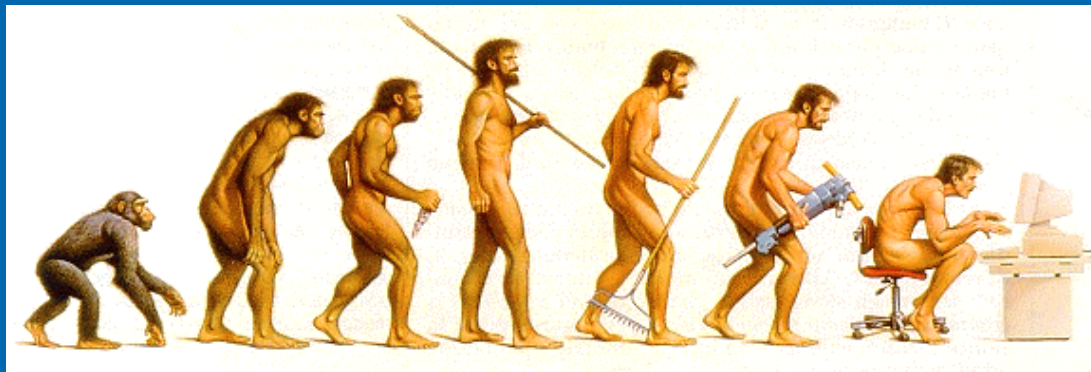


# Information Technology Planning at DVRPC



Taghi E. Ozbeki  
Manager, Information Services  
[tozbeki@dvrpc.org](mailto:tozbeki@dvrpc.org)

# History and Background

- First Efforts of Regional Planning in the Delaware Valley began in the 1930's with our predecessor, the Regional Planning Federation, which was funded 100% by private interests.
- In 1959, the Pennsylvania – New Jersey Transportation Study (a.k.a. Penn-Jersey study) was commissioned to study the current transportation conditions in the Greater Philadelphia region.
- DVRPC's first aerial photos were taken for this study.

# History and Background

## (cont.)

- DVRPC established in 1965 to provide comprehensive, coordinated planning for the orderly growth and development of the bi-state region.
- As an interstate, intercounty and intercity agency, DVRPC advises on regional policy and capital funding issues concerning transportation, economic development, the environment and land use.

# History and Background

## (cont.)

- DVRPC is governed by an 18-member Board which establishes regional policy, defines committee duties and adopts the annual work program.
- A 10-member Executive Committee oversees general operations and fiscal matters.
- Our planning and service functions are split among the Office of the Executive Director, Office of Public Affairs and three divisions: Transportation Planning, Regional Planning and Administration.

# DVRPC Region



# DVRPC Region (cont.)

- Sixth largest metropolitan area in the nation
- Approximately 4,000 square miles
- Home to over 5 million residents and 2.5 million jobs
- Over sixty four-year colleges and universities
- More than 25 medical schools and teaching hospitals
- Home to the second-largest concentration of health resources in the nation, including 120 hospitals, 200 pharmaceutical and biotech firms, and 135 medical manufacturers.



# IT History @ DVRPC

## Prior to 1998

- IBM mainframe
  - Reading Census tapes
  - Travel Simulation Models
- Personal Computers
  - Apple Macintosh (Accounting Staff)
  - IBM Compatibles (Planning Staff)

# IT History @ DVRPC

## Prior to 1998 (cont.)

### ➤ Computer System Mapping

- HARDWARE

- Intergraph Dual Screen Workstation with Digitizing Table
- MicroVAX II Server with 9mm Tape Drive
- HP Draftmaster II Pen Plotter

- SOFTWARE

- Intergraph Mapping Software
- VAX Operating System



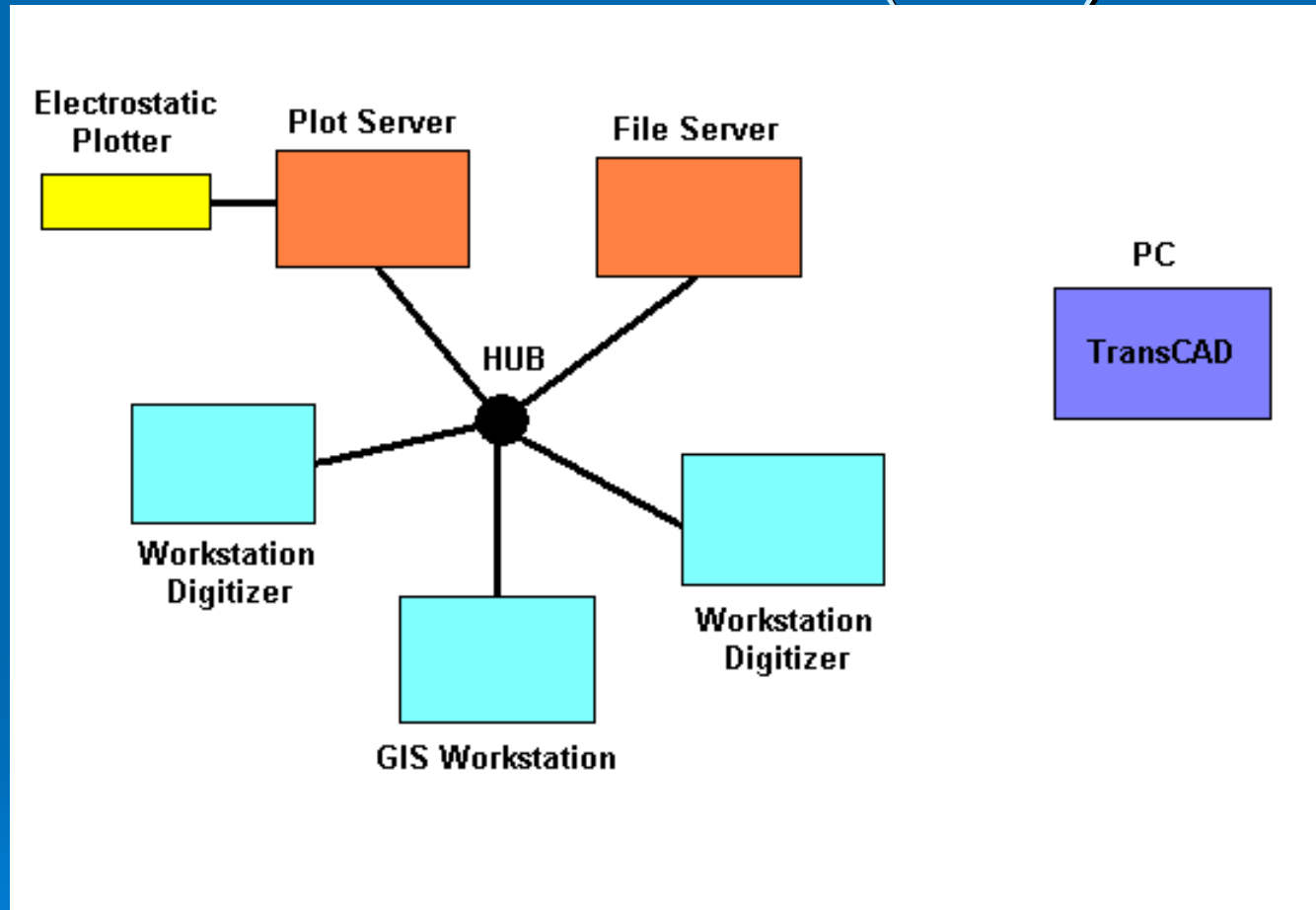
# IT History @ DVRPC

## Prior to 1998 (cont.)

- Operating System (VAX To UNIX)
- Purchased GIS Workstation
- Software Migration To MGE And Microstation
- Acquired Oracle License
- Network Capability

# IT History @ DVRPC

## Prior to 1998 (cont.)



# IT History @ DVRPC

## Prior to 1998 (cont.)

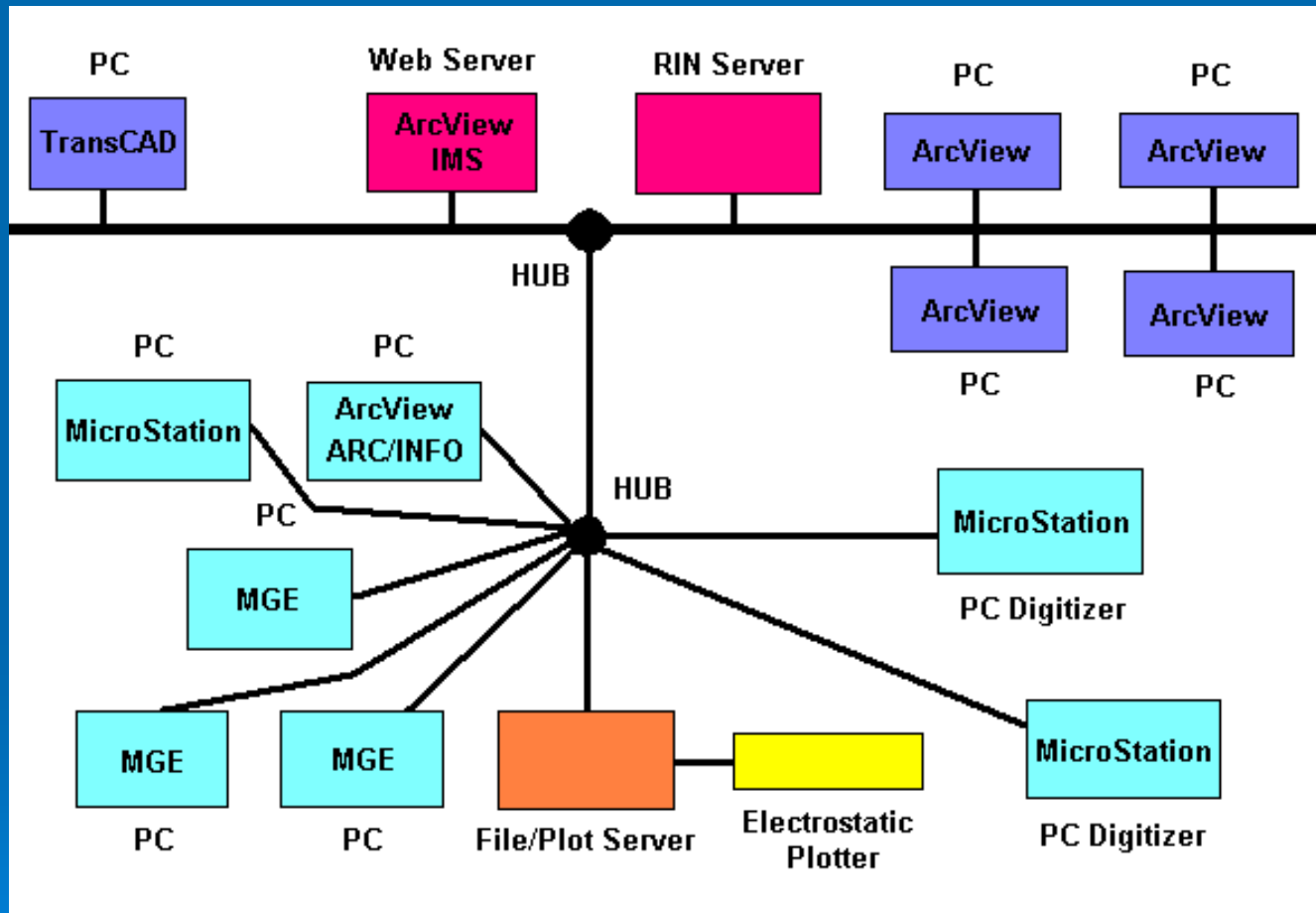
- Technology was not viewed in a strategic manner.
- Technology was viewed in terms of how it could be applied to business needs.
- DVRPC hired Coopers & Lybrand L.L.P. consultants to create its first IT Strategic Plan in 1998.

# IT History @ DVRPC

## Prior to 1998 (cont.)

<b>Recommendation</b>	<b>Status</b>
Remove the Mainframe	Implemented
Desktop PC's	Implemented
Establish an Office Network	Implemented
Office Productivity Software	Implemented
Enterprise Database	Implemented
Remote Access	Not Started
GIS	Implemented
Graphics	Implemented
E-mail and Scheduling	Implemented/In Progress

# 1998



# PROBLEMS

- Transferring Large Files
- Operating System Incompatibility
- File Translations To Other Programs
- Hardware/Domain Limitations
- Printing Limitations

# Progress

- A new IT Task Force Committee was formed this summer
- Has met three times since it was formed
- A Computer inventory of staff was done
  - 45% of Computers run on NT OS
- Recommended Hardware/Software standard for Desktops
- Assessed Servers Condition

# Progress (cont.)

## Desktops / Laptops Platform Architecture

Category	Desktops	Laptops
RAM	1024 MB	1024 MB
Hard disk size	80+ GB	60+ GB
Speed	2.80GHz	2.0GHz
Processor	Intel Pentium 4 Processor	Intel Pentium Processor
Monitor	17 inch SVGA Flat Panel	Active/Passive Matrix
Video	PCI graphics cards	Intel 910GML Integrated graphics
Floppy drive	3.5" 1.44mb	3.5" 1.44mb
CD drive	CD and DVD Reader/Writer	CD and DVD Reader/Writer
Additional hardware requirements	Sound card and speakers, 2 USB ports	Back-up Battery
Network card	Ethernet 10/100/1000 Base-T	Built-in Ethernet card
Operating system	Windows XP Professional	Windows XP Professional
File system	NTFS	NTFS
Third party software	Symantec Anti Virus Enterprise Edition, Microsoft Internet Explorer (latest version), MS Office Suite XP, MS Outlook	Symantec Anti Virus Enterprise Edition, Microsoft Internet Explorer (latest version), MS Office Suite XP, MS Outlook
Pre-Install Options	All Components	All Components
Maintenance	3 Year on-site, next business day	3 Year on-site, next business day
Preferred manufacturer	Dell	Dell



# Progress (cont.)

<b>Specific Use</b>	<b>Assessed Condition</b>
E-mail and Web	Replacement, critical
File Server	Replacement, not critical
Accounting	Acceptable
Backup Domain Controller	Acceptable
Print Server	Replacement, not critical
Filtering	Acceptable
Firewall	Acceptable
Oracle Database	Replacement, critical
GIS	Replacement, not critical
Transportation Modelina	Replacement, critical

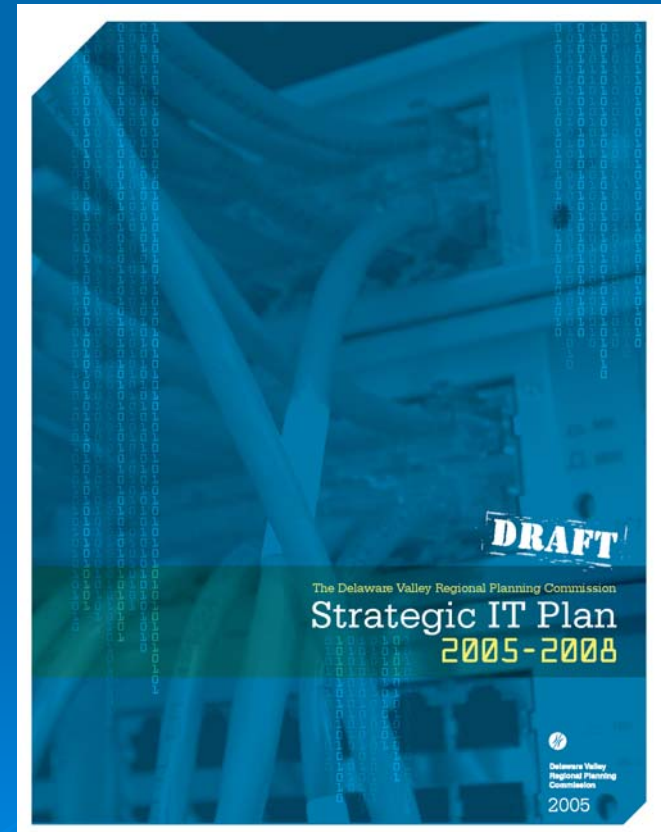
# Progress (cont.)

- Developed lists of:
  - Staff Computer Skills
  - Staff IT Functions
  - Staff Expert List
  - Staff Training Needs

# Progress (cont.)

## ➤ Currently Developing an IT Plan In-House:

- DVRPC's IT Vision/Mission
- Near-term Goals (tactical)
- Long-term Goals (strategic)



# GIS Recommendations

- Incorporate Many Key GIS Datasets Into The Enterprise Database
- Create E-commerce Capabilities For Distribution Of GIS Files, Aerial Photography, Digital Orthoimagery, And Reports



# GIS Recommendations

(Cont.)

- Update Map Sales Digital Orthoimagery Application To Include Historic Aerial Photography And Allow For Custom Plotting
- Online Mapping Development
- Create A Secure FTP Site For Sharing GIS Files With Member Governments

# Conclusion

- Develop IT Plan In-House
- Understand the Importance of Web Applications (Including Web Services) and Databases with Respect to GIS
- Use the IT Plan to Direct Your Day to Day IT Decisions