District of Columbia Government Data Transport Shared Service

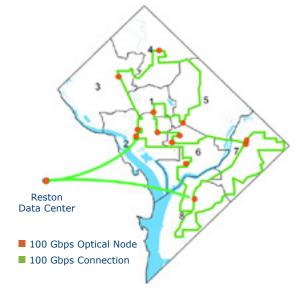


DC-Net's Transport Service saved one federal agency close to \$20 million over five years—while increasing bandwidth by 534% over services available through the Networx contract.

Service Background

The District of Columbia government is extremely well-positioned to provide data transport services to the wide range of federal agencies located within its borders. Designed to meet both local and federal agency needs, the District's state-of-the-art data transport network, "DC-Net," is operated by the DC Office of the Chief Technology Officer and provides an ultra-high capacity, robust platform for government services.

- DC-Net has deployed almost 600 miles of government owned fiber to every section of the city by leveraging 1905 legislation amended in 2005 that allows DC government use of all cabling conduits within the city.
- Fiber infrastructure is significantly maximized and enriched by a state-of-the-art 100 Gbps optical backbone equating to over 4.4 Tbps of aggregate bandwidth and creating one of the most capable government owned network infrastructures to date.



DC-Net Primary Network Backbone

- Network infrastructure extends to within ¼ mile of every building occupied by federal agencies in the District of Columbia.
- Title 31 U.S.C. §1537 allows services between the federal and DC governments to occur in an effort of preventing duplication and to promote efficiency and economy.

Cost Efficiencies

A comparison of DC-Net transport services with the list price of top network/ telecommunications contracts in the District (WITS 3 and Networx) indicates an a significant potential savings to federal agencies:

Intergovernmental Partners





- IP VPN 100 Mbps DC-Net services are over 35% cheaper than Networx
- 1 Gbps DC-Net services are almost 38% cheaper than WITS 3 and over 62% cheaper than Networx
- 10 Gbps DC-Net services are 55% cheaper than WITS 3 and 86% cheaper than Networx
- Supporting a recent federal agency initiative, DC-Net services were 59% cheaper and provided 534% more aggregate bandwidth than those offered by Networx

District of Columbia Government Data Transport Shared Service



Service Capabilities

DC-Net supports federal agencies through an architectural framework that allows shared existing infrastructure to maximize resources and dramatically reduce cost. At the same time the DC-Net platform integrates appropriate physical, logical, and security boundaries to ensure agency-centric data separation and protection.

- Specific data transport solutions include:
 - » Optical transport—DWDM solutions of 1 Gbps to 40 Gbps
 - » SONET—TDM services with bandwidths of DS-1 to OC-192
 - » Ethernet—with bandwidths ranging from 10 Mbps to 10 Gbps
 - » VPN transport—Over Layer 3 MPLS network with bandwidths from 10 Mbps to 1 Gbps
- Follows federal security and interoperability mandates (FIPS, C&A, IPv6 capable, etc.)
- Reliability rating of 99.999% achieved by redundancy at every level—diverse fiber paths, dual network node connectivity, redundant facilities, and 24/7 SOC/NOC for continuous monitoring and immediate incident response.
- Restoral response program similar to the FCC/DHS Telecommunications Service Priority (TSP) (All federal agencies receive at a minimum equivalent of TSP level 3 priority.)
- Limitless interconnectivity to capability rich locations (CoreSite, Terremark, Equinix, etc.) which provide cloud services, co-location/DR/COOP, and access to all major commercial carrier resources—providing broad flexibility to support practically any agency's business goals.

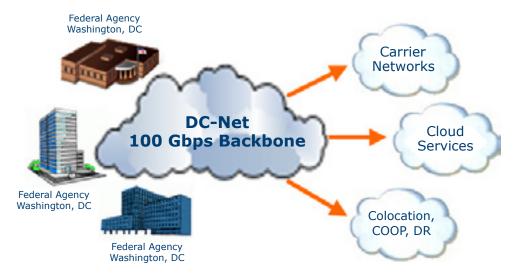
DC-Net Citywide Network

Office of the Chief
Technology Officer
District of Columbia
Government
655 15th Street, NW
Washington, DC 20005
dcnet@dc.gov

Federal Account Team

www.dcnet.dc.gov





Federal Agency Network Environment Leveraging DC-Net Data Transport Resources