TECHNOLOGY COORDINATION OFFICE
Review and Opinion Regarding the Proposed Renewal of the
Primary & Secondary Internet and Broadband Services
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COST SUMMARY:

		O&M	CIP
Zayo		**$138,600.00**	**$0**
XO		**$258,900.00**	**$0**
	Five Year Total	**$397,500.00**	**$0**

(Note: $397,500 is the total 5-year commitment for the two contracts with annual budget impacts of $79,500 collectively).

FY 2010 Budget Impact
Budgeted? **Yes**

VENDOR: Zayo Enterprise Networks (*the County's current vendor*) and XO Communications

OVERVIEW:
Shelby County Central Information Technology (Central IT) currently has a contract with Zayo Enterprise Networks (formerly Memphis Networx) for Internet and Broadband network services. The Broadband service provides network connections from the County East and West campuses. The Internet access is for all County offices serviced by Central IT. This proposal is to *request that these services be provided by two vendors for redundancy and diverse traffic routing* thus reducing Single Points of Failure (SPOF). Having these services provided by more than one vendor mitigates any potential service disruption to Shelby County business functions that are inherent when provided by a single vendor. This request was formally submitted for competitive bid.

Note: *This is the second time this project has gone out for bid and, unfortunately, only two responses were received. With the goal of achieving outage risk mitigation via multiple-vendor redundancy, the County was denied the desired negotiating flexibility that three or more bid participants would have offered.*

OPINION: RECOMMENDED

Business Need
Shelby County Government is dependent upon a reliable, secure and robust network infrastructure and advanced technologies in order to conduct the business of its citizens. An increasing number of processes and services depend upon the availability of the network infrastructure. Service interruptions and service degradation are costly in terms of lost productivity, access to resources and taxpayer dollars. In order for Central IT to maintain and improve upon the current level of network operational stability and responsiveness to the County, it is requesting continuation (with modifications) of the Zayo services and introduction of an additional vendor, XO Communications. Zayo would provide one Internet and one Broadband connection and XO would provide redundancy and diverse traffic routing with one Internet and one Broadband connection.

Value for the Financial Outlay
Considering the County's current and forecasted requirement for increased bandwidth (more lanes on the highway) for network traffic, Central IT requested RFP responders to provide pricing for increased Internet bandwidth from an aggregate 12Mbps (Million bits per second) to 32Mbps service in 1-year, 3-year and 5-

year options. The same was requested for the 100Mbps campus to campus links Comparing the costs associated with the 3-year versus the 5-year terms, the 5-year commitments offer an approximate $10,000 per month cost advantage over the 3-year ones. TCO believes that, all things considered, the 5-year contracts offer the best cost/service tradeoffs.

The risks of vendor viability naturally increase in concert with the length of a contractual relationship. In this instance, however, Central IT and Contract Administration have negotiated early termination provisions that are very favorable to the County. Beyond the standard provisions that can terminate the relationship 'for cause', *the County can opt out of the contract 'without cause' on thirty days written notice* to either or both vendors, assuring flexibility to respond to future events and technology opportunities.)

Due Diligence

TCO reviewed graphs and reports from Central IT that indicated network traffic on the Internet links exceeds bandwidth thresholds consistently to confirm that the requested upgrades are necessary at this time. Central IT has implemented technologies and rules to restrict unauthorized traffic that has the potential to utilize bandwidth unnecessarily.

TCO has received assurances from Central IT that vendor Service Levels as indicated in the agreements will be closely monitored for compliance and all deficiencies will be addressed expeditiously.

Strategic Fit

Central IT will work with the vendors to engineer this solution for traffic load-balancing and automated failover which will enhance the user experience for Internet connectivity and access to required County services. These capabilities will utilize the technologies and equipment previously deployed in the 2008 Network Refresh Phase 1 project. The vendor redundancy will provide the capability for Central IT to meet some of the objectives of the County for ensuring Continuity of Operations/Continuity of Government. Implementation of this project is also consistent with the goals of long-term strategic IT plans.

Information Security Considerations

The Central IT group is responsible for ensuring the adequacy of security provisions on the County's network. This protection provides the assurance that the required steps are being taken to maintain the integrity and availability of County resources and information. The changes proposed in this project will not significantly alter the risks to confidentiality and network integrity faced by the County, although they will go some way towards enhancing availability, flexibility and security of the underlying infrastructure. Due care and testing will be needed during the implementation to ensure that the changes do not have unintended negative impacts as a result of misconfiguration or mis-communication with vendors.

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