

## **The California Telehealth Network (CTN) is a statewide broadband network and received the largest single-state award from the FCC Rural Health Care Pilot Program (RHCPP)**

- ▶ \$22.1 million FCC award pays for 85% of eligible site build-out costs
- ▶ \$3.6 million California Emerging Technology Fund (CETF) match pays for 15% of eligible site build-out costs
- ▶ Over \$10 million in additional funding from multiple sources:
  - United Healthcare,
  - National Coalition for Health Integration,
  - California HealthCare Foundation,
  - University of California,
  - California Public Utilities Commission



## The FCC RHCPP funding is to be used by CTN to achieve four unique goals for the state of California

- ▶ **Goal 1:** Create a statewide broadband network dedicated to health care with explicit QoS, privacy and security
- ▶ **Goal 2:** Link the CTN to a national backbone
- ▶ **Goal 3:** Leverage and build upon recent investments in Telehealth
- ▶ **Goal 4:** Utilize CTN for ongoing disaster preparedness training and response

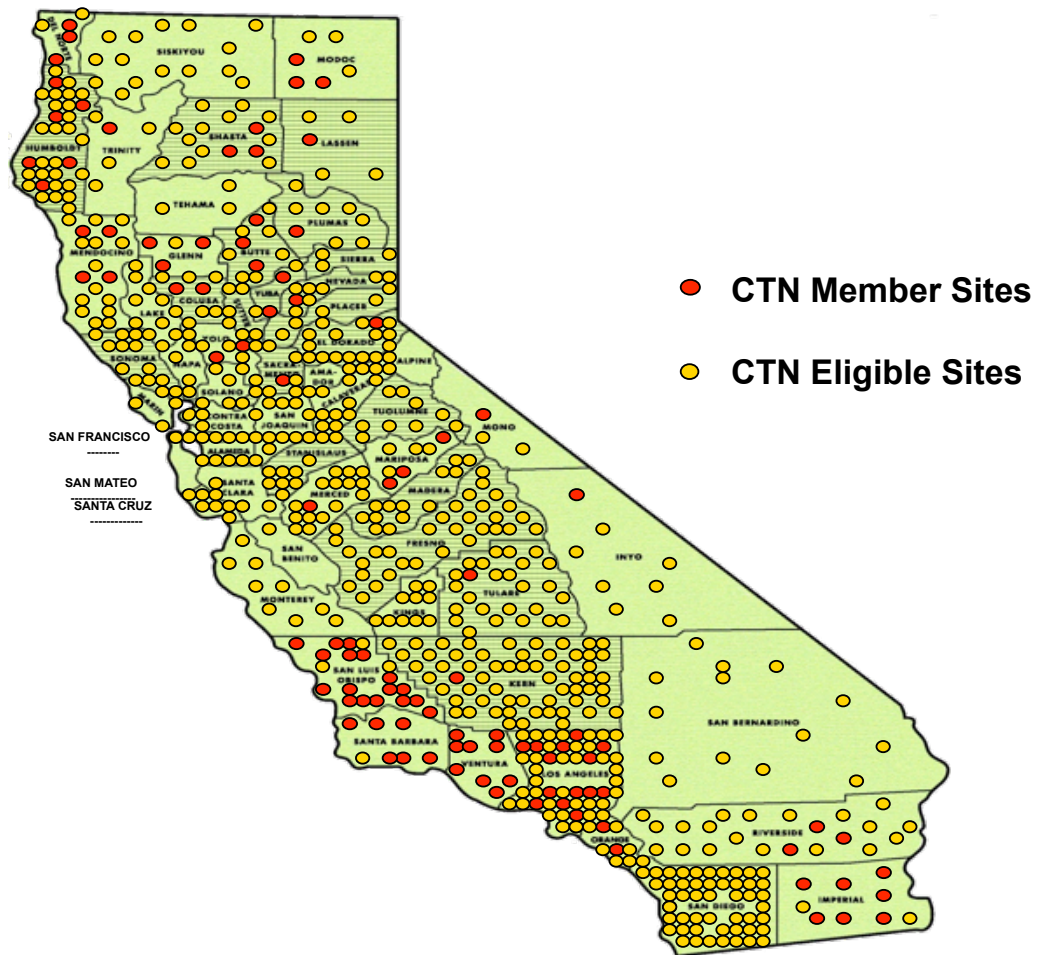


## **CTN's Consortium Members are dedicated to providing access to rural and medically underserved communities, improving clinical outcomes, and reducing costs**

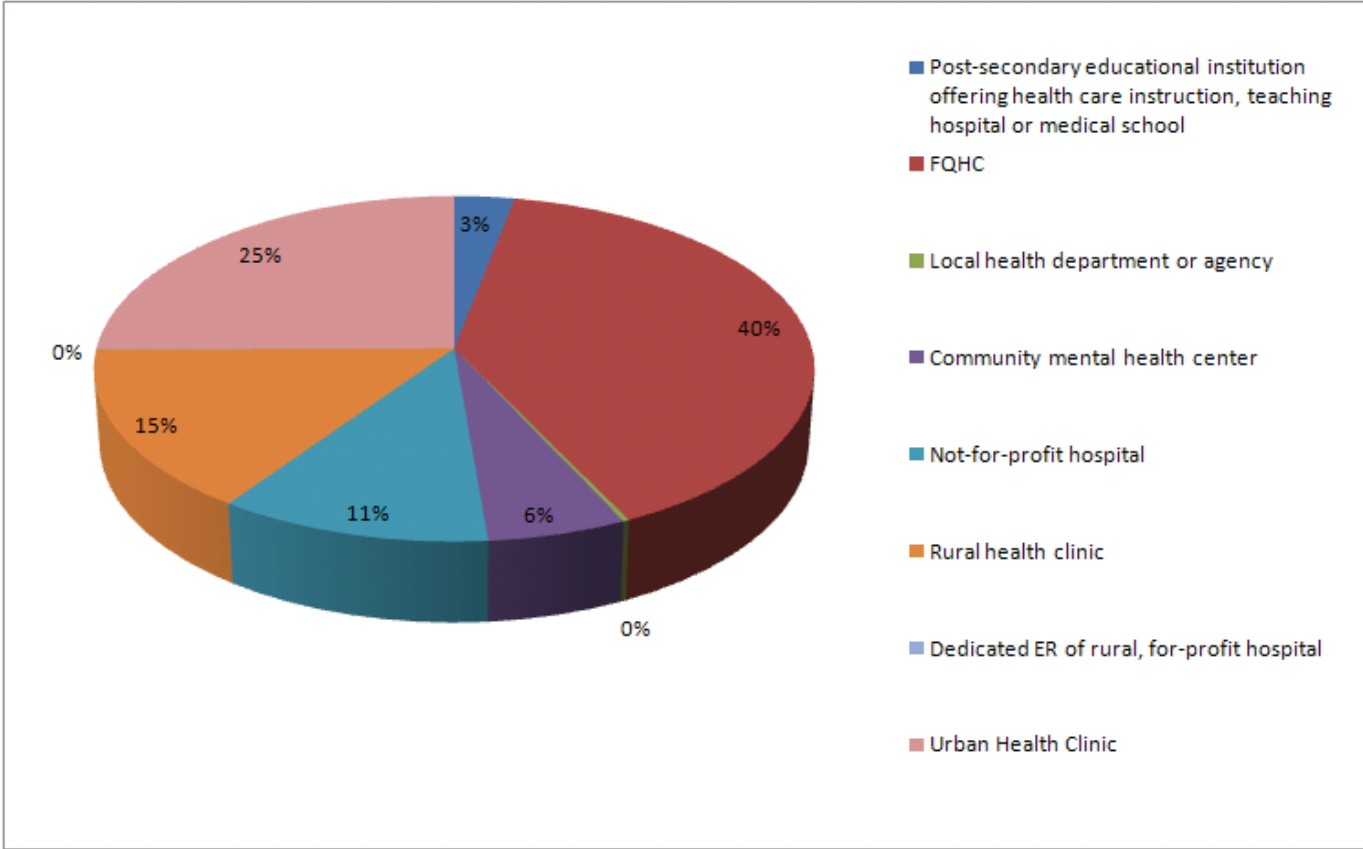
- ▶ The Office of the Governor
- ▶ The University of California Office of the President
- ▶ The California Emerging Technology Fund (CETF)
- ▶ The California HealthCare Foundation (CHCF)
- ▶ The California State Rural Health Association (CSRHA)
- ▶ California Health & Human Services Agency (CHHSA)
- ▶ The California Primary Care Association (CPCA)
- ▶ The California Hospital Association (CHA)
- ▶ The California Public Utilities Commission (CPUC)
- ▶ The California Department of Managed Health Care (DMHC)
- ▶ California Business, Transportation and Housing Agency (BTH)
- ▶ The California Telemedicine & eHealth Center (CTEC)
- ▶ University of California Davis Health System
- ▶ The Corporation for Education Network Initiatives in California
- ▶ The California Health Foundation and Trust (CHFT)



# CTN eligible site locations are geographically spread throughout the entire state



# CTN has identified 863\* eligible RHCPP sites



## At a high level, The CTN is:

- ▶ A managed router service that provides:
  - Installation,
  - Monthly circuit costs,
  - Router, and
  - 24/7 Network monitoring
- ▶ +850 sites (initially) eligible under RHCPP - eligibility for the RHCPP program includes public/non-profit institutions
- ▶ Recent recipient of a ARRA/BTOP grant award which provides for core operating expenses and the establishment of 15 Broadband Technology Enabled Model Communities



## At a high level, The CTN plans to *additionally* provide:

- ▶ A turnkey network solution that aggregates supply and demand for multiple types of healthcare related entities and services
  - An ideal mechanism for large network hospitals to extend reach and provide Telehealth services to CTN member sites (both rural and urban) statewide
  - An ideal mechanism for smaller healthcare entities to receive specialty services from CTN member sites
  - An optimal environment for Health Information Exchange and sharing of other medical information (e.g., X-Rays, MRI's, Telepharmacy) and providing training and CME content
  
- ▶ Access to national disaster preparedness resources (HHS, CDC, NIH)



# CTN provides both technological and community-oriented benefits

## Technology-Oriented Benefits

- Emphasis on privacy and security
- Guaranteed Quality of Service (QoS) reliability, medical grade network
- MPLS Architecture
- Private network, CTN does not cross the public internet
- Encrypted connections to other CTN member sites
- Equipment and network monitoring provided by AT&T working with last mile providers
- Secure connections to support HIE and multiple meaningful use applications

## Community-Oriented Benefits

- Improve access to medical care in rural and medically underserved communities
- Aligned with key California State organizations:
  - California Department of Health and Human Services
  - Cal eConnect – Health Information Exchange
  - CalHIPSO – EHR/Meaningful Use
  - HITEC-LA – EHR/Meaningful Use, LA County
  - CalOptima – EHR/Meaningful Use, Orange County
- CENIC connectivity to support internet, educational and workforce development activities
- Access to all CENIC partners<sup>1</sup>
- CTN sites have access to Internet2, National LambdaRail and other national medical/educational/research platforms
- Partnering with the California Telemedicine and eHealth Center (CTEC) to provide telemedicine training and educational services
- Plan to provide Continuing Medical Education (CME) services to CTN member sites

1: CENIC includes all UC Health Centers, Stanford, USC, California State Community Colleges, California State University campuses, libraries and others





**In addition to the speeds listed, CTN will provide higher capacity circuits and design interconnection points to accommodate any entity's need**

	<u>Monthly Membership Fees</u>	
<u>Speed</u>	<u>Year 1</u>	<u>Years 2-3</u>
1.5 Mbps	\$62.50	\$100.00
6.0 Mbps	\$125.00	\$250.00
10.0 Mbps	\$262.50	\$420.00
45.0 Mbps	\$1,000.00	\$2,000.00

- *No installation/activation charges for eligible sites*
- *Higher speeds available*
- *Monthly membership fees based on circuit speed selected*

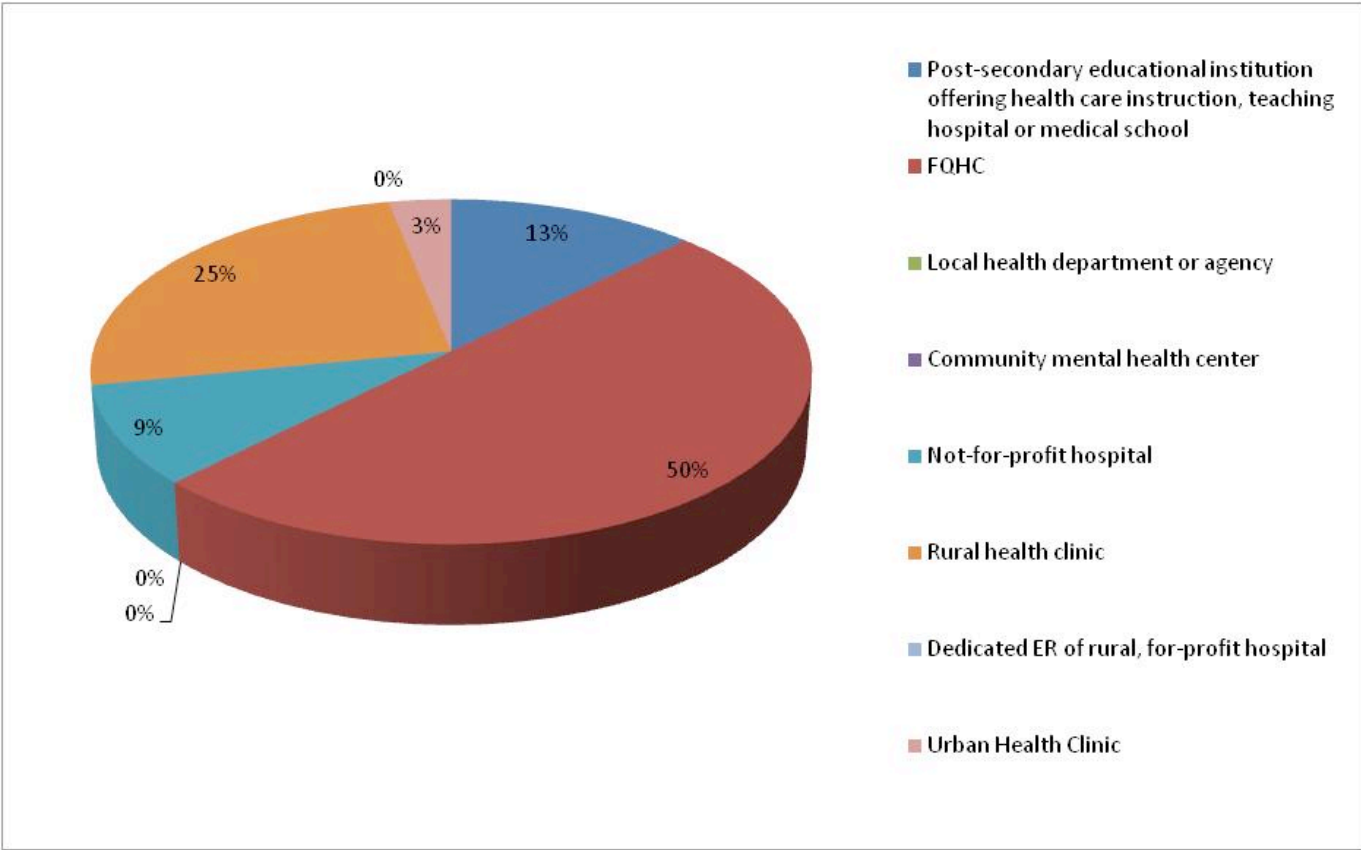


## CTN is poised for rapid growth

- ▶ Site activations began in December
- ▶ Over 75 sites currently have access to the network
- ▶ Booz Allen Hamilton is completing CTN business plan recommendations that will prioritize future health care services and applications
- ▶ Transitioning legal and operational control to an independent 501c3 non-profit corporation which is now funded and operational



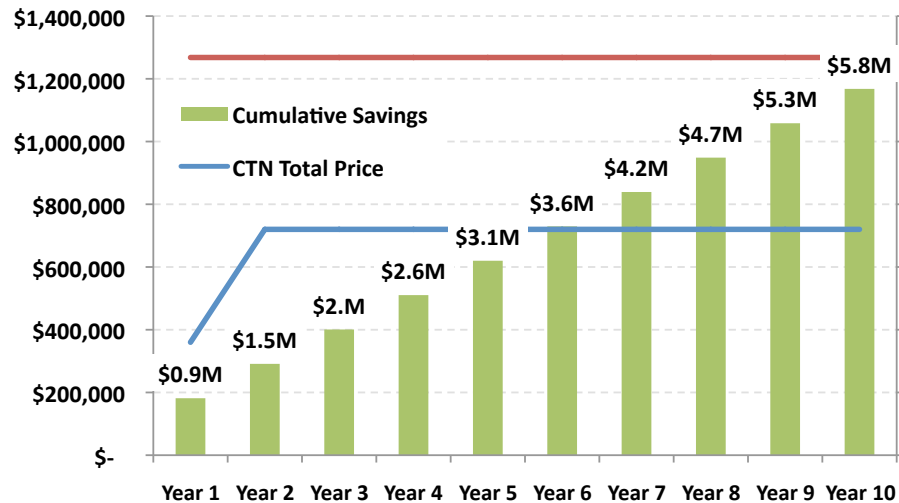
# Federally Qualified Health Clinics (FQHC) represent 50% of the first connected sites



# Multi-site health care providers can leverage an immediate economic opportunity by using CTN's low cost MPLS Broadband Connectivity at FCC RHCPP rates

- ▶ Sites can obtain high capacity access to AT&T's MPLS backbone via CTN at a heavily discounted price point – nearly **\$5.8M** in 10 year cash savings when compared to site procurement of the same services
- ▶ The CTN network can complement the existing site environment:
  - Provide redundant access or load-balancing of Internet access
  - Act as a special use network (e.g., for testing new applications/platforms, training)
  - Offload demanding services like video conferencing or VoIP
- ▶ CTN is prepared to work with site to provide high capacity circuits and interconnection points to meet specific needs

**MPLS Network Cost Comparison (45Mb/site example)**



**Key Assumptions:**

- 30 sites, 45.0 mbps circuits
- Cash flow discounted at a rate of 9.0%
- Commercial rates indicative of major telecomm provider for important multisite client/entity
- Network aspects considered similar



# CTN Opportunity

- ▶ Partner with the state's leading eHealth stakeholders
- ▶ Take advantage of CTN broadband connectivity at reduced rates
- ▶ CTN can deploy higher capacity bandwidth to meet your needs
- ▶ Secure medical grade connections to healthcare sites and associated clinics
- ▶ Ideal environment for Health Information Exchange and sharing of other medical information (X Rays, MRI's, Telepharmacy, etc)
- ▶ Access to national disaster preparedness resources (HHS, CDC, NIH)



# CTN Contact Information

- ▶ CTN web site: [www.caltelehealth.org](http://www.caltelehealth.org)
- ▶ Contact Denise Jurca, Operations Manager to file paperwork to confirm FCC RHCPP eligibility: [djurca@caltelehealth.org](mailto:djurca@caltelehealth.org)
- ▶ Phone: [\(916\) 341-3367](tel:(916)341-3367)



**Thank You!**



California Telehealth Network