

## Enterprise Technology Services

- In the estimate of Enterprise Technology staff, the Spectrum Data Center operates as a Tier I facility. During the RFP process for the County's Co-location Data Center solicitation, this tiered rating (I through IV) was not an acceptable level for County operations. The owner states they have engaged an engineering firm to design and propose an implementation strategy to bring the Data Center up to a Tier III standard. If the County procures this Data Center, a requirement remains for a large capital outlay to continue with this recommended upgrade of the Data Center and, replacement of antiquated equipment currently in operation.

For the current co-location Data Center, ETS engaged a study by FM Global to create a risk baseline and verify the co-location is a category V building. Enterprise Technology Services estimated this location operates within the 90<sup>th</sup> percentile of reaching Tier III status.

- The County originally occupied 1,500 square feet of Data Center floor space with a full office supporting Mainframe printing operations at the co-location Data Center. Enterprise Technology Services has reduced the office space and data center floor. The Data Center footprint is currently at 1,180 square feet with a goal of reducing the floor space to 900 square feet. In an era where Cloud computing is becoming more prevalent in the IT industry, data centers are continuing to shrink as more cost effective, secure services become available at co-location "Cloud" facilities. The Spectrum Data Center lists 7,288 of allocated square feet. This is in contrast with the needs of the County and any associated Constitutional offices. A recommended redesign to reduce the floor space footprint allows for better environmental efficiencies as opposed to the cooling requirements of a Data Center this large.
- The negotiated Broward County lease for the County's co-location Data Center includes all facilities operations, security, and maintenance in the cost of floor space rental. Additionally, Broward County only pays for electrical circuits needed. The electrical circuits include the costs of maintaining the building's tier III environment pertaining to generators, power conditioning and battery operations. Contractually, the County has a "most favored nation" clause and entitled to the lowest rates. Staff analysis indicates this cost model is far more effective than to fully staff a Data Center and contract with vendors for the maintenance of the infrastructure. The County's co-location Data Center operates with a budget of \$700K per year. For use of the Spectrum Data Center, estimated costs are \$2.83M per year for contract services and staffing.
- The County's move to the co-location data center in July 2007 required an estimated \$800K in moving related services. Duplicity of the data center environment, contractual services as related to retention of warranties and the initial buildout all contributed to this cost. Since 2007, Enterprise Technology Services brought County owned fiber optic connectivity into the co-location center to realize significant cost reductions related to vendor supplied data connectivity. With the absence of

the legacy Mainframe and the portability of today's technology, staff anticipates moving related costs estimated in the range of \$375K. The County owns fiber optic cable utilizing the Commercial boulevard easements and thus, fiber optic connectivity is locally available to the Spectrum Building. It is currently unknown as to what easements are available for public use within the Spectrum office park.

*Uptime Institute – Owners who select Tier I and Tier II solutions to support current IT technology are typically seeking a solution to short-term requirements. Both Tier I and Tier II are usually tactical solutions, i.e., driven by first-cost and time-to market more than life-cycle cost and uptime (or availability requirements). Rigorous uptime requirements and long-term viability usually lead to the strategic solutions found more often in Tier III and Tier IV site infrastructure. Tier III and Tier IV site infrastructure solutions have an effective life beyond the current IT requirement. Strategic site infrastructure solutions enable the owner to make strategic business decisions concerning growth and technology, unconstrained by current site infrastructure topology.*