Table 1: Statewide Higher Education Research and Education Networks and State Agency Networks (In progress DRAFT as of 3/24/2000)

State	Name and URL of state research and higher education network (R&E) [or regional higher ed commodity transit network consortia][a]	Sample university from that state (used for tracerouting purposes)	Sample university connects to I2 via vBNS or Abilene?	Sample university's typical[b] commodity Internet transit connectivity?	State R&E network has intrastate backbone circuits?	Relationship between state government and high ed R&E network?
AL	AREN http://www.asc.edu/html/aboutaren.html	Univ. of Alabama www.ua.edu	Abilene	DeltaCom --> UUNet	Yes	State govt is customer[c]
AK	None per se[d]	Univ. of Alaska www.uaf.edu	Abilene	Verio	n/a	n/a
AZ	ASPIN http://aspin.asu.edu/	Univ. of Arizona www.arizona.edu	Abilene	Qwest	Yes	State govt is customer[e]
AR	ARKnet http://www.arknet.edu/ See also: Greatplains Network http://www.greatplains.net/	Univ. of Arkansas www.uark.edu	Abilene	AR Dept of Info Services --> SWBell --> Sprintlink	Yes	State govt is customer[f]
CA	CALREN-2 www.cenic.org/calren2.html [g]	UC Berkeley www.berkeley.edu	Abilene	Cenic --> CWIX	Yes	Separate networks[h]
CO	WestNet/Front Range Gigapop http://www.scd.ucar.edu/nets/Projects/Westnet/	Univ. of Colorado www.colorado.edu	vBNS	Qwest	Yes	Separate networks[i]
CT	None per se	Univ. of Conn. www.uconn.edu	Abilene	Qwest[j]	n/a	n/a
DE	None per se	Univ. of Deleware www.udel.edu	Abilene	Voicenet	n/a	Separate networks[k]
FL	FIRN http://www.firn.edu/	Univ. of Florida www.ufl.edu	vBNS	Bellsouth--> UUNet	Yes	Unclear[l]
GA	PEACHNET http://www.peachnet.edu/peachnet	Univ. of Georgia www.uga.edu	Abilene	PeachNet --> BBNPlanet	Yes	State govt is customer[m]
HI	HERN http://www.hern.hawaii.edu/hern/	Univ. of Hawaii www.hawaii.edu	Abilene	UHNet --> BBNPlanet	Yes	State govt is customer

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ID	None per se[n]	Univ. of Idaho www.idaho.edu	Abilene	Verio	n/a	Separate networks
IL	Relevant regional consortia is MREN (http://www.mren.org/)	Umiversity of Illinois www.uiuc.edu	Abilene	BBNPlanet[o]	Yes	Separate networks
IN	IHETS http://www.ind.net[p]	Indiana Univ. www.iupui.edu	Abilene	UUNet	Yes	State govt is customer[q]
IA	ICN http://www.icn.state.ia.us/	Univ. of Iowa www.uiowa.edu	vBNS	State of Iowa ICN --> PSI	Yes	ICN is run by a state funded commission[r]
KS	KANREN http://www.kanren.net/ See also GreatPlains Network http://www.greatplains.net/	Univ. of Kansas www.ku.edu	Abilene	Greatplains --> Qwest[s]	Yes	Separate networks
KY	SEPSCoR (should be http://www.sepscor.org/ but maybe see http://www.sura.org/sepscor.html or try http://www.cns.uky.edu/SEPSCoR/contents.html)	Univ. of Kentucky www.uky.edu	vBNS	BBNPlanet		Separate networks[t]
LA	LaNet http://www.state.la.us/otm/lanet/	Louisiana State www.lsu.edu	Abilene	Bellsouth --> UUNet	Yes (muxed T1's)[u]	LaNet is run by State of LA OTM
ME	UNet/Education Network of ME http://www.unet.maine.edu/	Univ. of Maine www.maine.edu	Abilene	UUNet	Yes[v]	State is customer

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MD	SURA http://www.sura.org/ info_tech.html see also UMATS (http://www.umats.ums.edu/)	Univ. of Maryland www.umd.edu	vBNS	Digex[w]	Yes	Separate networks[x]
MA	UMass Univ. Info. Services http://www.umassp.edu/uis/ MITI (Mass. Info. Turnpike Init.) http://www.umassp.edu/miti/	Univ. of Mass. www.umass.edu	vBNS	CWIX[y]	Yes[z]	State govt is customer[aa] (state also maintains a 2nd network)[ab]
MI	MERIT/Michnet http://www.merit.edu/michnet/	Univ. of Michigan www.umich.edu	Abilene	Merit --> CWIX	Yes	State govt is customer[ac]
MN	State univesity system schools backhaul circuits to UMN Mpls.;[ad] state is also deploying a fiber-based network statewide[ae]	Univ. of Minnesota www.umn.edu	vBNS	MR Net[af] --> BBNPlanet	n/a	n/a
MS	None per se	Univ. of Mississippi www.olemiss.edu	No	Bellsouth --> UUNet	n/a	State operates network; higher ed is customer
MO	MOREnet http://www.more.net/	Univ. of Missouri www.missouri.edu	vBNS	More Net --> Sprintlink	Yes[ag]	State govt is customer[ah]

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MT	Network Montana http://www.nmp.umt.edu/ which has evolved into SummitNet ("State and Universities of Montana Multi-Protocol Network")	Univ. of Montana www.umt.edu	Abilene	Verio[ai]	Yes (T1 network speeds only)	State controls network[aj]
NE	University of Nebraska Wide Area Network[ak] http://csn.uneb.edu/ See also Greatplains Network http://www.greatplains.net/	Univ. of Nebraska www.unl.edu	Abilene	Alltel --> UUNet	Yes	Separate networks
NV	NevadaNet http://www.scs.nevada.edu/nevadanet/	UNLV www.unlv.edu	No	NSCEE --> Sprintlink	Yes	State govt is customer,[al] but see push to deploy separate agency network ("Silvernet")[am]
NH	USNH WAN http://telecom.unh.edu/WANindex.html[an]	Univ. of New Hampshire www.unh.edu	Abilene	Globix	Yes	Separate networks
NJ	NJREN (under RFP now) http://www.njin.net/ppt/njhen/ & http://www.njit.edu/Directory/Admin/Purchasing/RFP/1999/	Rutgers www.rutgers.edu	vBNS	BBNPlanet		

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NM	New Mexico Technet http://www.technet.nm.org/ See also CHECS: http://dns1-checs.nmsu.edu/	Univ. of New Mexico www.unm.edu	vBNS	ANS	Yes	State govt is customer of Technet[ao]
NY	NYSERNET http://nysernet.org/	SUNY Buffalo www.buffalo.edu	No[ap]	Applied Theory --> Sprintlink	Yes	Separate networks
NC	NCREN http://www.ncren.net/	Univ. of N. Carolina www.unc.edu	Abilene	NCREN --> Qwest	Yes	State govt is customer[aq]
ND	HECN http://www.nodak.edu/hecn/ See also: Greatplains Network http://www.greatplains.net/	Univ. of N. Dakota www.nodak.edu	Abilene	GreatPlains --> Qwest[ar]	Yes	Separate networks[as]
OH	OAR Net http://www.oar.net/	Ohio State www.osu.edu	Abilene	OAR Net --> BBNPlanet	Yes	State govt is customer[at]
OK	OneNet http://www.onenet.net/ See also Greatplains Network http://www.greatplains.net/	Univ. of Oklahoma www.ou.edu	Abilene	Onenet --> SWBell --> Williams --> Conxion	Yes	State govt is customer[au]
OR	OWEN/NERO http://www.nero.net/	Univ. of Oregon www.uoregon.edu	Abilene	OWN/NERO --> UUNet	Yes	State govt is customer[av]
PA	NCNE http://www.ncne.org/	Penn State www.psu.edu	Abilene	PSC --> UUNet[aw]	Yes[ax]	
RI	RINet http://www.ri.net/	Univ. of Rhode Island www.uri.edu	Abilene	Brown Univ --> UUNet or direct to CWIX		State govt is customer[ay]

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SC	None per se	Univ. of S. Carolina www.sc.edu	vBNS	InfoAvenue --> Qwest	n/a	State network status unclear
SD	Great Plains Network http://www.greatplains.net/ see also DakotaLink http://www.dakotalink.org/	Univ. of S. Dakota www.usd.edu	Abilene	Verio	Yes	Separate networks.
TN	TNII http://www.utenn.edu/tnii/ [az]	Univ. of Tennessee www.utk.edu	Abilene	BBNPlanet	Yes	State govt is customer
TX	THENET http://www.the.net/	Univ. of Texas www.utexas.edu	vBNS	ATT Net	Yes	Multiple networks; [ba] state govt is customer[bb]
UT	UEN http://www.uen.org/	Univ. of Utah www.utah.edu	Abilene	UEN --> Qwest	Yes	Separate networks;[bc] state is also UEN customer[bd]
VT	None per se	Univ. of Vermont www.uvm.edu	No	ATT Net[be]	n/a	Separate networks[bf]
VA	NetworkVirginia http://www.networkvirginia.net/	Univ. of Virginia www.virginia.edu	Abilene	Sprintlink	Yes	State govt is customer[bg]
WA	Washington K20 Network http://www.wa-k20.net/ see also: http://www.wa.gov/K20/	Univ. of Washington www.washington.edu	Abilene	CERF Net	Yes	State govt is customer[bh]

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WV	West Virginia Network http://www.wvnet.edu/ [bi]	West Virginia Univ. www.wvu.edu	vBNS	WV Net --> UUNet	Yes	State govt is customer[bj]
WI	WiscNet http://wiscnet.net/	Univ. of Wisconsin www.wisc.edu	vBNS	WiscNet Net -->BBNPlanet	Yes[bk]	State govt is customer[bl]
WY	WestNet/Front Range Gigapop http://www.scd.ucar.edu/nets/ Projects/Westnet/	Univ. of Wyoming www.uwyo.edu	Abilene	Front Range Gigapop --> Qwest	Yes	Seperate networks with Univ. Wyoming providing Internet transit[bm]

a. This column focuses on commodity *transit* network connectivity, i.e., *non*-Internet2 (non-Abilene/non-vBNS/non-HPC) connectivity; in some cases commodity transit connectivity may be obtained from the same source as Internet2 connectivity (i.e., a GigaPOP), but in many cases the two are handled completely independently. It is also worth mentioning that we will not be listing some pan-regional computing consortia (such as NWACC); while NWACC deals with network related issues, NWACC and similar organizations do not operate a regional (or statewide) commodity transit network for its members.

b. Many universities are multihomed, purchasing Internet transit connectivity from multiple providers and/or interconnecting at various regional peering points. Thus, the Internet transit connectivity reported here may be only one of multiple Internet transit paths possible, and in this particular case, because of where the connectivity was assessed, the routes reported will tend to favor BBNPlanet transit connectivity over any additionally available connectivity.

c. http://www.asc.edu/html/members.html

d. UAF participates in the Pacific Northwest Gigapop in Seattle, but that doesn't provide intrastate connectivity, nor connect UAA or UA Southeast.
CENIC also mentions UA in conjunction with PI2 (Pacific Internet2); see http://www.cenic.org/plan/collaborations.html, but that project isn't believed to be operational at this time. UA is also participating in the WCI AK Fiberstar project, which will link UAF and UAA, and the WCI Alaska Northstar project, which will link Juneau via a spur on the WCI suboceanic connection between Anchorage and the Oregon Coast.

e. http://aspin.asu.edu/partners/

f.   http://www.arknet.edu/arknet/overview.html states: "ARKnet's member [sic] now includes all of the state's universities, colleges, community colleges, and technical institutes, as well as several non-profit organizations, state agencies, and public libraries."

g.   Note that Cal State schools, some community colleges and some high schools connect via 4CNet, http://www.4c.net/

h.   Many state agencies may connect via Calnet, http://www.calnetinfo.com

i.   See: http://www.state.co.us/gov_dir/gss/cits/comm/multinet/multinetcover.htm

j.   See the most recently available UConn Communication's Master Plan, revised April 14, 1998, at http://abraham.ucc.uconn.edu/wwwcnnct/sp.htm ("The University of Connecticut is currently operating with a 4.5Mbps connection from Storrs and the Regional Campuses to the Internet through a tier two Internet provider. ... Communication Services recommends upgrading in Summer 1998 to a 10Mbps link through a new Internet Service provider, preferably with first-tier non-aggregated access to the Internet core backbone."

k.   http://www.otm.state.de.us/ states that "OTM also manages the StateWide Information Transport Network and Internet Connection." http://www.otm.state.de.us/network1.htm states that "OIS/OTM administers the State Information Transport Network (SITN)."
 HOWEVER in that same document they state, *"Education traditionally has had a certain independence, in terms of not being a part of the State network environment and will probably maintain that independence to some extent. In fact, the way the WAN is designed, we effectively have two separate networks that are joined at strategic points. It was made that way because we realized that Education was a different community with different needs. We also had concerns for security. An education environment, with its thousands of students, tends to be looser in terms of administration and management of information technology, and we did not want that to impact vital State production systems."*
Miscellaneous note: SITN appears to be IP over SMDS based; the state's WAN standard appears to be Banyan Vines (rather than Novell or NT).

l.   See user profile pie chart at http://www.firn.edu/gifs/firn/levels.gif

m.   http://www.usg.edu/peachnet/about/sites/other.html

n.   http://www.wsu.edu/IT/netsys/proposal.html describes various collaborations that UI has had with WSU (they are separated by only eight miles, although obviously they are in completely different states); UW services WSU wide area network requirements (and derivatively/jointly, UI's requirements, too).

o.   http://www.uiuc.edu/ccso/network/networkfaq.html states that "As of 9/99 the University has 28Mbits per second of commodity access and approximately 22Mbps of traffic through peers, research and education networks."

p.   http://www.state.in.us/intel/html/intel.html

q.   See, for example: http://stats.ind.net/traffic/indianapolis/ listing Indiana Supreme Court, Indiana State Library, etc.

r. http://www.icn.state.ia.us/about/faq/Faqnetwork.htm describes capital funding for ICN, which included $114,530,000 ('92/'93 dollars) in certificates of
participation plus an additional $94,600,000 in construction costs covering the period Jul 1995-June 1999.

Operational funding is described as "The Iowa Communications Network receives its funding from several sources. Ongoing operations for the Network are paid for by receipts for services provided. There is an annual short fall in revenues due to low rates charged to authorized users. The General Assembly has appropriated 3,735,000 for subsidization of video rates during fiscal year 1999. The Certificates of Participation, issued to build parts I and II of the Network, require semi annual interest payments and an annual principal payment. These requirements are paid by interest earnings on investments related to the Certificates of Participation. The annual short fall, which approximates $12,500,000, is paid for by the State of Iowa General Fund, via an appropriation. The Part III [1995-1999 period] additions to the network are paid for by an annual appropriation from the Rebuild Iowa Infrastructure Fund. This averages $20 million per year."

s. See, for example: http://nic-ks.greatplains.net/mrtg/I1/ks-1.r.greatplains.net.i1-ks.html

t. Compare http://www.state.ky.us/kirm/kih.htm and http://www.cns.uky.edu/SEPSCoR/contents.html

u. http://www.state.la.us/otm/lanet/lanetmap.html

v. http://www.unet.maine.edu/tech_serv/index.html says "Technology Services maintains a high-speed TCP/IP network linking the U. Maine System campuses, several other educational institutions in the state, the State government offices and numerous outreach sites including libraries and public schools."

w. http://noc.umd.edu/Network/offcampusrate.html says "Currently the University contracts with Intermedia Communications for 27Mbps worth of commodity Internet bandwidth over a direct DS-3 circuit. The university has signed a contract with Qwest Communications to upgrade campus connectivity to 36Mbps"
http://www.noc.umd.edu/ says "NTS has been working for quite some time to arrange for a new Internet Provider contract for the University. The contract was awarded to Qwest Communications this past November. They will become the carrier of our non research internet traffic as soon as Bell Atlantic completes the installation of the circuit into the Qwest network facility in Washington, DC. We expect that to occur before the end of February.")

x. http://www.mec.state.md.us/ (the Maryland Electronic Capital) appears to focus primarily on SAILOR, "Maryland's Online Public Information Network" (http://www.sailor.lib.md.us); the state appears to connect via gemini2000.net

y. http://nms1.oit.umass.edu:888/mrtg/BORDER1-RT.html

z. http://www.umassp.edu/miti/mitinet.gif

aa. http://www.umassp.edu/uis/acccess.html

ab. http://www.state.ma.us/itd/onlinegv/p2crstat.htm says "The Commonwealth of Massachusetts' internal network is called MAGNet, short for Massachusetts Access to Government Networks. [...] GTE/BBN and MCI provide Internet access, with high-speed connections to MAGNet through the ITD Network Control Center."

ac. http://www.merit.edu/merit/members.html (listed under Michigan State Government)

ad. See for example: http://www.d.umn.edu/itss/computing/umdnet.html and http://www.mrs.umn.edu/cs/Newsletters/fall98/network.shtml
HOMENETS (http://www.crk.umn.edu/nets/homenets.htm) on the other hand, appears to be video delivery-oriented.

ae. http://www.dot.state.mn.us/projects/fiber/faq.shtml states "ICS/UCN will also provide access to 20% of network capacity for public sector use -- this includes K-12 schools, universities, libraries and state and local governments. The state will also received 20% of any future additions to the base network, 20% off ICS/UCN's best customer rate for capacity over 20%, and 10 "dark" (reserve) fibers."

af. mr.net, the former state academic network, has now become www.onvoy.com, however they still have some DNS-based references to mr.net

ag. http://www.more.net/new_tech/index.html

ah. evidenced by traceroute to www.state.mo.us passing through the Jefferson City more.net hub

ai. http://www.state.mt.us/isd/techninfo/COMPUT.HTM states "Internet Access. The State of Montana, the University of Montana and Montana State University each have their own Internet portals. All SummitNet state government traffic accesses the Internet through two T1 Internet portals located in Helena. Future plans are for adding additional Internet portals in the Billings area."

aj. http://www.state.mt.us/isd/techinfo/COMPUT.HTM states "State Network Environment. The State proves data networking facilities and services for all agencies and other qualifying organizations. SummitNet (the State and Universities of Montana Multi-Protocol Network) is the Intranet for the State of Montana and the Montana University System. The primary supported protocol is TCP/IP, but it also supports some IPX and SNA traffic. The SummitNet core backbone is a T-1 meshed network connected by Cisco 7500 series routes located in Bozeman, Helena and Missoula. Remote locations are typically connected by 56Kbs/28CIR frame relay circuits, however there are some T1 connections."

ak. For a network diagram, see: http://csn.uneb.edu/networksrv/network5.htm

al. http://www.scs.nevada.edu/nevadanet/nvhistory.html states "NevadaNet is the University and Community College System of Nevada (UCCSN) Wide Area Network (WAN). Managed by System Computing Services (SCS), NevadaNet provides voice, video, and data connectivity between UCCSN locations, the Internet, participating state and federal agencies, and K-12 locations throughout Nevada. From its beginning in 1970, NevadaNet has developed into a robust statewide backbone network. In 1988 the University of Nevada, Las Vegas (UNLV) to University of Nevada, Reno (UNR) link was upgraded with funding provided by the National Science Foundation (NSF). In 1995, the Nevada Senate provided further funding of NevadaNet enhancements with the passage of Senate Bill 204 (SB204). Specifically, SB204 provided for a text based network and to add K-12 sites to the network. Additional money was secured in 1997 with the passage of Assembly Bill 606 (AB606). AB606 provided for expansion and enhancements to the network bandwidth. Currently, the shared backbone capacity of NevadaNet is 1.5mbs to 4.5mbs between hub centers and includes Internet connections of 4.5mb

from both Reno and Las Vegas. Individual sites connect to NevadaNet at speeds of 384kbs to 1.5mbs. SCS is currently working on plans to increase bandwidth to the Internet and across the entire statewide backbone. [...] SCS provides engineering, design, equipment specification, ordering, and planning services to assist UCCSN, state, federal, and K-12 customers in attaching their LANs and WANs to NevadaNet."

am. http://www.state.nv.us/doit/newsletter/fall99/index.html

an. At the time we visited that page, it has a non-fully qualified link to the USNH WAN diagram and MRTG network traffic graphs; for them, please see:
http://spot.unh.edu/~dgreen/mrtg/grinx.html

ao. evidenced by traceroute to www.state.nm.us passing through technet-gw.customer.alter.net

ap. Doing a traceroute to www.buffalo.edu clearly shows a commodity path; an email query sent to Buffalo resulted in a reply that yes, Buffalo DOES have I2 connectivity, however only for selected campus subnets, not including the one that www.buffalo.edu sits on.

aq. evidenced by traceroute to www.state.nc.us passing through sipsncih-dmz.ncren.net

ar. See, for eample: http://nic-ks.greatplains.net/mrtg/I1/ks-1.r.greatplains.net.i1-nd.html

as. http://www.state.nd.us/itd/commun/serv.html ("A statewide data network - to over 50 cities and towns with connections to most state agency LANs and access to national networks. ISDN also provides a World-Wide Web (WWW) Home Page for North Dakota State Government.")

at. evidenced by traceroute to www.state.oh.us passing through sot2-atm1-0s1.columbus.oar.net

au. evidenced by traceroute to www.state.ok.us passing through border2-okc.FE0-0.onenet.net ; note that http://www.onenet.net/onenet/oneovw.html states that "The Oklahoma State Regents for Higher Education, in partnership with the Office of State Finance and Oklahoma telecommunication companies, operate the network."

av. http://www.nero.net/NERO/partners.html

aw. http://www.ncne.net/arch/genarch.html ("NCNE.Net currently has 133 Mb/s of Commodity Internet bandwidth. The bandwidth is divided up among four providers. They are: 45 Mb/s --> AT&T WorldNet, 21 Mb/s --> AT&T CERFnet, 22 Mb/s --> SprintLink, 45 Mb/s --> UUNet")

ax. http://www.ncne.net/arch/map.html

ay. http://www.ri.net/RINet/partners.html

az. Note that http://www.state.tn.us/finance/oir/tnii/tnii.html appears to be the TNII Home Page (and is so labelled), but has not been updated since 06/10/96.
The www.utenn.edu/tnii/ site is more current, although its schedule was last updated 04/07/99, and the status page returns "not currently available."

ba. See "Texas Performance Review: Disturbing the Peace" (ca 1996) at http://www.window.state.tx.us/tpr/tpr4/c4.gg/c406.html which states:

"Texas operates or is building at least seven separate interagency telecommunications networks managed by different agencies on a cost-recovery basis. Each of the managing agencies markets its services not only to other state agencies and universities, but also to local jurisdictions (primarily school districts) across the state. In some cases, these networks work together to support different aspects of the basic job of moving information from one place to another. In other cases, however, they are redundant and wasteful.

"The TEX-AN III network transports bulk voice and data communications across the state. Its services are provided by private companies under contract with the General Services Commission (GSC). All non-legislative state agencies are required by law to use TEX-AN or to obtain a waiver from GSC and the Department of Information Resources (DIR). [...] Each agency is free to build its own data or video network so long as it uses TEX-AN "bandwidth" (carrying capacity). Each agency also purchases its own telephone equipment and local circuits, now in newly competitive markets. Any agency may go beyond providing for its own telecommunications needs and choose to sell services to other agencies or local jurisdictions.

"The Texas Higher Education Network (THENET) is managed by the University of Texas at Austin (UT-Austin), which owns portions of this network and contracts for others. It provides statewide data and video transport and routing to many universities, school districts, and some state agencies....

[continues at some length; see original document]

bb. "CAPnet is the largest state agency provider of Internet services, connecting through THENET" (ibid)

bc. http://www.its.state.ut.us/wan/html/wide_area_network.html ("The Wide Area Networking group plans, designs, implements, and provides ongoing support for the state wide area network (WAN)."

bd. evidenced by a traceroute to www.state.ut.us passing through gw-its-core3.uen.net

be. Plans for commodity network upgrades at UVM are discussed at http://sjc.cc.uvm.edu/network-growth-at-uvm.html (updated as of Nov 12, 1999); UVM will be buying 15Mbps from Bell Atlantic/BBNPlanet.

bf. See http://www.state.vt.us/govnet/infrastructure.htp which states "The backbone of GOVnet is made up of fifteen T1 (1.544 Mbps) lines supplemented by more than fifty 56kbps lines. This network connects to the Internet via a T1 to MCI in Massachusetts."

bg. http://www.networkvirginia.net/connected.html; see also www.networkvirginia.net/vben-brochure.html which states "[NET.WORK.VIRGINIA] is the result of a project led by Virginia Tech in association with Old Dominion Univerity and the Virginia Community College System..." and "Also, many state agencies are taking advantage of NET.WORK.VIRGINIA including the Department of Health, the Virginia Employment Commission, the Department of General Services, the Virginia State Library, the State Police, the Institute of Marine Science and others."

bh. State government isn't listed as a participant on www.wa-k20.net/members/index.html, however a traceroute to www.state.wa.us shows traffic flowing over wa-k20.net. Moreover, www.wa.gov/K20/ claims that the "Washington State Department of Information Services is responsible for coordinating the development of the network" however it is clear from http://www.wa.gov/K20/contacts/koco.html that the University of Washington has operational control and responsibility for the network. See also: http://www.wa.gov/dis/tsd/nwrksvc.htm

bi. Reportedly merged nine major parallel systems into one ATM based, OC3 speed state network. $1.8M appropriated 2001

bj. http://www.wvnet.edu/GRANTS/TWVwhowe.html

bk. http://wiscnet.net/annmtg99/brdchair/napnet1999.gif

bl. http://wiscnet.net/members.html

bm. http://www.state.wy.us/~tele/declaration.html including statements that "ITD is responsible for management, design, engineering, connectivity, availability, diagnostics, capacity planning and performance of the WAN side of the demarcation." and "ITD provides alternate paths to the Internet. This is accomplished with Border Gateway Protocol (BGP) agreements and connections with current ISP and the University of Wyoming."