

Center for American Progress



EyeSpan

PROJECT BRIEFING

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SR. FELLOW/CTO



EYESPAN.TV

▶ THE BASIC IDEA:

- ▶ PUT A CAMERA IN EVERY CONGRESSIONAL HEARING, THE WHITE HOUSE BRIEFING ROOM, AND OTHER LOCATIONS IN “OFFICIAL” DC.
- ▶ STREAM THE DATA LIVE OUT TO THE NET.
- ▶ CREATE A PERMANENT ARCHIVE ACCESSIBLE ON THE NET.
- ▶ ALLOW ANYBODY TO ANNOTATE THE EVENTS.



CENTER FOR AMERICAN PROGRESS



- ▶ 501(c)(3) THINK TANK IN WASHINGTON, D.C.

- ▶ OUR ROLE

- ▶ PROJECT INCUBATOR

- ▶ WHY?

- ▶ PROMOTE TRANSPARENCY AND CITIZEN PARTICIPATION IN GOVERNMENT.

- ▶ WE WISH THE SERVICE EXISTED ALREADY AND INTEND TO BE HEAVY USERS.



HOW BROADCAST WORKS TODAY

- ▶ JOIN THE CLUB (GET CREDENTIALS).
- ▶ BRING CAMERAS INTO EVENT.
- ▶ IN CONGRESS, TRANSMIT VIDEO TO HUB ROOM.
- ▶ USE VERIZON'S "AVOC" TO BROADCAST CONTROL ROOM.



CAMERAS IN HEARING ROOMS



- ▶ CONGRESS, WHITE HOUSE, STATE, PENTAGON, AND ALL OTHER BRIEFING ROOMS ARE WIRED.
- ▶ FIBER OPTIC LINKS TO VERIZON'S "AUDIO VISUAL OPERATIONS CENTER" (AVOC)
- ▶ SPECIALIZED VIDEO-OVER-FIBER STANDARD (SMPTE-259)
- ▶ CREDENTIALS ARE AVAILABLE TO QUALIFIED PRESS ORGANIZATIONS.
- ▶ COMMITTEE OF JOURNALISTS USE THE POTTER STEWART TEST FOR DETERMINING WHO QUALIFIES.



MAP 1 CONGRESS

Capitol Hub Room

Dirksen SOB Subhub

Rayburn HOB Subhub

Independence Ave SE

Constitution Ave NW

Constitution Ave NE

Maryland Ave NE

E Capitol St NE

1ST St NW

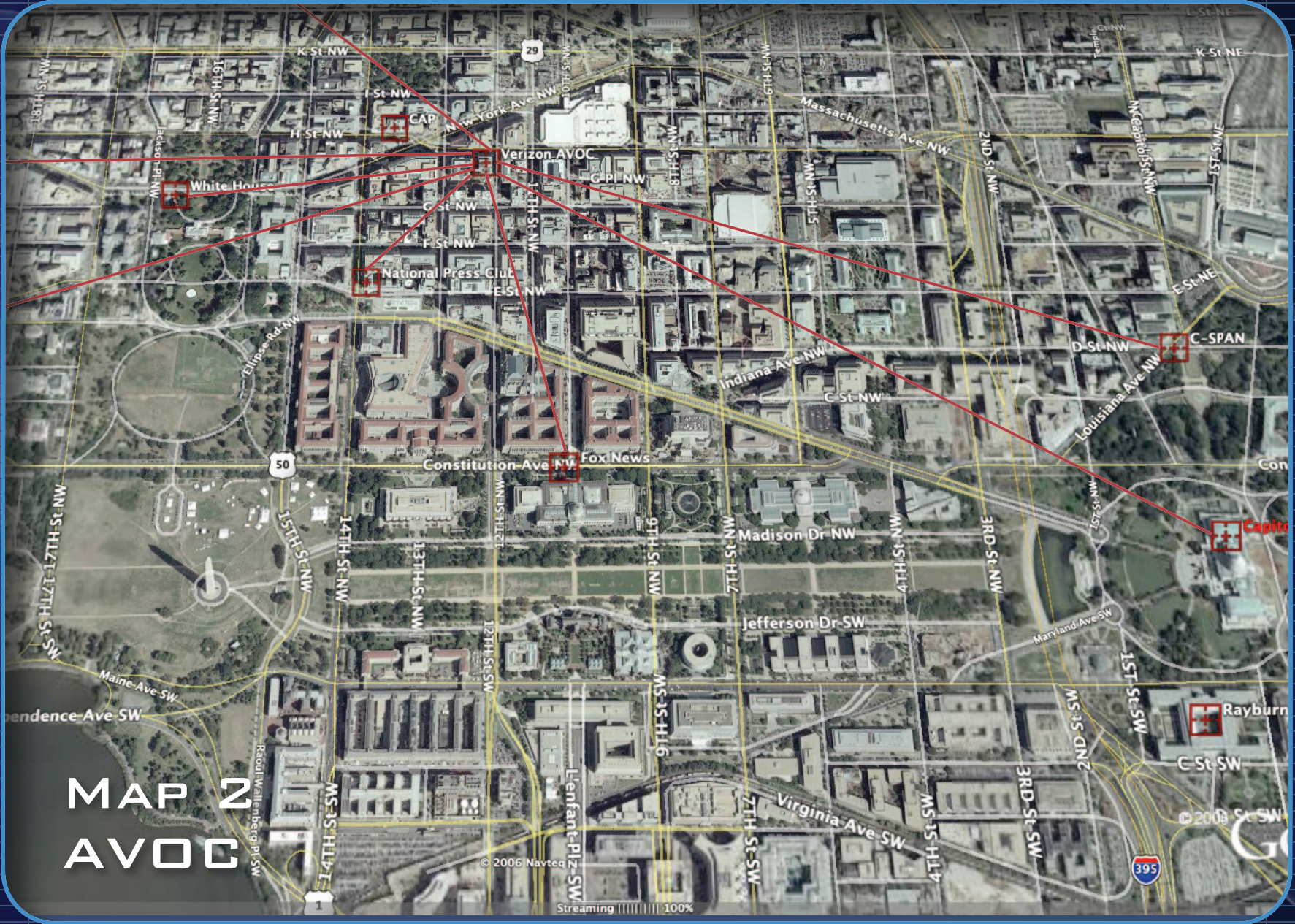
1ST St NE

2ND St SE

2ND St SE

Pennsylvania Ave NW

Illinois Ct NE



MAP 2 AVOC

© 2006 Navteq
Streaming 100%

© 2008 Google

EYESPAN MODEL

▶ TURN VIDEO-OVER-FIBER INTO 50 MBPS MPEG-2 STREAMS.

- ▶ MOVE STREAMS TO KEY COLOCATION FACILITIES.

- ▶ MAKE AVAILABLE TO PUBLIC, RESEARCH, AND PRIVATE PROVIDERS ON MULTICAST AND UNICAST INFRASTRUCTURE.

▶ ADDITIONAL PROCESSING.

- ▶ TRANSCODE, CACHE, STREAM.

- ▶ ARCHIVE.

- ▶ ANNOTATE.

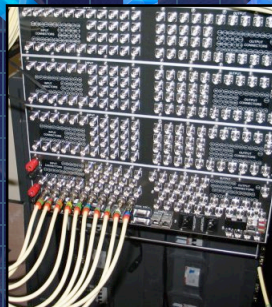


DC

CAPITOL
(8xSDI)

CROSS-
SWITCH
FEEDS

OTHER
FIBER
(4xSDI)



AVOC

16xSDI



SDI->MPEG

NXGIGE



ROUTER

OC48



THE NET



BAR



STREAMS



SWITCH



OC48



ROUTER



TRANSCODE



STREAM EVENTS TO INTERNET



▶ INTERNET2, RUN BY U.S. UNIVERSITIES, HAS SUFFICIENT CAPACITY TO STREAM HIGH-DEF VIDEO STRAIGHT ONTO THE NET.

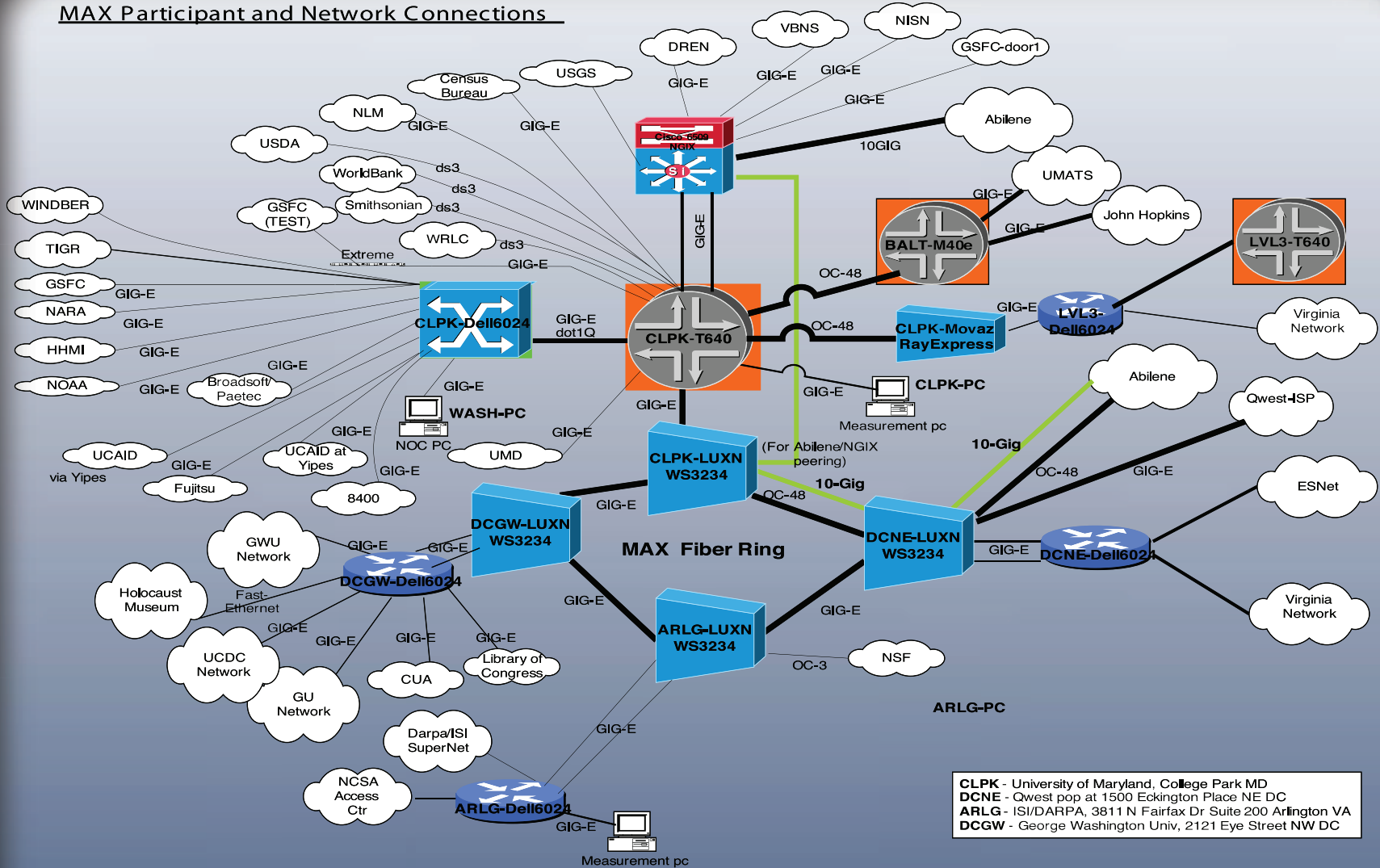
▶ RESIDENTIAL BROADBAND USERS AND EVEN DIAL-UP USERS WILL ALSO BE ABLE TO ACCESS THIS DATA.

INTERNET2 BACKBONE

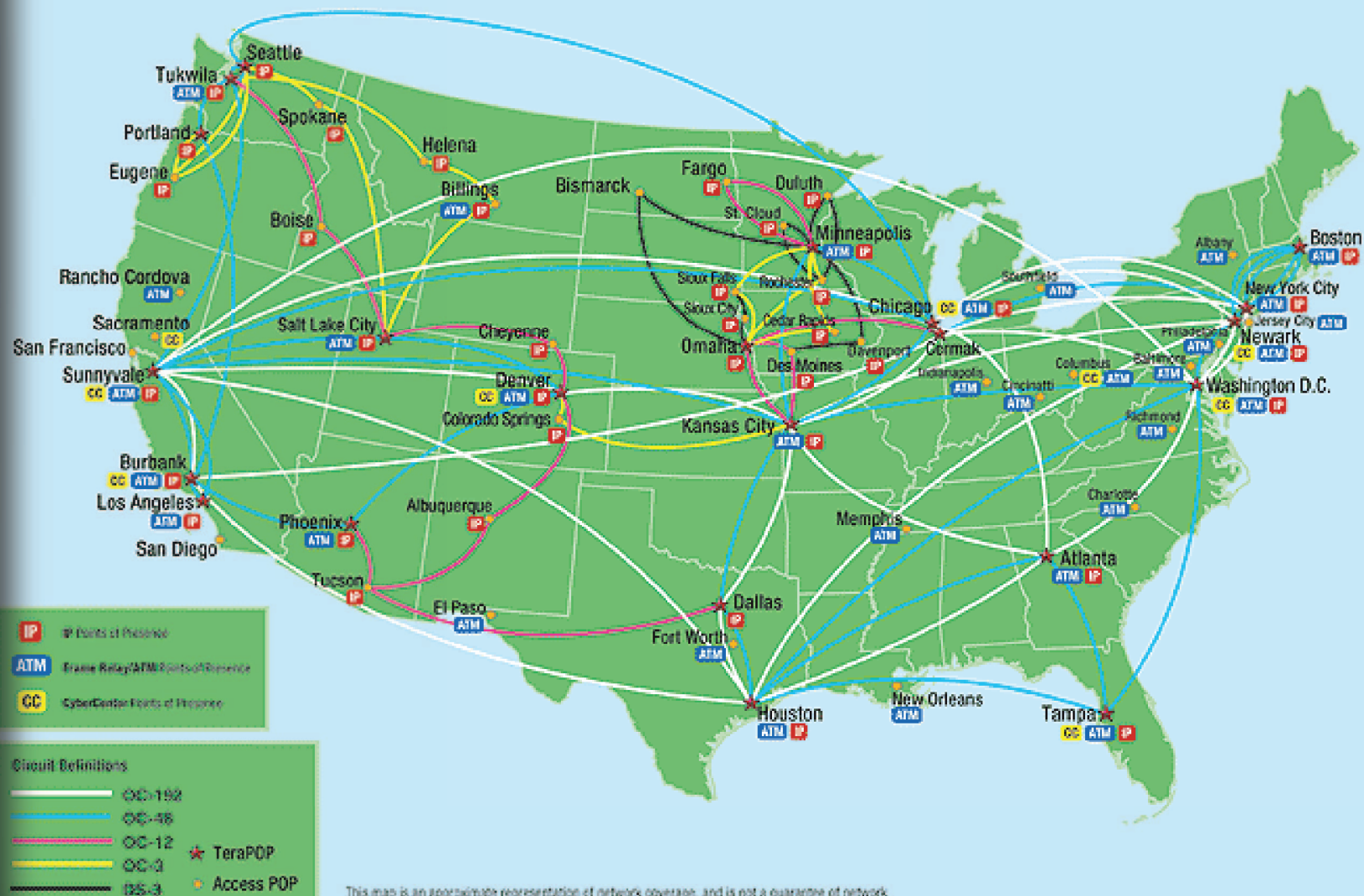
[HTTP://WWW.ABILENE.IU.EDU/](http://www.abilene.iu.edu/)



MAX Participant and Network Connections



Qwest iQ Networking Map



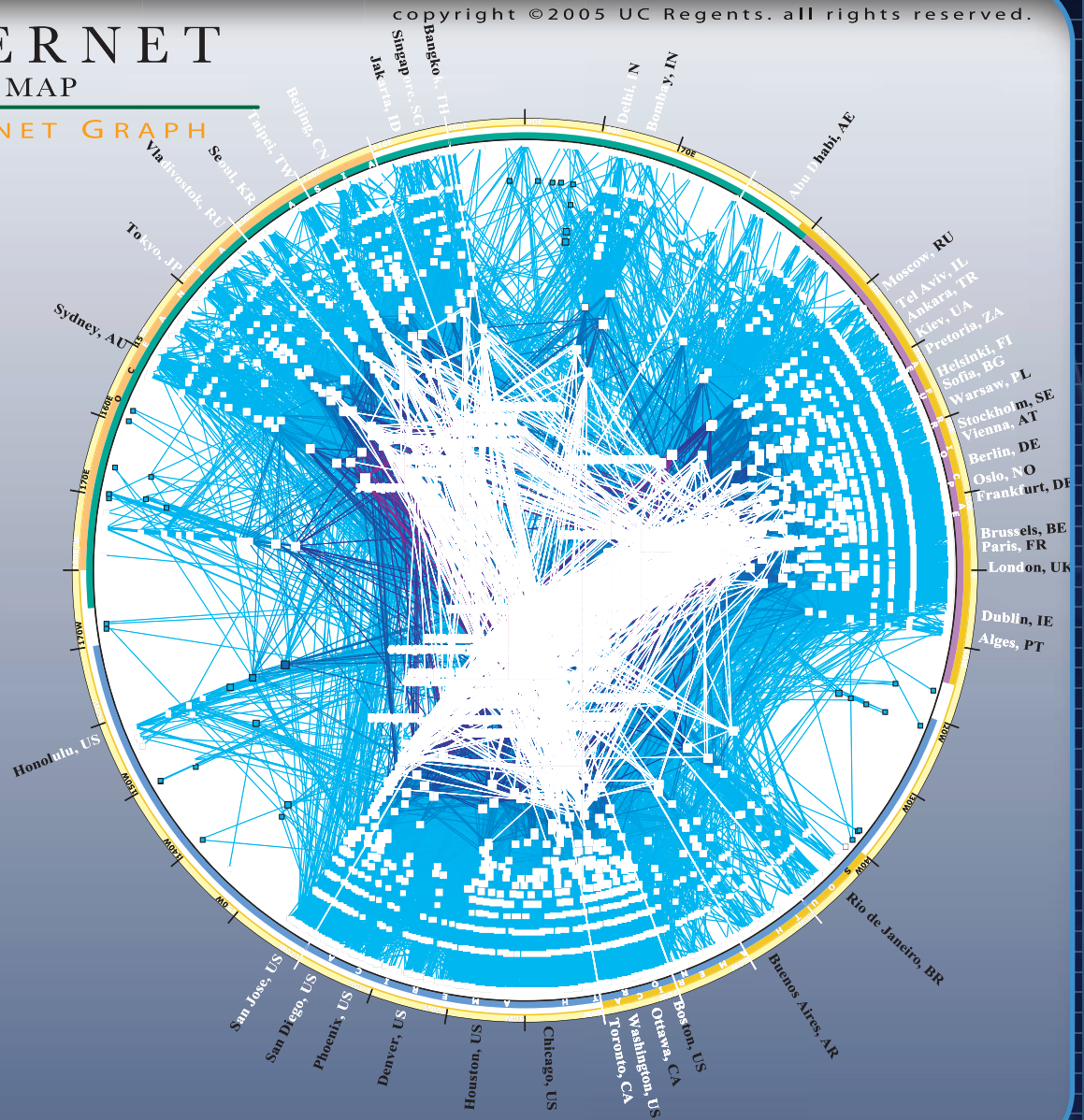
This map is an approximate representation of network coverage, and is not a guarantee of network or service availability. Coverage is subject to change. Copyright ©2004 Qwest. All Rights Reserved.

IPv4 INTERNET TOPOLOGY MAP

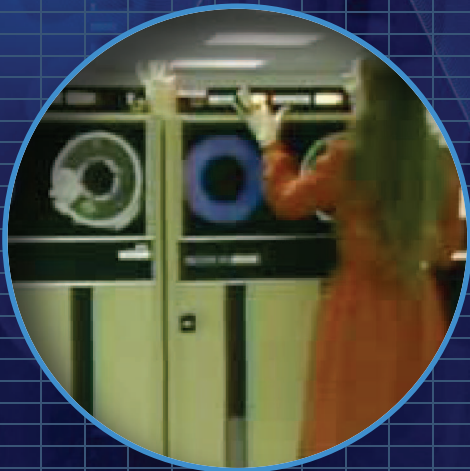
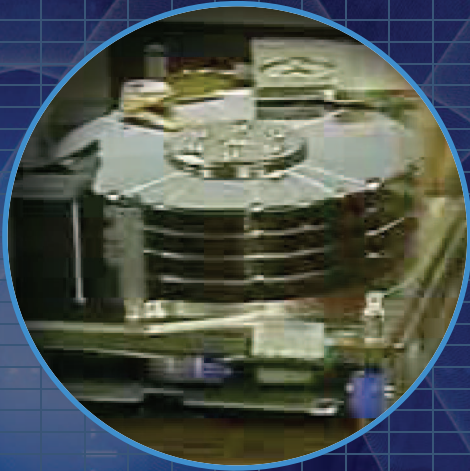
AS-level INTERNET GRAPH

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Peering:
OutDegree



CREATE PERMANENT ARCHIVE



▶ DISK IS GETTING CHEAPER.

▶ PROJECTIONS OF \$0.30/GIGABYTE SOON.

▶ PETABYTE-SCALE SYSTEMS NOW PRACTICAL.

▶ PROVIDE LONG-TERM ARCHIVES AND CONSTANT AVAILABILITY THROUGH REPLICATION.

▶ FEDERAL DOCUMENT DEPOSITORY

▶ OVER 1,250 LIBRARIES.

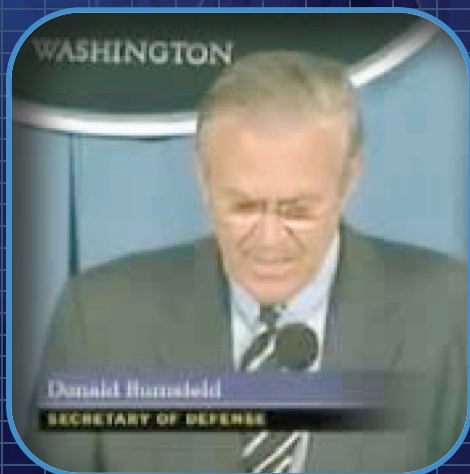
▶ PROGRAM SHOULD BE EXPANDED TO INCLUDE MASSIVE VIDEO ARCHIVES.



ALLOW ANYBODY TO ANNOTATE



HIS
TRANSCRIPT
IS HERE.



- ▶ ANYBODY ON THE NET SHOULD BE ABLE TO ANNOTATE ANY HEARING, EITHER LIVE OR AFTER THE FACT.
- ▶ USING INSTANT MESSAGING, THIS IS NOT HARD TO GET OFF THE GROUND QUICKLY.
- ▶ FULL AUDIO AND VIDEO ANNOTATION IS THE NEXT STEP: PICK YOUR FAVORITE COMMENTATOR(S) FOR AN EVENT.
- ▶ ANNOTATION RANGES FROM TRANSCRIPTION TO CHAT TO FULL-BLOWN TV PRODUCTION VALUES.



INSTITUTIONAL STRUCTURE

- ▶ BUSINESS MODEL
- ▶ GOVERNANCE
- ▶ STAFFING
- ▶ RELATIONSHIP TO CAP
- ▶ LONG-TERM GAME PLAN



GOVERNANCE

- ▶ **INDEPENDENT, WELL-QUALIFIED ADVISORY BOARD.**

- ▶ NEUTRALITY IS KEY TO “REAL MEDIA” STATUS.

- ▶ ALSO KEY FOR INDUSTRY PARTNERSHIPS.

- ▶ **OPEN WORKING GROUP PROVIDES ENGINEERING, ARCHITECTURAL, IMPLEMENTATION ADVICE.**

- ▶ **GOAL OF SERVICE IS MAXIMUM DISPERSION OF DATA WITH NO IP OR USE RESTRICTIONS.**



STAFFING



- ▶ STAFFING ESTIMATE OF 2 FULL-TIME STAFF.
- ▶ HEAVY USE OF DISTINGUISHED VOLUNTEERS.
- ▶ HEAVY LEVERAGE FROM EDUCATIONAL PARTNERSHIPS, OPEN SOURCE PARTICIPATION.

RELATIONSHIP TO CAP



▶ PROJECT INCUBATOR

- ▶ OUR MISSION IS TO PRODUCE “TRANSFORMATIVE NEW IDEAS.”
- ▶ TRANSPARENCY AND CITIZEN PARTICIPATION IN OUR SYSTEM OF GOVERNMENT ARE FUNDAMENTAL AMERICAN VALUES.

▶ HEAVY USER

- ▶ THIS WILL BE AN EXTREMELY USEFUL FACILITY AS WE WORK ACROSS A LARGE NUMBER OF ISSUES THE CENTER IS ACTIVE IN.
- ▶ WE WISHED THE SERVICE EXISTED ALREADY, SO WE DECIDED TO CREATE IT.



LONG-TERM GAME PLAN



▶ EYESPAN.TV/DC

- ▶ EVENTUALLY, GPO AND LIBRARY OF CONGRESS SHOULD BE IN THIS BUSINESS.
- ▶ GOAL IS TO WORK OURSELVES OUT OF THE DC BUSINESS WITHIN 5-7 YEARS.

▶ THIS MODEL CAN EASILY BE REPLICATED.

- ▶ EYESPAN.TV/LONDON
- ▶ EYESPAN.TV/INDIANAPOLIS
- ▶ OUR LONG-TERM JOB IS TO TEACH OTHERS HOW TO PRODUCE, USE, INTERACT WITH, AND INFLUENCE PUBLIC PROCEEDINGS.



SUPPORTING MATERIALS

▶ PRO-FORMA BUDGET





PRO FORMA CASH BUDGET (\$3.5M/5 YEARS)



	2006	2007	2008	2009	2010
AVOC 32X32 SWITCH	18,650	24,600	24,600	24,600	24,600
8X FIBER TO CAPITOL	29,430	35,040	35,040	35,040	35,040
16X FIBER TO CAP	52,020	69,360	69,360	69,360	69,360
4X FIBER SINGLE RUN	25,200	33,600	33,600	33,600	33,600
OC48	103,889	137,052	137,052	137,052	137,052
STAFF AND TRAVEL	220,000	233,200	247,192	262,023	277,744
EQUIPMENT PURCHASE	150,000	75,000			
CAP BUILDOUT	80,000				
OVERHEAD (20%)	135,837	108,070	109,364	112,335	115,479
TOTAL	815,026	648,422	656,186	673,910	692,875

