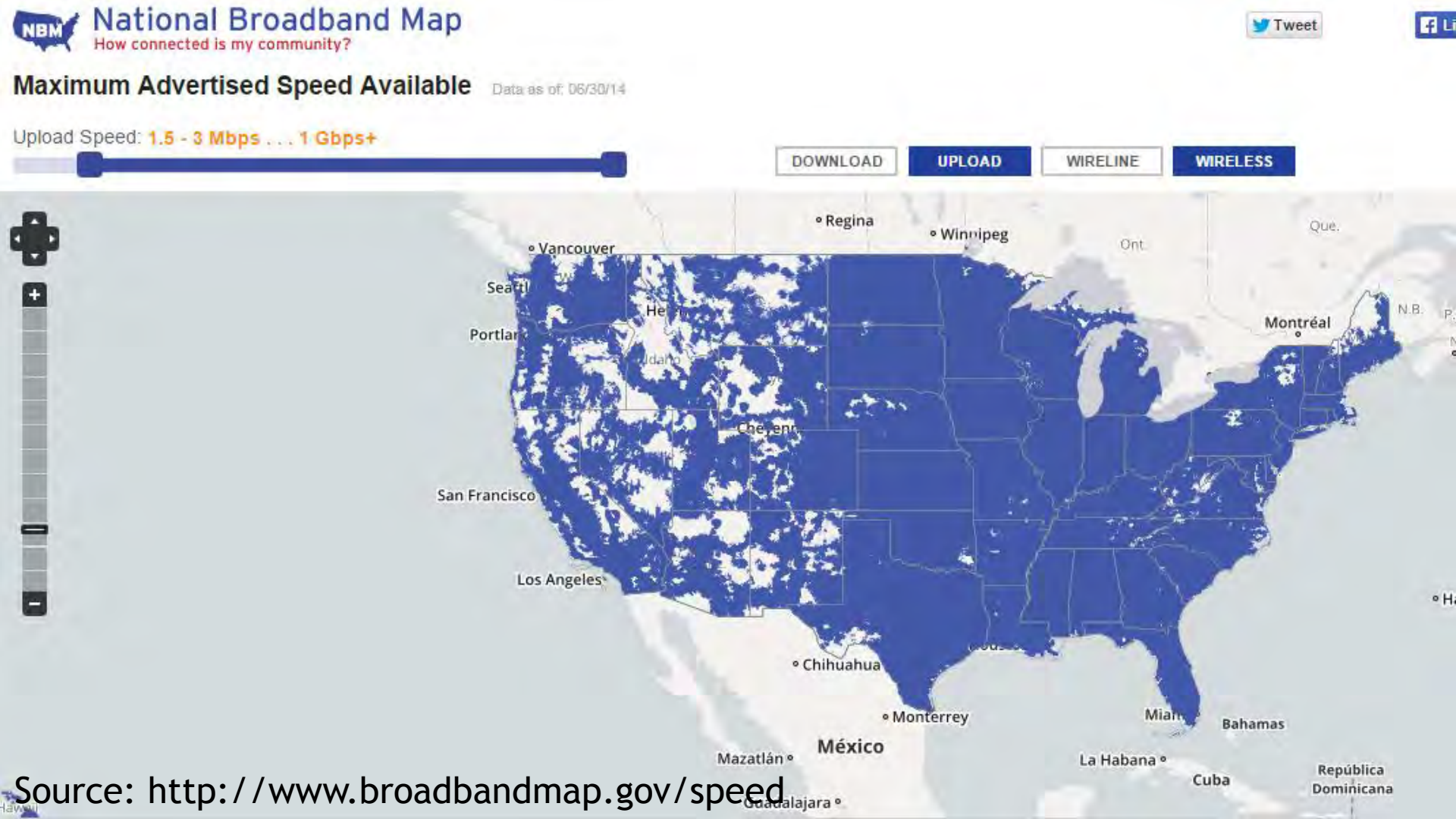


- DOWNLOAD**
- UPLOAD
- WIREFINE
- WIRELESS**

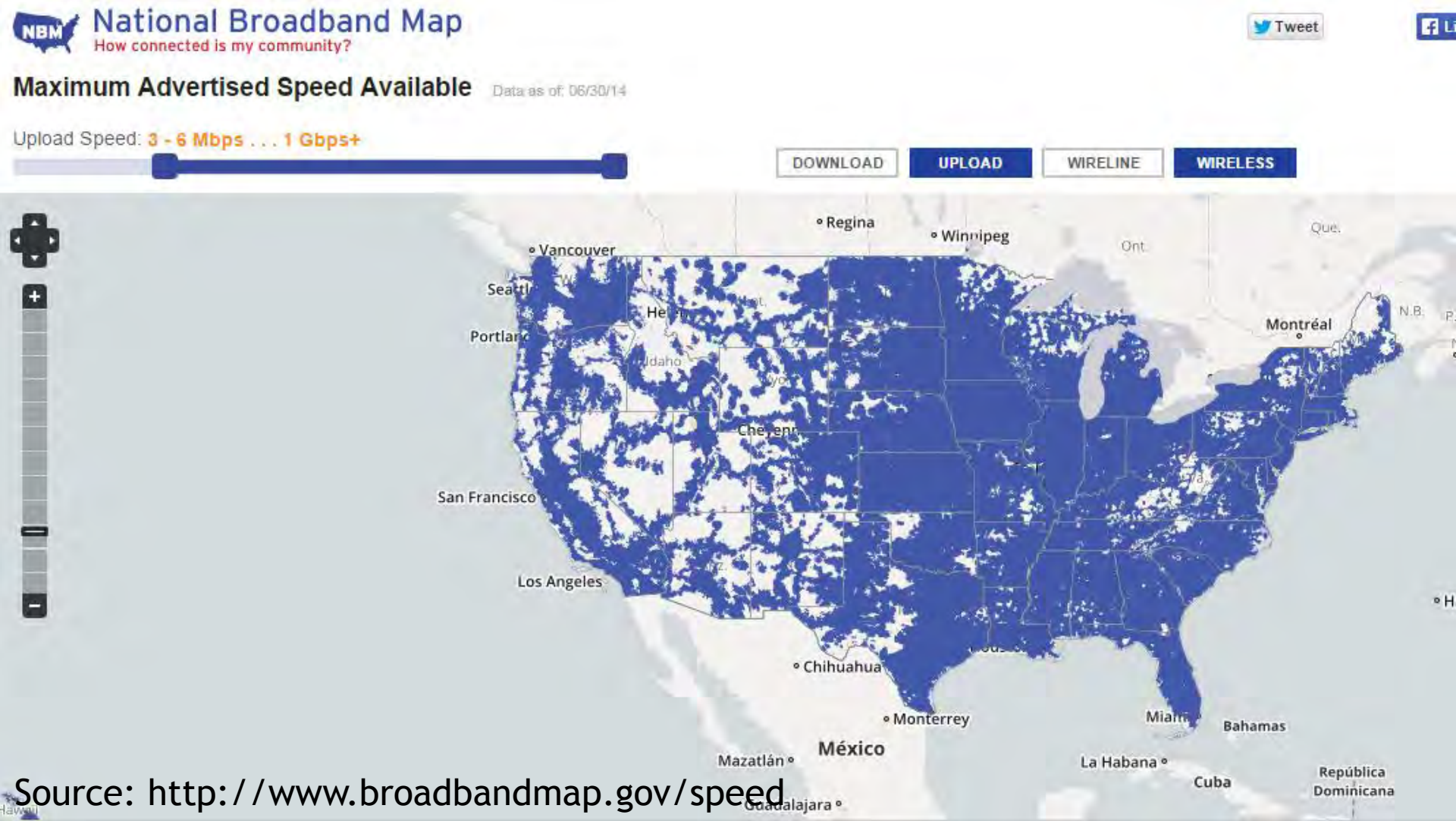


Source: <http://www.broadbandmap.gov/speed>

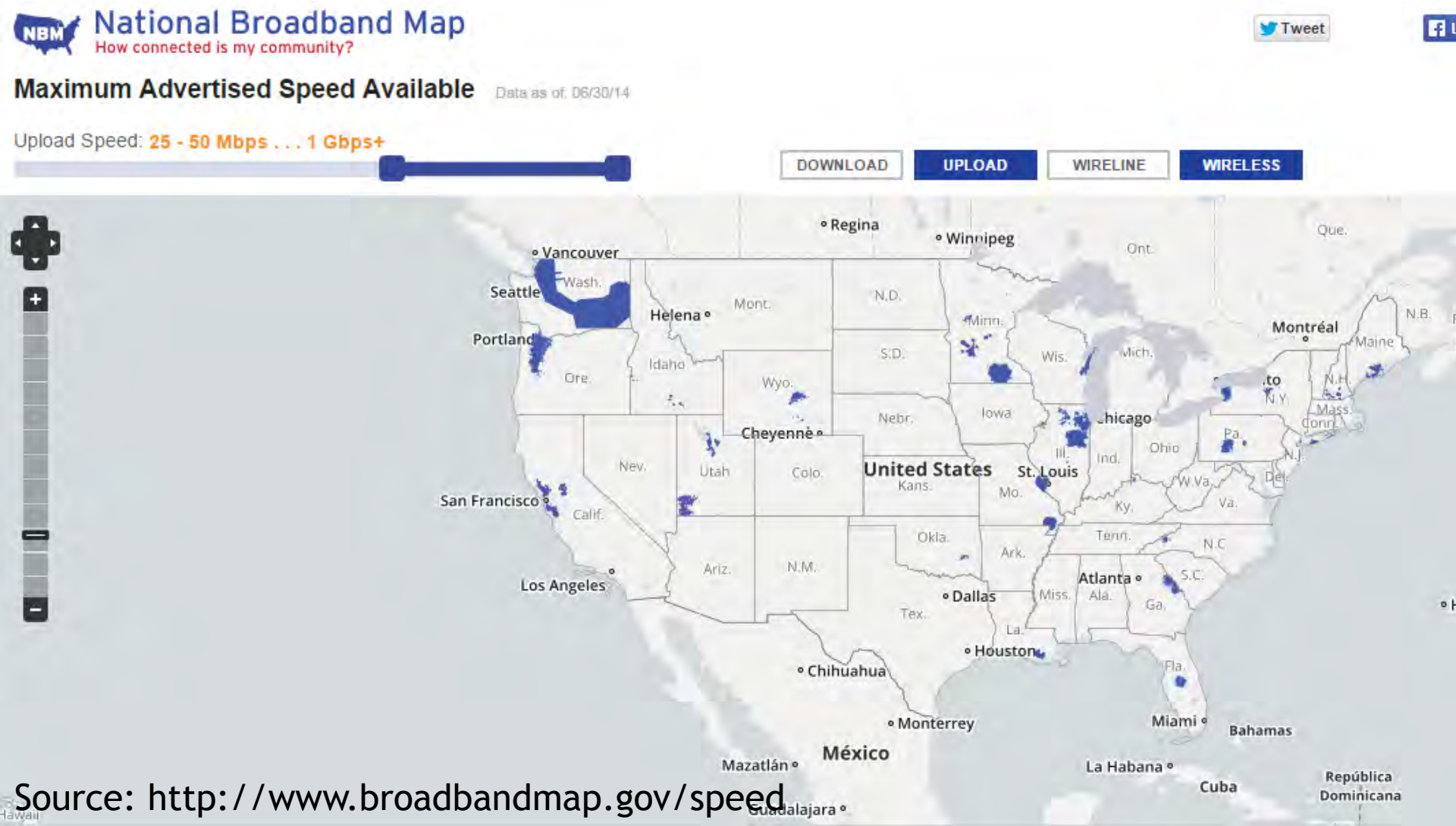
FCC Broadband Definition: 2010 to 2014



FCC Broadband Definition: 2015



What if upload similar to download?



Terry Griffin, Ph.D.
Kansas State University
501.249.6360
twgriffin@ksu.edu
@Space_Plowboy