STATE OF MARYLAND
DEPARTMENT OF PUBLIC SAFETY & CORRECTIONAL SERVICES

Information Technology & Communications Division	**Information Technology and Communications Division Policy #: ITCDP05-02**
	TITLE: Performance Management & Capacity Planning
	EFFECTIVE DATE: March 7, 2005
	APPROVED: Chief Information Officer (CIO)

I. PURPOSE:

The purpose of this policy is to provide guidance on a disciplined approach to effective agency capacity planning, to ensure that computer processing capacities will meet future requirements for service levels, response times, and application availabilities in support of the mission and goals of the Department of Public Safety and Communications Division (DPSCS) and its subordinate agencies. This policy is not a contract and may be modified by DPSCS at any time.

II. REFERENCES:

None.

III. SCOPE:

This policy applies to all units of the Information Technology and Communications Division (ITCD) and the Enterprise Network of ITCD.

IV. DEFINITIONS

See Glossary.

V. POLICY:

IT capacity shall be planned and managed to provide the Enterprise Network environment capable of sustaining the workload of its entire user community while providing acceptable response time for all supported systems.

VI. RESPONSIBILITIES:

A. The Chief Network Officer (CNO) of ITCD will review and update the Performance Management and Capacity Planning Policy annually no later than July 1st. The policy version number and change history shall be explicitly documented in each policy.

B. ITCD is responsible for implementing and enforcing this policy within the DPSCS.

VII. PROCEDURES:

A. Network Operations must be consulted during the planning or major modification phase of any new or existing system, to discuss the capacity requirements.

B. Network Operations will be responsible for pro-active monitoring of the Enterprise Network. The monitoring will include, but not be limited to, Average Resource Consumption, Peak Resource Consumption and Response Time.

C. Network Operations will perform historical trending analysis to predict resource saturation.

D. Network Operations will be responsible for reviewing the Enterprise Network to provide optimal performance based on technology and resource availability.

E. Network Operations will provide Capacity planning results to forecast the resource needs for DPSCS.

VIII. APPENDICES:

A. Effective Capacity Planning Methodology

B. Glossary

IX. RECISSIONS:

None

APPENDIX A. Effective Capacity Planning Methodology

Effective capacity planning methodology includes performance monitoring, historical data analysis, and modeling/simulation to predict future performance.

Capacity planning steps may include, but are not limited to:

- Defining key system and network resources
- Accumulating baseline statistics on key resource use
- Defining current available capacity of key resources
- Establishing correlations between key resources and business process response time
- Analyzing resource utilization over time to identify patterns in 1) resource utilization increases 2) cyclical highs and lows in utilization and 3) variable events that affect utilization
- Projecting future business volume growth
- Identifying both cyclical/variable effects
- Underlying growth assumptions
- Establishing correlations between business volume, growth, and key resources
- Determining anticipated upgrade timeframes for key resources
- Monitoring actual resource usage compared to growth projections
- Modifying the capacity plan as necessary where variance, e.g., overtime, is due to valid business drivers
- Providing budgetary and cost information

Glossary:

CICS	-	Customer Information Control System
Enterprise Network	-	The term 'Enterprise Network' is used through the document to denote the Enterprise Hardware, Software, Licenses and Communication Networks.