

management, accounting, asset sales, reconciliation, loan servicing and financial management reporting systems.

4. IV&V Services for the DC Government

TCBA has performed IV&V services for the DC Government on implementation of its new financial management system, procurement system, tax and revenue system, and budget system.

5. Emergency and Non-Emergency Number Telephone Calling Systems Funds Review

TCBA provided information auditing services to the District of Columbia Office of the Chief Technology Officer. Our responsibilities included review of the procedures for E-911 remittance fee collection by Local Exchange Carriers (LEC) and review of the procedure for measuring, reporting and remittance of user fees. TCBA recommended standards to define unit costs, and reporting and billing of LEC costs to OCTO E-911 fund.

NETWORK INFRASTRUCTURE

1. Wide Area Network Design and Implementation

TCBA provided support to the District of Columbia Department of Motor Vehicles during the implementation of a new motor vehicle information system. We assisted the DMV with the design and implementation of a hub and spoke frame relay network architecture among its eight remote offices and the District's two data centers. This system implementation required the complete reengineering of the District Wide Area

Network to support the application. The network design achieved full network redundancy using frame relay for the primary circuits and ISDN circuits for backup connectivity. The two mirrored data centers were networked over a fiber channel.

2. Cisco Content Switch Deployment

The DC Department of Consumer and Regulatory Affairs procured TCBA's assistance for the implementation of the Master Business License Renewal application. This application was developed in .ASP and deployed as a web application with Oracle as its primary data source. The Department required redundancy and load balancing between its two Dell 2650 web servers to ensure 99.999% system availability. TCBA developed a plan to deploy a Cisco Content Services switch that provided for seamless failover and load balancing between the two servers. The web servers were then connected to two Microsoft Cluster Dell 6450 data base servers running Oracle FailSafe. These database servers were configured and connected to an EMC Disk Array via fiber channel. TCBA successfully delivered these services to the Department ahead of schedule and without service interruption.

3. Network Performance Assessment

TCBA performed an assessment of the DC Emergency Management Agency network infrastructure to determine the causes of poor network performance and other issues affecting its video display units in the Emergency Operations Center. Our effort resulted in the identification of problems associated with the network architecture that included conversion from thinnet to Ethernet, switch overload, poor LAN segmentation and the need for additional network hardware.

4. Data Center Hardware Obsolescence Assessment

The University of the District of Columbia engaged TCBA to assess aging and obsolete hardware that had accumulated over time and cluttered its Data Center. We assisted with the identification and earmarking of network and server equipment no longer needed by the University and scheduled removal. In certain cases, this process included the development of a transition plan for migrating services from active, but obsolete hardware to other supporting platforms and ultimately power down and removal of the devices.

5. Enterprise LAN Management

The District of Columbia Office of the Chief Technology Officer engaged TCBA to support the consolidation of its enterprise LAN and Server management. This effort included several DC Government agencies where we performed network reconfiguration, consolidation and server management.

6. Solid Waste Management Authority

TCBA provided the Solid Waste Management Authority with the following services:

1. Network Infrastructure redesign, support and maintenance
2. Network Systems Integration and Training
3. Network and Systems Requirements Analysis and Recommendations

4. Desktop Applications Training and Performance Measurements
5. Management Consulting and Review

TECHNICAL STAFF AUGMENTATION

1. Telecommunication Agency Staff

TCBA provided staff and operational support services to the District of Columbia Office of the Chief Technology Officer's telecommunication agency. Our responsibilities included assisting OCTO in transferring its telecommunication services role to the newly created DC Communications Agency (DCCA), and to provide long-term permanent operations support for the new agency. TCBA provided qualified personnel to initiate organizational deployment and provided assistance in hiring permanent staff in accordance with OCTO's vision.

2. Technical Architect Experts

TCBA provided technical architectural support for the District of Columbia Office of the Chief Technology Officer including administration, maintenance, and troubleshooting, for the DMV Destiny application. The provided resource focused on technologies including Desktop, Windows server, and LAN and WAN issues.

3. Senior Technical Architect

TCBA provided technical architecture and engineering support to the District of Columbia's Office of the Chief