COUNTY OF EL DORADO BROADBAND WORKSHOP

VALLEY VISION

Connect. Partner. Impact.

Valley Vision

September 1, 2015

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Overview

☐ Valley Vision's role

☐ The value of broadband planning

☐ The Yolo County experience

☐ Broadband Resources and Models

Valley Vision

- ❑ Regional nonprofit civic leadership organization serving primarily the six-county Sacramento region
- ❑ Projects include: Next Economy regional prosperity strategy, regional food and ag system, workforce initiatives, community health needs assessments, broadband
- ❑ Manages the Connected Capital Area Broadband Consortium (CCABC) for Sacramento, Sutter, Yolo and Yuba counties

CCABC Focus

- Collaboration with local, regional, state and federal partners

- Technical assistance to local partners

- Communications on best practices, resources, policies

- Partnership with California Emerging Technology Fund: School to Home, AgTech Pilot

- Provides a voice for the issue and the region

Why Is Broadband Important?

- Economic Development
- Commerce
- Agriculture
- Schools/Homework
- Adult Education & Training

- Digital Literacy & Equity
- Healthcare
- Public Safety
- Government Services
- Entertainment
- Telecommuting

Benefits of Broadband Planning

- Documentation of priority issues and infrastructure gaps and assets
- Data on both households and businesses
- Identification of resources and needed policy changes
- Platform to educate policymakers and funders
- The roadmap to mobilize leadership and stakeholders for action

Yolo Broadband Strategic Plan

- Initial need identified through CCABC planning process
- Yolo Leaders Forum took on issue in 2013
- Yolo County LAFCo – project manager under shared services
- "Planning for Next-Generation Broadband" for four cities and the county

Dial-Up – 56Kbps

- Legacy technology
- Shared Technology

ADSL – 10Meg

- First Generation of DSL
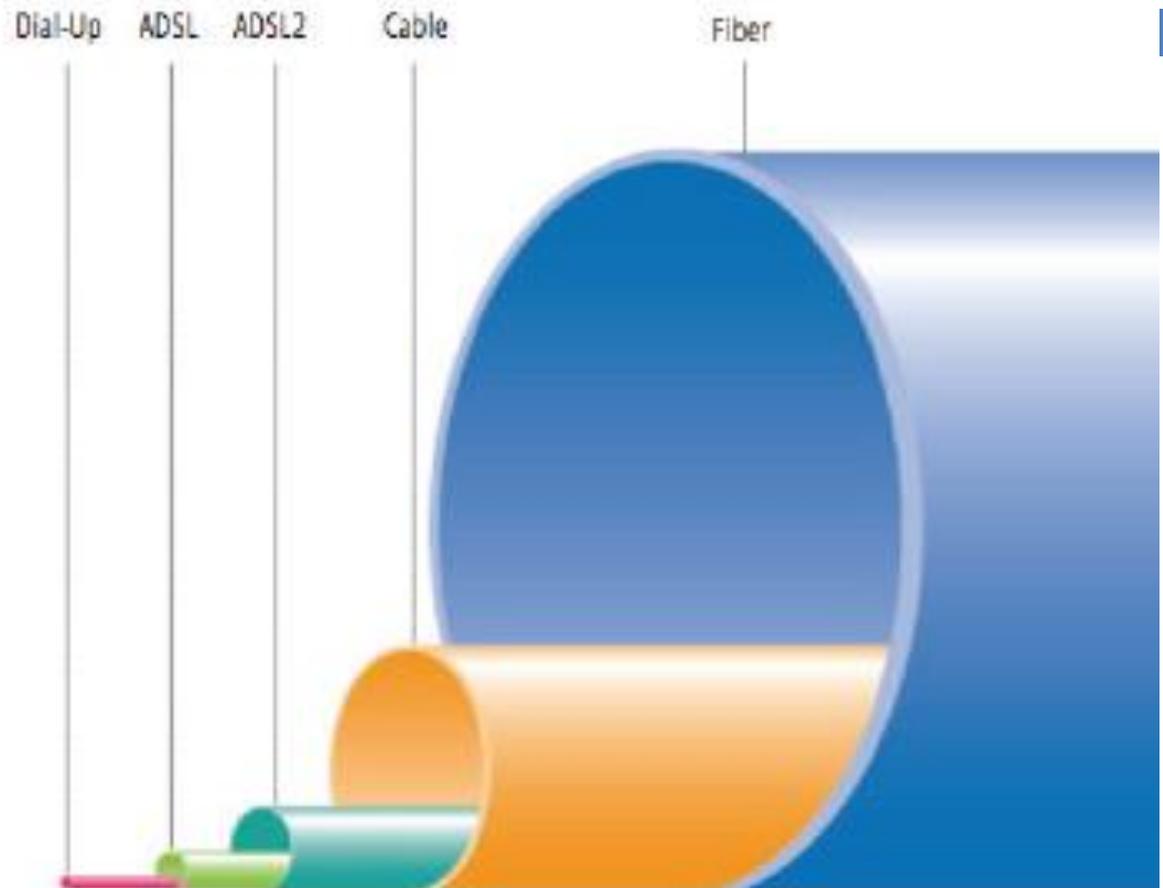- Shared Technology

ADSL2 – 24Meg

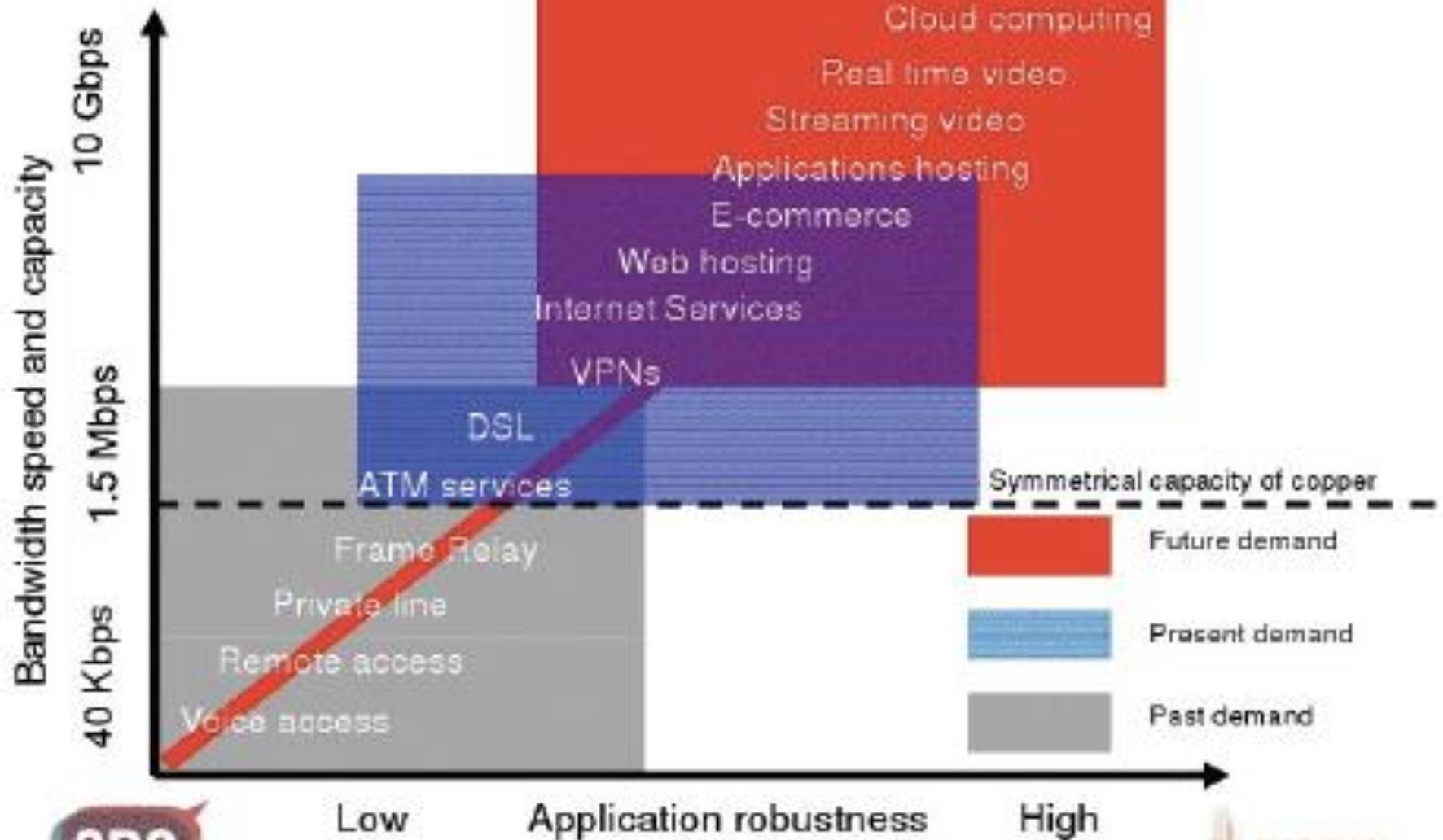- Second Generation DSL
- Shared Technology

Cable – 150Meg

- DOCSIS 3.0
- Shared Technology

Fiber – 1Gbps

- PON, Active Ethernet
- Shared and
- Dedicated Technology

Users' Applications Demand Growth

Bandwidth speed and capacity (vertical axis): 40 Kbps, 1.5 Mbps, 10 Gbps

Application robustness (horizontal axis): Low, High

- Cloud computing
- Real time video
- Streaming video
- Applications hosting
- E-commerce
- Web hosting
- Internet Services
- VPNs
- DSL
- ATM services
- Frame Relay
- Private line
- Remote access
- Voice access

Symmetrical capacity of copper

Legend:
- Future demand
- Present demand
- Past demand

CPC   WOWC

Yolo Broadband Strategic Plan Catalysts

- Lack of market competition driving investment in Yolo

- Missed opportunities (2012 CENIC build through Yolo, Woodland-Davis Water Project, ARRA grant, etc.)

- Needed collective focus

- Partners for grant funding

- Frustration re: CPUC Broadband Availability Maps

- Collaboration to bring attention to local issues

- Economic Development imperative – both urban and high tech agriculture

Strategic Plan Goals

- Identify broadband gaps

- Educate the community on broadband

- Positively affect broadband infrastructure and services

- Identify key short, mid and long-term initiatives

- Unified technology polices

- Identify key strategic broadband investments

Yolo Broadband Strategic Plan Process

- Hired consultant via RFP process ($42,600)

- Took approx. 1 year + a lot of staff time

- Conducted surveys/speed test data

- Stakeholder Engagement

- Action plan for each city and unincorporated communities

Strategic Plan Tasks

- Community Profiles (i.e. Davis, West Sacramento, Winters, Woodland, and unincorporated areas of Yolo County):

  - Inventory of Existing Broadband Assets
  - Needs Assessment – identify Broadband Gaps
  - Identify Broadband Demand – goals for economic development, agriculture, social justice, etc.

- Validate/Correct CPUC Coverage Map

- Outline and Prioritize Community Strategies including "middle mile" and "last mile" access

- Action Plan and Resources – a "road map" for each community's next steps for planning, funding, grants

Plan Findings

- 1,000+ speed test survey results

- Residential - half of survey results indicate underserved where availability maps show served (includes cities)

- Businesses - larger businesses can pay to get service they need, but small to medium just make due **YET SMALL TO MEDIUM BUSINESSES CREATE 5X MORE JOBS**

- Disparity in service – even in cities **THIS IS NOT JUST A RURAL ISSUE**

- Agriculture industry reports broadband is #1 need

Broadband Speed in City of Winters

Figure 7.2: Residential Wireline Broadband Availability By Speed (Download Speeds)
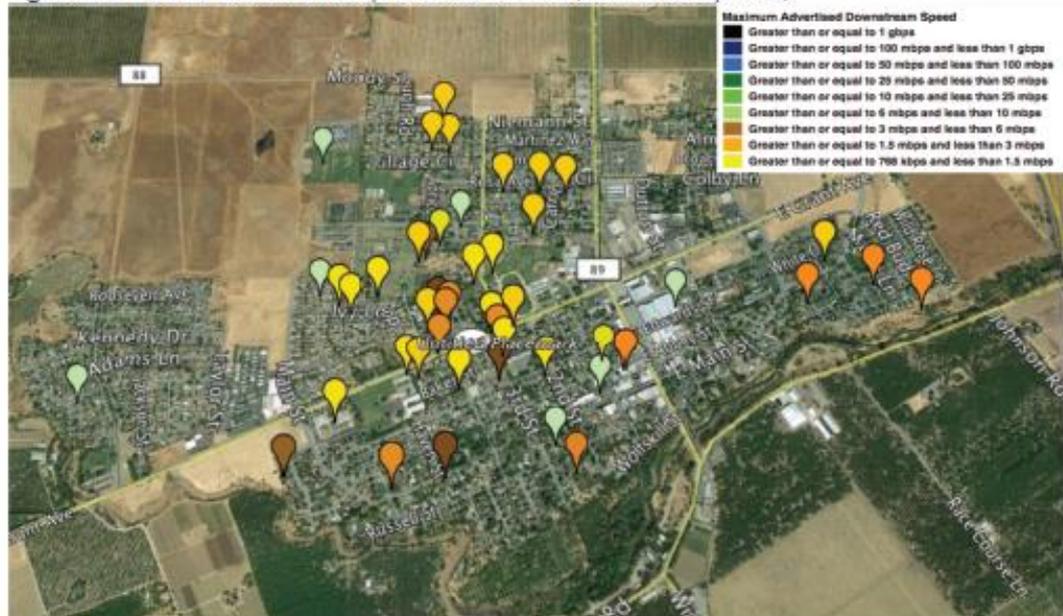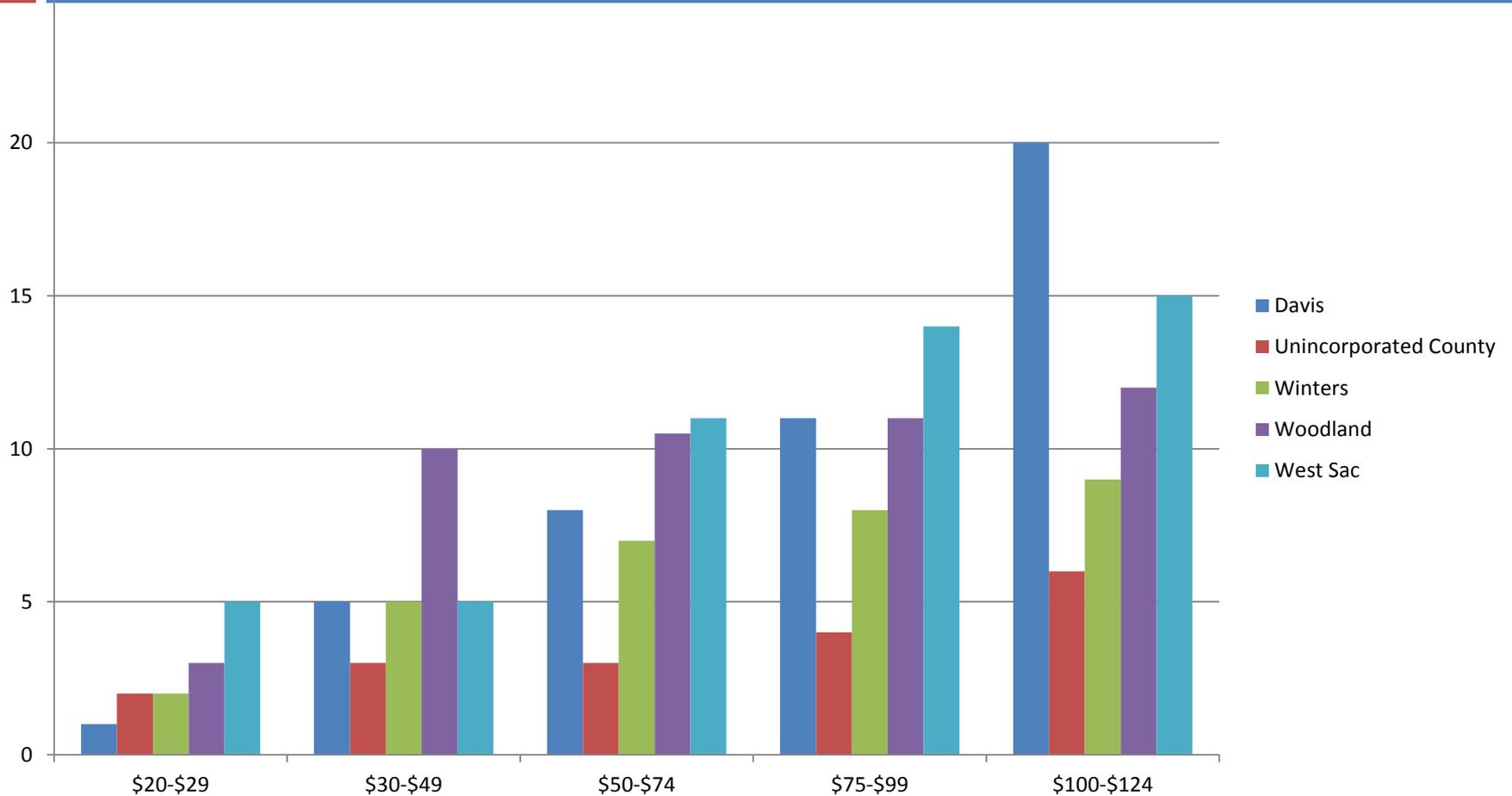

← What providers report

Figure 7.3: Residential Wireline Speed Test Results (Download Speeds)

← Actual speed tests

Monthly Cost Versus Speeds (in Mbps) Reported

Process Challenges

- Be realistic about baseline data

  (providers won't give you anything)

- It's hard to get internet speed test data from people without internet access

  (duh)

- Ability for agencies to make change is still limited

  (where's the $$$?)

- CPUC Mapping –

  (CPUC staff is great about checking data sets, but what happens in the next cycle? We can't keep up)

Challenges (cont.)
In Local Gov't Nobody "Owns" This Stuff

- Broadband doesn't belong to any one department (part econ devt, IT, planning, PW, even our County Librarian)

- We know where our roads, water/sewer lines are, etc, BUT

- We don't know where broadband infrastructure is - and you can't get the info

- Cultural shift – agencies need to think of broadband as essential piece of infrastructure (just like water, sewer and electricity)

- Find a place in your organization to own it!

Positive Outcomes

- Broadband has become a council/BOS priority issue

- Staff awareness - cultural shift to plan for broadband as essential public infrastructure

- Agencies will adopt broadband policies into their General Plans to create framework (i.e. install conduit with public and private projects, dig once, open trench, engineering standards, etc.)

- Advocacy and funding

- State/investor attention to Yolo

- LAFCo continuing role to support agencies' next steps and continue coordination meetings
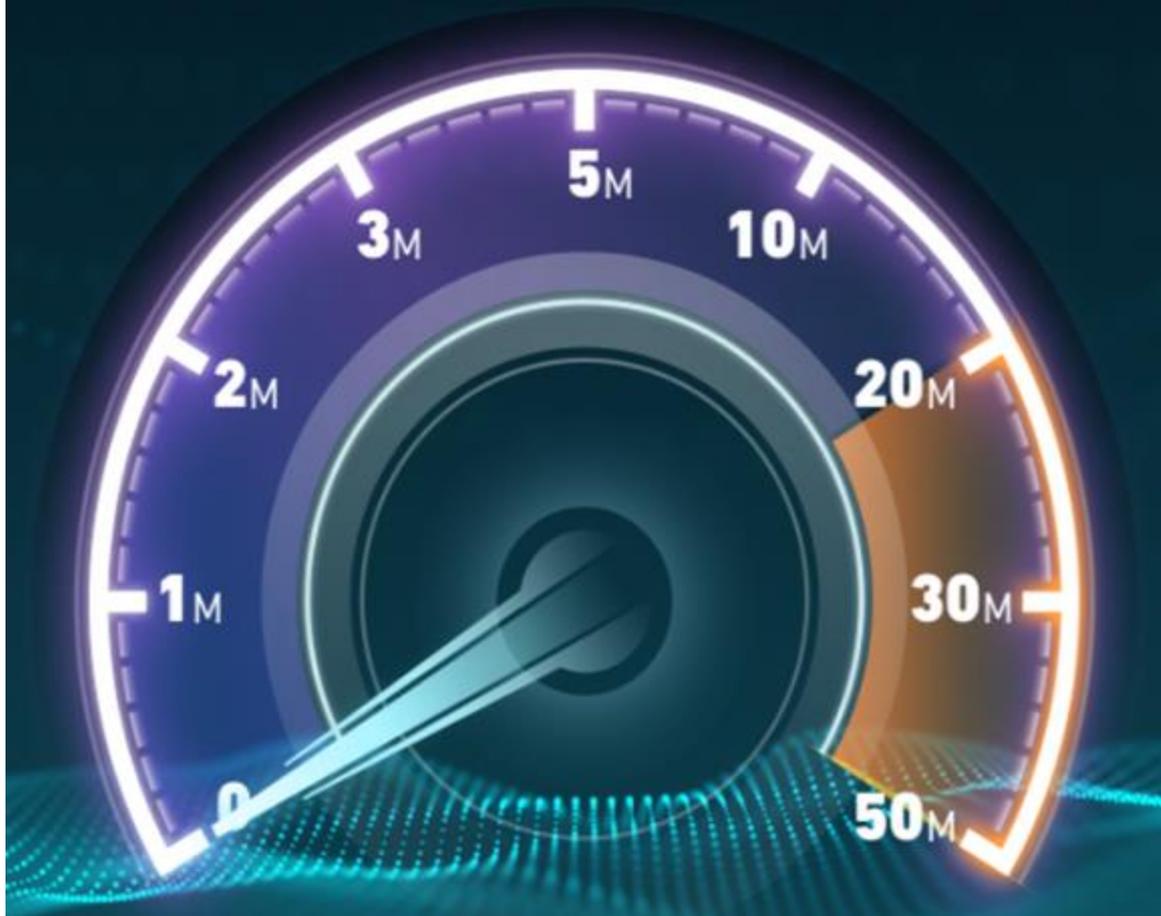
FCC now defines "Broadband" as:

- **>25 mbps download**

- **>3 mbps upload**

Innovative Approach

- Lit San Leandro – partnership with City and OSISoft, one of largest employers

- City – license agreement to allow installation of fiber loop using City's existing conduit

- Got $2.1 million EDA grant to expand fiber network

- City will receive approximately 10% of fiber capacity

Resources

- Counties with good policies and ordinances – Humboldt, Santa Cruz, Mono, CETF Resource Guide

- FirstNet – federal public safety network

- Next Century Cities – tools and support

http://nextcenturycities.org/about-ncc/

QUESTIONS AND COMMENTS

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