

# North Carolina Department of Transportation's Implementation of Trns•port C/S BAMS/DSS

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# Transport C/S BAMS/DSS

- Standard Configurations
  - Client/Server
  - Client/Server Workstation
  - Client/Server Stand Alone



# C/S BAMS/DSS Certified Platforms

## Application Server OS

Intel Windows NT

Intel Windows NT

Intel Windows NT

Intel Windows NT

Intel Windows NT

Intel Windows NT

**Intel Windows NT**

## DBMS

Oracle8

Oracle8

Oracle8

Oracle8

Sybase

DB2

**SAS**

## Database Server OS

Alpha Windows NT

Alpha Open VMS

SUN Solaris

Intel Windows NT

Alpha Unix

IBM MVS

**Intel Windows NT**



# NCDOT Configurations

- Version 3.5d on MVS Mainframe
- C/S Workstation version 4.1x accessing MVS mainframe data
  - WinNT 3.51 clients
- C/S version 4.1x
  - 1-database/interface server
    - Pentium II, 400 MHz, dual processor, 384 MB RAM
  - 2-application servers
    - Pentium II, 400 MHz, 128 MB RAM



# NCDOT Configurations (cont.)

- C/S version 5.0c
  - 1-database/interface/application server on one machine (**non-standard configuration**)
    - Pentium II, 400 MHz, dual processor, 384 MB RAM



# C/S Workstation 4.1x -- MVS Host

- Pros
  - Good transition configuration
  - No risk
- Cons
  - Requires PC SAS software that has high first year cost



# C/S 4.1x Standard Configuration

- Needed to supply our PES/LAS implementation team with a C/S BAMS/DSS to experiment with
  - Did this by copying our database into a different directory and then configuring their C/S BAMS/DSS clients to point to that directory



## C/S 4.1x Standard Config. (cont.)

- Initially was dissatisfied with the time required to build BAMS/DSS data views
  - Later this improved after a maintenance patch and a switch to a faster router on our network



# C/S 4.1x Standard Config. (cont.)

- Initially had a lot of trouble with:
  - Keeping our DPS services running
  - Finding our output reports
  - The Process Status display
  - Seeing our SAS Ad Hoc programs
    - Later this problem was completely solved by creating a shared RPT Out area on our Database server



## C/S 5.0c Non-standard Config.

- We installed this fully knowing that it was a non-standard configuration that had not be tried before
- Suspected that this configuration would perform well based on performance experienced by Maine that had installed C/S Stand Alone and because it would be closer to our mainframe installation



## C/S 5.0c Non-std. Config. (cont.)

- Noticed an immediate performance improvement
- Would not recommend that this configuration be attempted with a database other than SAS



# C/S 5.0c Non-std. Config. (cont.)

- Pros
  - Less hardware required
  - Less software required
  - No DBA required
  - Improved performance
- Cons
  - Not a standard configuration - state assumes risk



# Installation

- Downloaded database from mainframe with the use of a simple SAS ad hoc
- Sorted downloaded database with a simple SAS ad hoc



# Installation (cont.)

- I did installations myself with phone support from ITI
- The installation instructions for version 4.x was aimed primarily for Oracle installations
- The installation instructions for version 5.x was considerably better, but I still recommended changes



# Data Import

- Client/server versions of BAMS/DSS uses the same import file as the mainframe



# Usability

- The GUI makes BAMS/DSS easier to learn and use
- Considerably easier to utilize report results in other PC applications



