RECOMMENDATIONS FOR AUTOMATED SUPPORT FOR PROPOSED DCM PROGRAM IN THE BALTIMORE COUNTY CIRCUIT COURT
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CONSULTANT:

Thomas F. Lane
Technical Assistance Report No. 3-027

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<tr>
<th>Technical Assistance No.:</th>
<th>3-027</th>
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<tbody>
<tr>
<td>Requesting Jurisdiction:</td>
<td>Baltimore County, Maryland</td>
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<td>Requesting Agency:</td>
<td>The Circuit Court for Baltimore County</td>
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<tr>
<td>Requesting Official:</td>
<td>Hon. Edward A. DeWaters, Jr., Chief Judge</td>
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<tr>
<td>Local Coordinator:</td>
<td>Peter J. Lally, Court Administrator</td>
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<tr>
<td>Dates of On-Site Study:</td>
<td>March 26, October 8 and October 23, 1992</td>
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<tr>
<td>Consultants Assigned:</td>
<td>Thomas F. Lane</td>
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<tr>
<td>CTAP Staff Coordinator:</td>
<td>Caroline S. Cooper/Joseph A. Trotter, Jr.</td>
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<td>Central Focus of Study:</td>
<td>Planning and Automation Support for Civil DCM System</td>
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AUTOMATED SUPPORT FOR PROPOSED DCM PROGRAM FOR BALTIMORE COUNTY CIRCUIT COURT

Background
In January 1992, The Baltimore County Circuit Court requested technical assistance in considering the development of a Differentiated Case Management (DCM) system for civil cases. CTAP Deputy Director, Caroline Cooper, provided the Court with background materials on DCM issues and programs. On March 26, 1992, Ms. Cooper conducted a site visit to meet with judges and staff involved with DCM development to provide an overview of issues and tasks relevant to the development of a DCM program and specific issues relevant to the civil DCM program in Camden County, New Jersey which they planned to visit shortly.

During the course of these discussions, it became apparent that a primary issue to be addressed was the automation capability needed to support a civil DCM program in the Court and, in mid-September, the Court requested CTAP's assistance in determining the automated support it would need to acquire for its planned civil DCM program. By letter from Mr. Peter Lally, Court Administrator, dated October 6, 1992 the request was refined to focus on information on hardware configuration, software development and security requirements. Since the Maryland AOC is in the process of developing an automated system for all the circuit courts, financial and other support for the County will probably be minimal.

A visit to the Circuit Court on October 8, 1992 included meetings with Judges DeWaters and Howe, Court Administrator Peter Lally and Timothy Krempa, Chief of Information Services-System and Programming for the County Data Processing Department; as well as interviews, observation and data collection with staff of the Civil Assignment and Central Assignment Offices.

A draft of this report has been reviewed by the Court Administrator and circulated to the
court's DCM bench-bar committee. The consultant appeared before that Committee on November 23, 1992 to answer questions and provide any elaboration requested. It is the intention of the Committee to use the report as part of a grant request.

Findings
The court has a substantial civil caseload, with more than 14,000 filings annually, and a relatively high trial rate (4200).

Although the DCM program is in the process of being formulated, the concept has been approved and it will cover approximately one third of all civil cases.

Civil case processing involves three organizational entities: initial docketing of civil filings by the Clerk's Office; trial setting, noticing and record keeping by the Civil Assignment Office; scheduling by the Central Assignment Office. Initial case data passes from the Clerk's Office to the Civil Assignment Office where a duplicate set of records is created and maintained. Control over processing of the case also transfers at this time. Twenty-one days before the trial date (set 6-9 months previously) a list of cases is given to the Central Assignment Office by the Civil Assignment Office. Last minute confirmations of trial are made and calendars prepared by the Central Assignment Office. In the event of a postponement, control over the case reverts to the Civil Assignment Office, until it appears on the next trial list.

All three entities rely on good communication, with the Civil Assignment Office being the main repository of case status information.

There is practically no automated support for civil case processing. Although the Central Assignment Office has a PC with limited information, it is not used to track cases and will require substantial enhancement to the R:base software for DCM.

The court operates an IBM S/36 computer with terminals (3197) in the offices of the judges,
court administrator, records room, and several other interested agencies directly and through
the County mainframe computer. The main application is word processing (Display Write)
with tracking of case folders (bar coded), E-mail, CSEA notices, and settlements as
additional applications. The S/36 has been replaced in IBM's product line by the AS/400,
and is not a wise choice for new applications. The County has discussed moving the court's
applications to a shared AS/400, although no firm plans or offers are on the table. Further,
it is the policy of County Data Processing to place data base applications, such as the one
under consideration, on the County's mainframe. They are not staffed to develop
minicomputer or LAN-based applications and the court is not in their queue for resources.
I don't believe the court has made any specific request of County Data Processing for
services.

The Administrative Office of the Courts (AOC) has voiced its intention of automating all
the circuit courts in a manner not unlike the District Courts - tying them into its mainframe
computer in Annapolis. It has offered the Circuit Court funds for a local area network
(LAN) of PCs which could eventually be tied to the AOC computer. This is all that is
known of the plans of the AOC - certainly information on intended functionality, topology,
and implementation schedule would improve planning at the local level.

The Clerk in Allegheny County has offered a copy of a system (clipper-based) developed
for his court. It was not developed specifically for DCM and would require some
enhancement. More study is required to estimate the extent of enhancement.

Conclusions
DCM is an information intensive program that requires automated support to be successful.
The present manual, civil case processing in Baltimore County is overdue for improvement
in processing, record keeping and organization, and cannot adequately support a
requirement for additional information processing. It is amazing in an organization of this
size, complexity and importance, that staff have no automated support.
In light of the State’s decision to assume responsibility for providing automation to all the circuit courts, it seems advisable to keep automated support for DCM modest. Although the recommendations that follow are in keeping with a minimum effort, some discussion of a more robust approach is included.

Despite the preoccupation with the more tangible aspects of automation (hardware) the preferred approach to automation is to first determine the functional requirements, then to find/develop software solutions for those requirements, and finally to obtain the hardware resources necessary to support the software solutions. This approach is often overlooked as simplistic since we are constrained by budgets, available knowledge, and other agendas and resources (e.g. available hardware).

**Functional Requirements of Automated Support for a DCM Program**

- collection of information on the case, its attributes for track assignment, parties;
- monitoring case progress, recording track-specific events and dates;
- scheduling support, providing information on specific case status, available and committed court resources, and performance evaluation, including continuances;
- reporting on DCM performance by track, case status, and goals;
- producing calendars and notices;
- producing exception reports on cases not meeting expectations; and
- providing access to case and calendar information to all with a need.

Specifically, in Baltimore County the system must maintain case records displacing the paper in the Civil Assignment Office and provide additional information on track and status for all civil cases, DCM and non-DCM. There should be on-line access by case number, party name, attorney name, and scheduled date(s) and events. The Central Assignment Office should be able to access this information for scheduling. Reports should be produced on
demand, by a menu pick. The system must support a minimum of 11 simultaneously active users and 30,000 cases (2 years' civil filings, since all cases should be entered even though only DCM will be tracked more intensively), with archiving capability. It is desirable that the system support access by the judges, probably through the S/36. Dial up access for both system maintenance and eventually for the Bar should be provided, with adequate security provision. Considerable growth should be anticipated to include more users and more case information stored on-line, as well as additional reporting. Expansion to encompass all the Clerk's civil docketing in the event that implementation of the AOC system proves to be more than three years away should also be considered.

Descriptions and Estimated Costs for Two Levels of Automation Support

Following are descriptions, and estimated costs for two levels of automation support.
1. Bare Bones Configuration

This is a description of a minimum system, with costs, out of pocket and staff, to support the civil DCM by automating both assignment offices.

A. System Costs

LAN with 486-based server (or equivalent) with 8 MB RAM, 7,000.
200 MB disc, backup tape & UPS.
10 work-stations/terminals 8,000.
 network software, cards & cables (Novell is most popular) 6,500.
dot matrix printer (& backup) for self-mailer forms and reports 1,300.
DOS, database management system & utilities* 800.
modem and communications software 300.
System total $23,900.

Hardware & Software to attach to S/36 for judicial access (obtain costs from IBM rep)

*NOTE: Unix OS & DBMS would cancel some network costs and end up even.
**NOTE: This figure assumes installation by County DP.

B. Supplies [self mailer notices, paper, tapes, ribbons, etc.] 2,000.

C. Application software development costs:

This is based upon acquiring a competent programmer/analyst to develop a simple system using a popular DBMS, or modifying one of the available DOS DBMS (Q&A from AU, Clipper from Allegheny Co., or your existing R:Base system). Sources of design information are American University’s DCM site descriptions and your own DCM specifics.

Estimated programming effort:

<table>
<thead>
<tr>
<th>Task</th>
<th>Effort</th>
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<tr>
<td>design database</td>
<td>10 days</td>
</tr>
<tr>
<td>calendars</td>
<td>2</td>
</tr>
<tr>
<td>reports</td>
<td>5</td>
</tr>
<tr>
<td>forms, etc</td>
<td>3</td>
</tr>
<tr>
<td>testing</td>
<td>2</td>
</tr>
<tr>
<td>document</td>
<td>5</td>
</tr>
<tr>
<td>train SA*</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>30 days @ $400</td>
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Total [exclusive of staff time]: $37,900.

*NOTE: The SA (System Administrator) performs maintenance chores similar to those now performed by your S/36 operator. He/she has some technical knowledge of the hardware and software and can assist in introductory training.
D. Staff Time

For training in data entry, update, inquiry, reports, by system administrator and Project Manager: 5 days
Table loading, testing & parallel run: 10 days

E. A project manager will be required for 2-3 months for orchestration of tasks, procurement, development of forms and procedures, staff training and maintaining project momentum. The amount of time required will depend upon the detailed procedural change to support DCM and the impact of those procedures on the operations of the assignment offices.

This system will have the capability of tracking cases, printing calendars, notices and reports and assisting in scheduling. It will not have the stored logic for automatic side effects and streamlining data entry which would be expected from a more sophisticated packaged application. It will also have limited growth potential (100%). Security of the system will depend upon (1) physical security of the hardware (no unauthorized persons on the hardware), and (2) password protection for login to the operating system and applications. Access and permissions (inquire only/add, change/delete) must also be controlled through the modem and S/36.

F. All systems require maintenance, both hardware and software. If purchased, it runs about 10% of the purchase price per year. Application maintenance will require access to a knowledgeable analyst/programmer, probably the original developer, to make the inevitable changes, corrections and enhancements over time. Over the life cycle of a system, the costs after the initial procurement are (1) data entry, (2) software maintenance, and (3) hardware maintenance, in order of magnitude.
2. More Than Bare Bones Configuration

A more robust and sophisticated system will require 50 -100% more hardware resources and an additional $15,000 to $30,000 for software and consulting.

Such a system would be expected to have the capability for automating the case processing operations of the Clerk's office. Entry of documents filed with the court would trigger necessary scheduling, noticing, tracking and reporting -- functions now performed by different groups within the court in less than efficient ways. The system would be expected to be scalable, meaning growth in number of users and caseload would require only incremental increases in hardware. For the county/court to develop a system with capabilities equal to packaged software would require multiple person-years of effort.

For a consultant to assume management of the entire project, installing a turn-key system, expect to pay another $50,000 in fees.

Summary
Under separate cover, I have sent to the Court Administrator a diskette of vendor information from the National Center for State Courts which lists vendors with packages by machine (PC, S/36, AS/400, RS/6000, etc.), as well as application (CV = civil). This list is too extensive to attach to this report.

I have made no distinctions between Court/Judicial and Court/Clerk since an information system affects both hemispheres, and an efficient and effective system serves both.

A system for supporting DCM ought to be part of a larger data processing plan for the court. This has been preempted by the State and the plans of the AOC for the Circuit Courts. The decision for the court turns on whether it is better to build the bare bones capability, and rely on the State to provide the more robust system which is needed, or embark on the robust system now. I do not recommend relying on the State and doing
nothing now, because the potential benefits from DCM, tangible and intangible, would also have to be postponed to that uncertain day. As a worst case scenario, the software procured by the Court would be replaced by the State's system and hence of no value. As a practical matter, the data base of case information could probably be converted to the new system's format and continue to be used to support operations albeit with different software and procedures.