Sacramento County Broadband Assessment

29 November 2018



California minimum 6 Mbps download (AB 1665)

1 Mbps upload

FCC Minimum

10 Mbps download 1 Mbps upload



FCC Baseline, **USDA Minimum** 25 Mbps download 3 Mbps upload



MBEP/CCBC standard, FCC **Above Baseline**

100 Mbps download 20 Mbps upload



FCC Gigabit

1 gigabit download 500 Mbps upload



Broadband Speed Standards

	6 down/ 1 up CA legislature min	0 down/20up 2 "above baseline"	250 down/20 up CA avg max	1000 down/ 500 up FCC "Gigabit"
MBEP consumer				
MBEP business				
MBEP combined				
North county				
South county				
Monterey				
San Benito				
Santa Cruz				

Rural and urban minimum needs the same

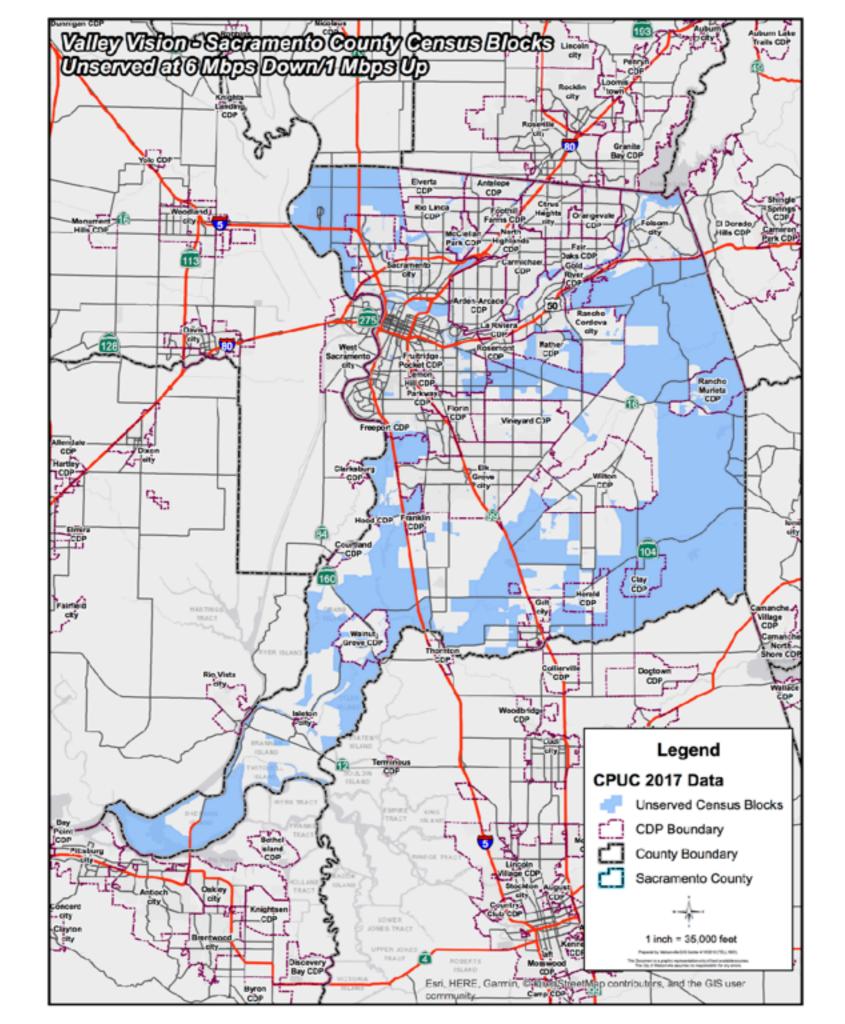




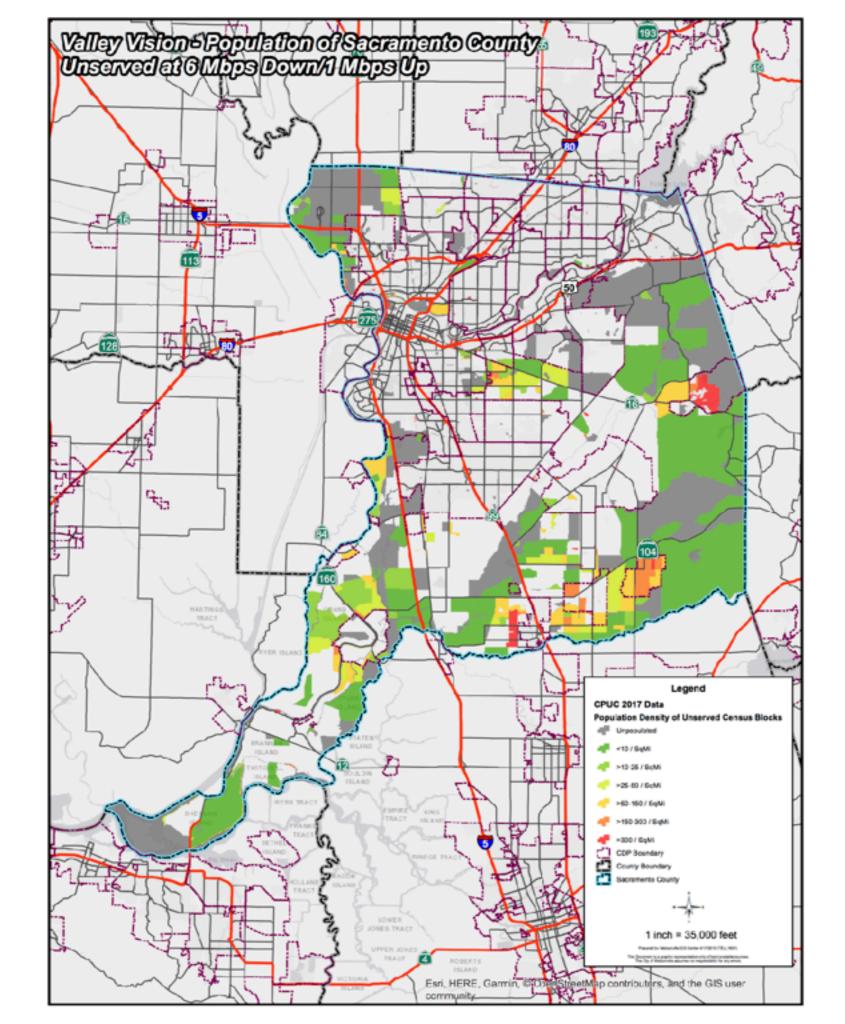
- Consumers comfortable with 100/20, can get by with 25/3.
- Businesses need better, but can get by with 100/20

Minimum speed: 100 Mbps down/20 Mbps up

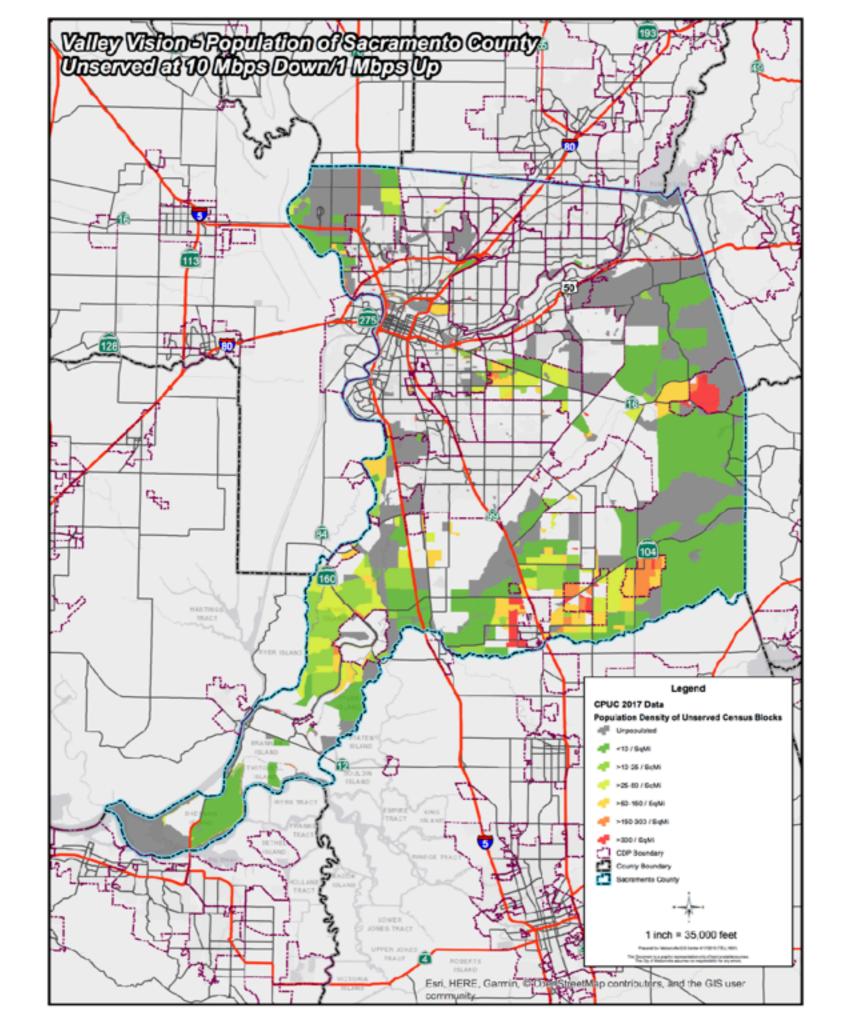
6 Mbps download/ 1 Mbps Upload



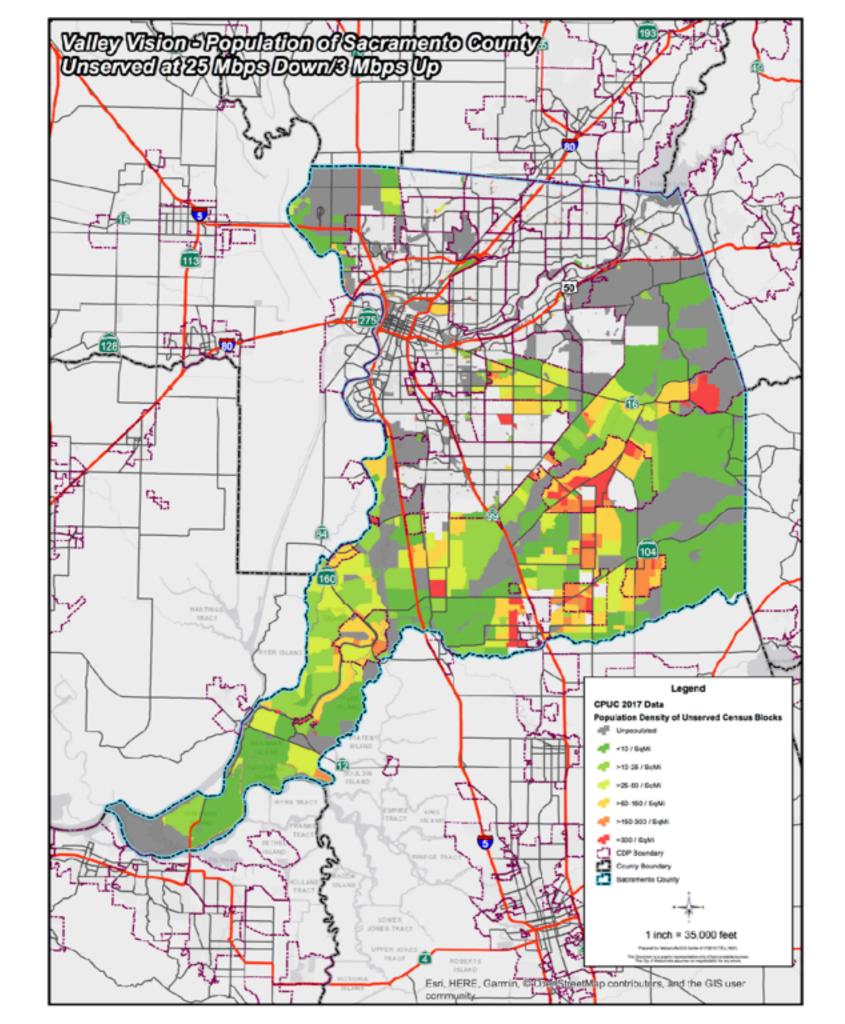
6 Mbps download/ 1 Mbps Upload



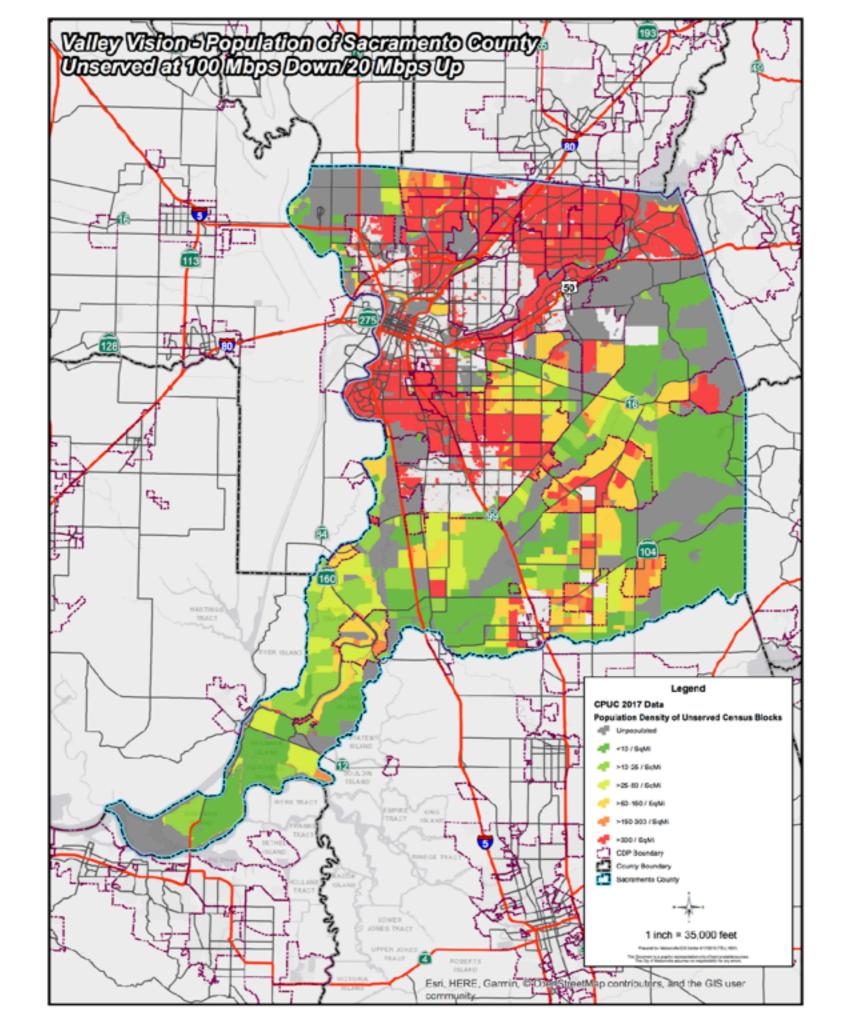
10 Mbps download/ 1 Mbps Upload



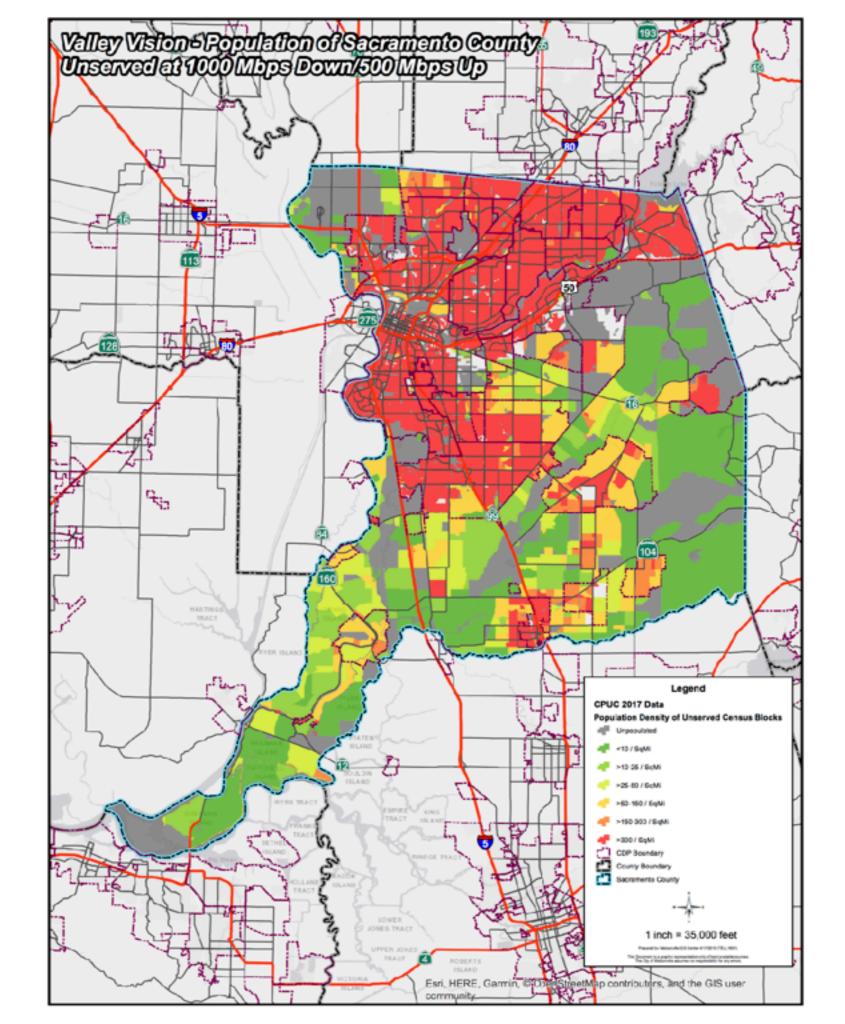
25 Mbps download/ 3 Mbps Upload



100 Mbps download/ 20 Mbps Upload



1 Gbps download/ 500 Mbps Upload





At least two primary providers, with one offering FTTP at 1,000 Mbps down/500 Mbps up and, and at 250 Mbps down and 20 Mbps up. Or better.

- At least two primary providers, with one at 250 Mbps down/20 Mbps u, and one at 100 Mbps down/20 Mbps up. Or better.
- At least two competing primary providers, one at 250 Mbps down/20 Mbps up and one at 30 Mbps down/3 Mbps up. Or better. (Reflects service available to the average Californian.
- At least one primary provider at 25 Mbps down/3 Mbps up (FCC & USDA standard.
- No primary provider at 25 Mbps down/3 Mbps up, or no primary wireline service at all.

Infrastructure grades: C is Californian average

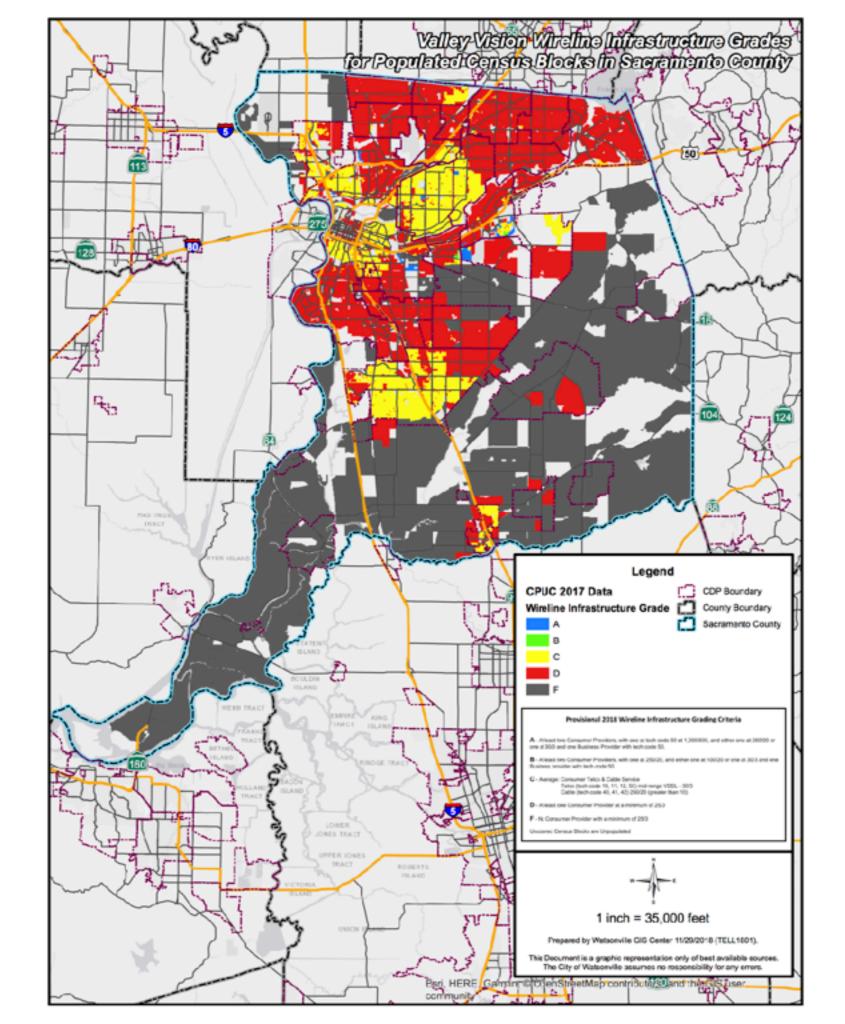


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Sacramento County 2018 grade is D, down from C in 2016

2018
Broadband
Infrastructure
Report Card



Sacramento County 2018 Broadband Report Card

	2016	2018	3 Δ
Antelope	В	D	(1.0)
Arden- Arcade	A-	C-	(1.8)
Carmichael	B-	D+	(1.3)
Citrus Heights	C-	D	(8.0)
Clay	F	F	0.0
Courtland	F	F	0.0
Elk Grove	В	D+	(1.6)
Elverta	D-	D-	0.0
Fair Oaks	C-	D	(8.0)
Florin	C-	D	(0.9)
Folsom	C-	D	(0.9)
Foothill Farms	C-	D-	(0.7)

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What can you do about it?

Planning

Policy

Projects

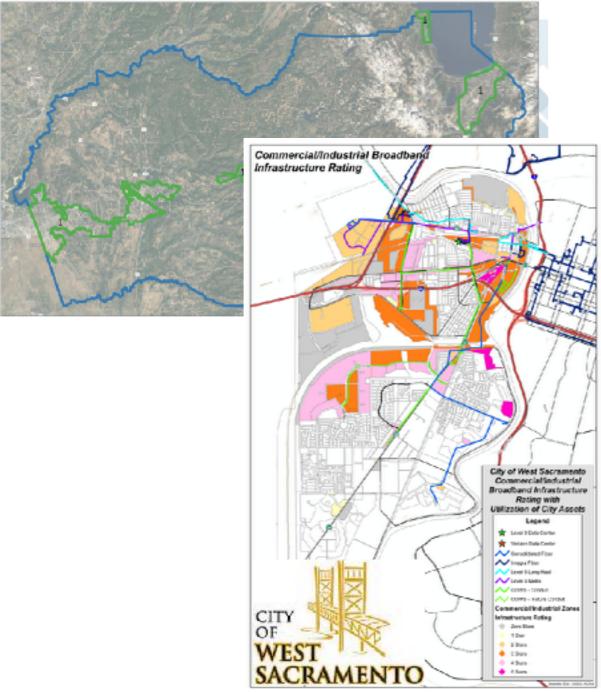
Property

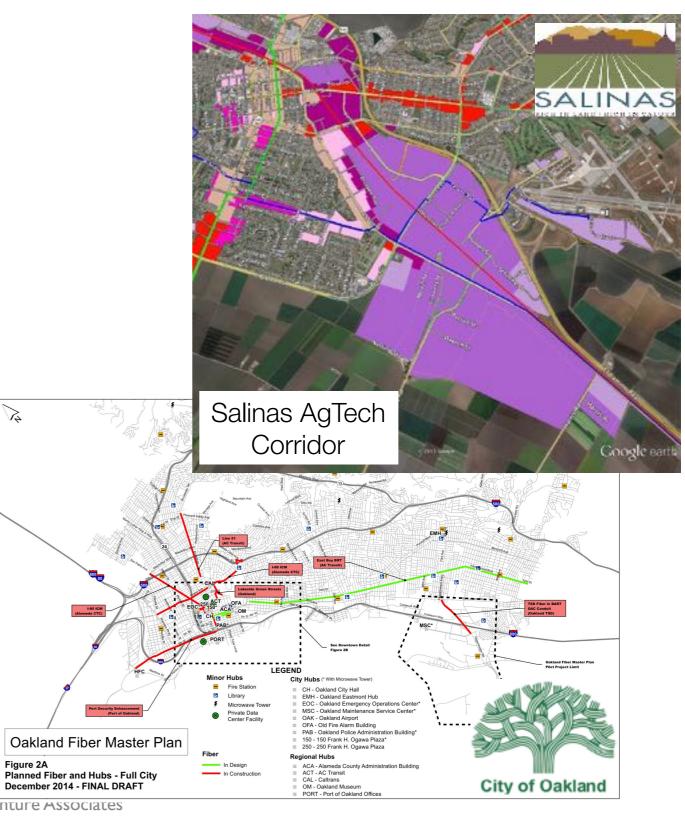
What can you do about it?

Planning



FIBER TO THE PREMISE GIGABIT BROADBAND PHASING





Policy

Advocacy, access, adoption

Remove barriers – review permitting

Set standards – broadband is a utility

Encourage development now – Dig Once



Projects

U.S. Economic Development Administration

Public-Private Partnerships

Non-Broadband Sources - Public Safety, Transportation, Education, Telehealth

U.S. Department of Agriculture

California Advanced Services Fund

Federal Communications Commission

Projects

Overbuilders like Surewest are rare

Incumbents protect monopolies/duopolies, avoid capex



Public-Private partnerships work when partners are carefully selected



Create competition!

Property

Inventory assets - muni & private

Conduit

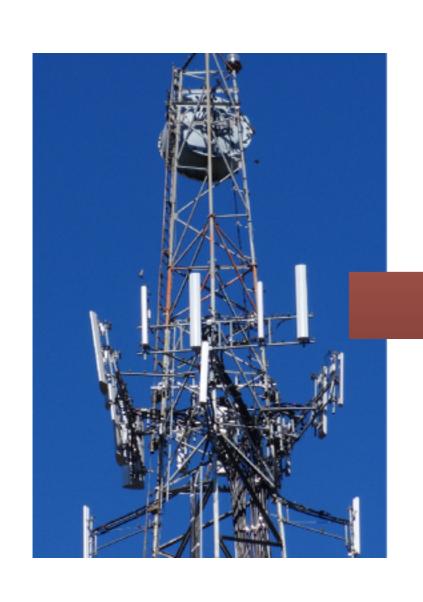
IT Infrastructure

Open access and operations

Master leases

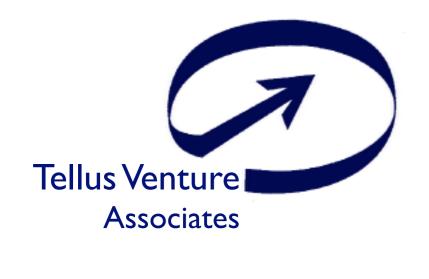


Property





Questions?



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