

VA'S PROGRESS IN COMPUTER MODERNIZATION AS A PART OF THE OVERALL STRATEGIC PLANS

HEARING
BEFORE THE
SUBCOMMITTEE ON
COMPENSATION, PENSION, INSURANCE AND
MEMORIAL AFFAIRS
OF THE
COMMITTEE ON VETERANS' AFFAIRS
HOUSE OF REPRESENTATIVES
ONE HUNDRED FOURTH CONGRESS
SECOND SESSION

—————
JUNE 19, 1996
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Printed for the use of the Committee on Veterans' Affairs

Serial No. 104-26



U.S. GOVERNMENT PRINTING OFFICE

27-189 CC

WASHINGTON : 1996

For sale by the U.S. Government Printing Office
Superintendent of Documents, Congressional Sales Office, Washington, DC 20402
ISBN 0-16-053789-4

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WEDNESDAY, JUNE 19, 1996

**HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON COMPENSATION, PENSION,
INSURANCE AND MEMORIAL AFFAIRS,
COMMITTEE ON VETERANS' AFFAIRS,
*Washington, DC.***

The subcommittee met, pursuant to call, at 10 a.m., in room 334, Cannon Building, Washington, DC 20515, the Honorable Terry Everett, (chairman of the subcommittee), presiding.

Present: Representatives Everett, Weller, Evans, Montgomery, and Kennedy.

OPENING STATEMENT OF CHAIRMAN EVERETT

Mr. EVERETT. Before we begin, I'd like to call everyone's attention to copies of the revised media advisory concerning today's hearing on the table in the back. The one that went out yesterday was a strongly-worded release, and I want to state my regrets to both GAO and the VA for the ruckus it stirred up. Modernization is not a partisan issue, it is also not a—

I hope that we can all work together to ensure VBA's and VA's success in serving the veterans.

Good morning. The subcommittee will come to order. Today, we will hear testimony from the General Accounting Office and the Department of Veterans Affairs regarding VA's computer modernization program. This is our third hearing on the subject, and I'm confident that we will have more as VA proceeds, because up to now VA has been slow to do the upfront planning necessary to ensure that systems development is part of a discipline and integrative planning process that revolves around a strategic plan.

That's not my opinion. It also comes from the GAO and the Center of Naval Analysis.

We are here today because I'm convinced that VA and VBA must conform to solid business planning methods in its operations, and I'm not going to sit by and let the old ways continue. Caring, dedicated employees on the front lines cannot make up for the weak management practices.

As GAO states, that this is a Government-wide program, I want to see VA become the shining example of how to modernize computer systems.

As recently as the May 3 Senate Appropriations hearing, VA stated that they could not allocate improvements and claims processing to any particular incentive or factors such as reduced workload. That statement highlights the problem before us today, that is, in a time of tight resources how should an agency make resource allocation decisions? Where does an agency like VA get the best return for the taxpayer dollars provided to care for the veterans. It is bad public policy on our part to let those types of practices continue.

I have often mentioned the GAO's estimate of \$300 million spent on modernization since 1986, and I believe Secretary Vogel will address that number in detail here today. That's three administrations and five Congresses that have been here since that's been going on, and there's no real end, I'm afraid, inside.

The recent retrenchment of restructuring is a good example of ad hoc planning that had budget considerations, not quality, as its focus. But, as TQM proponents would say, if you take care of quality cost comes down and customer satisfaction goes up. I would also say that while I support the concept of restructuring, it cannot be done in a vacuum. For instance, consolidation of compensation and pension claims processing is a good concept, provided that you have the necessary information systems in place ahead of time to ensure nationwide access to information. Without such a system, the confusion and frustration that will be experienced by both veterans and employees will make today's customer satisfaction issues seem tame by comparison.

I'd like to just review a few quotes from the Center of Naval Analysis report issued on March, 1995, just to illustrate the challenge VA faces internally. "The amount and complexity of change is seriously stressing the organization's ability to integrate and manage efficiently the modernization projects that are underway and planned." "VBA is systematically pursuing a growing number of initiatives without a systematic and explicit corporate understanding of their consequences, benefits, resource effects, scheduling and risks. Initiatives are not analyzed or managed on a corporate-wide or project-wide basis in an integrated and systematic manner." "VBA needs to strengthen its planning, and control and integration process and structure for management implementation of large, complex modernization projects and systems. We find them generally weak." "VBA did not put in place the necessary management infrastructure improvements for implementing this modernization program. Responsibility for integration and management of complex programs has changed, it's diffused, with no one responsible and accountable." As a result, we asked GAO to monitor VBA's development of a plan, a business plan, strategic plan or business plan and business process, reengineering projects with a focus on how those processes would be applied to ongoing and future information resources modernization projects.

Mr. Dodaro, the Deputy Controller General, will testify today about what they have found over the past year. Having read his written testimony, I am very concerned about VA's future ability to improve its claim processing through enhanced computer technology. Weaknesses in organization and skills, noted by GAO and CNA, do not lead me to feel confident we can continue to throw

money at VA without some form of accountability that comes through the discipline processes that GAO will discuss.

We also have a written statement from Ms. Rhoda Davis, a member of the Claims Adjudication Commission, headed by Mr. Melidosian. The committee appreciates the assistance the Commissioner has given us, and we look forward to the future of our mutual efforts.

Let me read a couple of the statements by Ms. Davis. Component executives do not see the advantage of working at the department level and are not committed to doing so. Workload projections for BVA and VBA are done in isolation. VBA is not participating in the corporate database activities. No program or workload projections are done beyond the budget year, requirements unlike other government benefit programs. No long-term program policy planning is underway for the compensation and pension program. Program policy is not being addressed by VBA engineering effort. While the new VBA Strategic Management Committee holds promise, integration of major initiatives has not yet occurred. Other BVA officials are not aware of the Deputy Secretary's meetings, and have no input or action from them. The Assistant Secretaries, that might do agenda planning and integration with strategic planning and performance measures setting, as well as accountability, are not participating.

I will now recognize the Ranking Member for any comments he may make.

OPENING STATEMENT OF HON. LANE EVANS

Mr. EVANS. Thank you, Mr. Chairman. The Congress has long been interested in VA's plans to modernize its benefits delivery system for many years, going back to the 1970s. It seems that the GAO has been reviewing and criticizing VBA's modernization plans for the same number of years. Overall, I believe that this has been a healthy exchange; Congress has been properly exercising its oversight responsibilities in questioning the wisdom of certain decisions which may commit the Government to the expenditure of millions of dollars.

I believe VBGA has made important progress in the last year in attempting to manage its computer modernization efforts. For the first time, VBA has a Chief Information Officer, who is ultimately responsible for the success of VBA's information technology program. It has received several detailed reports from the CNA Corporation in response to its quest for an independent assessment of its information technology management, and I believe those reports have been helpful to VA's top management. In addition, VBA has taken the advice of the GAO and begun a business process re-engineering effort aimed at structuring its procedures for the next century.

As both the CNA and the GAO have noted, VBA is engulfed by external changes, and it has not made all of the management changes that will ensure a successful outcome of its modernization efforts. In addition, I believe that VBA is continuing its quest for a replacement for the benefits delivery network before it has firmly decided what that network's capability should be and capacity should be. I hope that we can discuss these issues during this hear-

ing in an open, honest, and nonpartisan manner, so that veterans might be better able to be served by our combined efforts.

Mr. Chairman, I appreciate the hearing again today.

Mr. EVERETT. Thank you, Lane. Mr. Montgomery.

OPENING STATEMENT OF HON. G.V. (SONNY) MONTGOMERY

Mr. MONTGOMERY. Thank you, Mr. Chairman and Mr. Evans.

I welcome our witnesses this morning.

I've been concerned over the years about our computer systems, that we need to continue to update them. We need them in the hospitals and other areas of veterans to put the different services on line, and I think this hearing is very timely. The GAO report criticizes modernization, we need to find out about it. I'm glad Mr. Vogel is here, too. Maybe we can have a good exchange and find out where we are headed.

Thank you.

Mr. EVERETT. Thank you, Mr. Montgomery. Mr. Weller.

OPENING STATEMENT OF HON. JERRY WELLER

Mr. WELLER. Thank you, Mr. Chairman, and, of course, I want to commend you for your leadership on the timeliness of this particular hearing. I'm particularly anxious to hear Mr. Dodaro's testimony and his assessment of the VA's progress on the subject matter of today, and, frankly, bringing the VA, not only into the 20th Century, but working to bring the VA into the 21st Century.

I do want to point out a parochial issue of concern to many of us in the Chicago metropolitan area, and a concern of the Illinois Delegation regarding this particular modernization process, because some plans currently being considered could greatly affect hundreds of working men and women in the Cook County area. I do want to express some concern, Mr. Chairman, regarding the potential closing of the data processing center at the Hines VA facility and a consolidation effort with another facility in the southwest.

I'm anxious regarding this, because GAO's report makes more than one reference to the Hines facility for its progress and use of software equipment, and, frankly, I think it would be a shame and a real mistake to close the Hines VA facility without weighing the consequences of doing so.

So, Mr. Chairman, I'm anxious, like you, to hear the GAO's recommendations. I do want to express my strong concerns regarding what the VA is considering regarding the facility in the Chicago area, and, of course, express the concerns of the Illinois Delegation in opposition in the closing of the data processing center at the Hines VA facility. So, with that, thank you, Mr. Chairman, look forward to hearing the testimony.

Mr. EVERETT. Okay, thank you, Mr. Weller.

I want to also ask that all testimony and any of Ms. Davis' testimony be entered—complete testimony be entered into the record, and any statements by the members be entered into the record.

Without objection, because of the small number of witnesses and to allow us to follow up questions, today's hearing will use a 10-minute limit, instead of our usual 5 minutes.

Our first panel is composed of Mr. Dodaro, Assistant Comptroller General from GAO, for Accounting and Information Management

Division, accompanied by some of the GAO team that are working on issues, Ms. Patricia Taylor, Ms Helen Lew and Mr. L.J. Latham. Gene, welcome, and if you all will, please begin.

STATEMENT OF GENE L. DODARO, ASSISTANT COMPTROLLER GENERAL, ACCOUNTING AND INFORMATION MANAGEMENT DIVISION, GENERAL ACCOUNTING OFFICE; ACCOMPANIED BY PATRICIA TAYLOR, DIRECTOR, INFORMATION RESOURCE MANAGEMENT/HEALTH, EDUCATION, AND HUMAN SERVICES; HELEN LEW, ASSISTANT DIRECTOR, INFORMATION RESOURCE MANAGEMENT/HEALTH, EDUCATION, AND HUMAN SERVICES; L.J. LATHAM, TECHNICAL ASSISTANT DIRECTOR, OFFICE OF CHIEF SCIENTIST

Mr. DODARO. Good morning, thank you. We are pleased to be here, Mr. Chairman and members of the subcommittee, to talk about an important issue, as you have all indicated, which is VBA's efforts to streamline its business processes and to take greater advantage of information technology. This issue is critical to improving service delivery to veterans and controlling VBA's costs of its operations.

VBA is working to address these issues, but like many Federal agencies there are some basic management and technical weaknesses that need to be overcome to take full advantage of the benefits offered by information technology.

This morning, I would like to make four basic points. Number one, there is a critical need for VBA to complete its business strategy, clearly articulating how it intends to modernize its operations. This strategy is needed to guide its reengineering efforts. It's needed to make sure that new investments in technology achieve the benefits that are expected. Also, the business strategy is an effective vehicle for the Congress, VBA and its customers to engage in a constructive dialogue about what VBA's priorities should be and how it should go about improving service delivery.

Secondly, I want to underscore the urgent need for VBA to prepare for the year 2000 transition. This is a monumental undertaking, both in the private sector and the public sector, in terms of dealing with changing the computer software to accommodate this change. Failure of the VBA and other Federal agencies to address this issue could lead to major disruptions in services, particularly, those that the veterans have become able to rely upon faithfully. This is a very important issue, and I am going to elaborate on it in a minute.

Thirdly, I want to highlight some of the challenges facing VBA in implementing new mandates that this Congress has levied upon all Federal agencies to go about improving their information technology investments in a more disciplined, businesslike manner. This is very important to make sure that the investments in technology directly relate to improved service to veterans, and that the Federal agencies make wise use of taxpayer funds.

Fourth, and last, I want to talk about the need for VBA to make needed improvements in its capability to develop computer applications. This capability is paramount to making sure that VBA's managers have the tools at their disposal to become more efficient

and provide more services at a higher quality and faster to the veterans.

First, let me turn to the area of business process review and planning. These are two areas that we consistently identified in Federal agencies that have been problems in using information technology effectively, and we've noted this over the years. Number one is leaping to buy technology without reengineering your business processes. And, secondly, not having a clear business strategy in mind first, before deciding upon what technology would be most effectively used.

Now, VBA has fallen prey to these issues in the past, like other Federal agencies, but they are working to try to rectify this situation. They've got an effort underway to develop a strategic plan, and they've started a business process reengineering effort. These activities are not complete, as I have noted in our statement, so we have been unable to assess the merits of what's coming out of these proposals, but both are important initiatives that need to be completed.

Basically, those efforts must be completed if VBA is really going to be able to successfully deal with what I consider to be entrenched service delivery problems. I mean, we still have concerns about the length of time, months that it takes to process initial claims. There is a growing backlog of appeals. Half of the appeals are remanded back to VA for further consideration, some more than once, and a lot of these problems are very difficult ones.

Now, to VBA's credit, in the past few years they have dealt with a spike in their claims processing initiatives in the early 1990s, but they did so by throwing what I would consider to be conventional management techniques at it, increasing the use of overtime, hiring additional employees, shifting the workload among the regions. They brought that backlog down under control, but they still have service delivery problems that are unacceptable to their customers, and really achieving change needs to start with a clear articulation of their plan.

The basic plan needs to be done in order to get some major service breakthroughs. A lot of the activities VBA has been undertaking over the years has been successful in controlling the workload and trying to deal with the mounting problem, but they really have not achieved major service breakthroughs that they, and the veterans, and their other customers and stakeholders think are possible in the process. And, none of this is really going to happen without a clear business strategy.

Now, this plan needs to be able to be the formulation for setting the priorities with the Congress on what VBA should be working on, getting a clear consensus on how the quality of services need to be measured, and coming up with reasonable expectations for progress by VBA which the Congress could track over time. This has been the clear expectation of the Government Performance and Results Act passed by the Congress in 1993, to really bring about changes in the culture of all Federal agencies to develop strategic plans and set measurable goals and objectives to focus on results, rather than just work flows and processes.

In addition to the business planning, there is an absolutely essential need for VBA to get on top of this year 2000 issue. Basi-

cally, what this involves is the difficulty of correcting the code of the software running their computer applications. When a lot of software was developed 20 years ago or so, memory was expensive, so there is only a two-digit factor in most codes accounting for the years. When the year 2000 comes, many computer applications will read that as 1900, rather than 2000, and as a result any time-driven decisions that are made by the computer systems, in terms of calculation of interest costs, determination of eligibility for benefits, calculating when loans are due, when interest is due, et cetera, are basically going to be faulty, and this could lead to a denigration, a serious denigration of services to the veterans. So, VBA needs to make the investments in order to do this.

Now, this is a big problem for VBA, like a lot of agencies. A lot of their software code was developed over 20 years ago, a lot of it is not documented completely, and in some cases there is not documentation at all. So, this is going to take a consistent application of their most experienced people to fix this problem. It is going to take coming up with a clear strategy, estimating accurately the costs and dedicating the resources necessary to do it, and also coming up with a contingency plan in case these activities cannot be done in time.

Industry experts recommend that all these problems be taken care of by the year 1998, so that there is a year of execution and working through the problems, but if that cannot be accomplished they need a clear back-up plan. This could cause major, major problems with service delivery.

Another information technology issue deals with the need to bring about more disciplined processes to the Government. One of the factors that we have consistently cited across Federal agencies over time, and a big difference between how the Government looks at information technology investments and how leading organizations do in the private sector, is the fact that they do not adequately measure risks, make sure that they have clear service benefits that could be demonstrated and are going to lead to accomplishing your business goals, and thirdly, understanding what the costs are going to be associated with those efforts.

VBA, historically, has had problems, like many agencies, with this, in terms of really clarifying the benefits, costs and risks associated with these projects. We note in my prepared remarks some concerns that we have along these lines with the current efforts to redesign the software for the benefit payment system, and I'd be happy to talk about that later.

But, the major point here is that VBA needs to make major improvements in its processes for selecting, controlling and evaluating its information technology investments, in order to meet these new legislative mandates by the Congress, and to really bring about businesslike processes and adequate return on the taxpayers' investments in computer equipment.

Lastly, I want to point out another area we think there needs to be major efforts and improvements. That is VBA's ability to develop computer applications. We have been evaluating Federal agencies' capabilities to do this using the Software Engineering Institute Computer Maturity Model Assessment. Our assessment of VBA's processes on a scale of one to five is that the VBA currently

is at the level one, the initial level, which is characterized by ad hoc, occasionally chaotic software development activities.

We are very pleased that VBA agreed with us. They have begun to hire the expertise that's needed to develop a plan to improve their capabilities in this area, but this area is one that often Federal agencies have neglected to make investments in over the years. I hope that VBA continues to make the investments in this area because it's critical to actually being able to produce and put in the hands of their managers applications that are going to improve service delivery.

So, in summary, basically, VBA is heading in the right direction in many areas, but effective implementation of a business strategy, an IT investment approach dealing with the year 2000, and building its software development capabilities are absolutely essential if modernization is to succeed.

[The prepared statement of Mr. Dodaro appears on p. 51.]

Mr. EVERETT. Gene, thank you for that testimony.

We're going to change things up a little bit, I don't know if word got to you prior to right now, but we've been asked by some of the members if we would hear from both panels and then bring both panels back up for all questioning.

Mr. DODARO. Sure. We're very flexible.

Mr. EVERETT. Thank you very much.

Our next panel is composed The Honorable John Vogel, Under Secretary for Benefits, and he is accompanied by Mr. Mark Catlett, the Assistant Secretary for Management, Mr. Dennis Duffy, the Assistant Secretary for Policy and Planning, and Mr. Newell Quinton, VBA's Chief Information Officer.

Good morning, John.

Mr. VOGEL. Good morning, Mr. Chairman

Mr. EVERETT. Whenever you are ready, please, proceed.

STATEMENT OF R. JOHN VOGEL, UNDER SECRETARY FOR BENEFITS, DEPARTMENT OF VETERANS AFFAIRS; ACCOMPANIED BY MARK CATLETT, ASSISTANT SECRETARY FOR MANAGEMENT; DENNIS DUFFY, ASSISTANT SECRETARY FOR POLICY AND PLANNING; NEWELL QUINTON, CHIEF INFORMATION OFFICER, VETERANS BENEFITS ADMINISTRATION

Mr. VOGEL. Mr. Chairman and members of the subcommittee, thank you for inviting me here today. I'm pleased to have the opportunity to discuss with you the progress we have made in the Veterans Benefits Administration in the area of planning and in integrating our information technology activities into our plans.

I ask that my written testimony be made a part of the record.

Mr. EVERETT. Without objection.

Mr. VOGEL. I wish to introduce the other panelists who are with me today, Mark Catlett, the Assistant Secretary for Management to my left, Dennis Duffy, the Assistant Secretary for Planning and Policy, and to my immediate right Newell Quinton, the Chief Information Officer of the Veterans Benefits Administration.

As I mention in my written testimony, VBA has made significant progress in our planning efforts, efforts which I hope will not be dismissed as insignificant. We've invested a great deal of time and

energy in developing integrated business plans, which will become the basis for the budget we present to you early next year.

We are excited about those plans. They will provide a comprehensive illustration of each of our business lines, along with our performance objectives and indicators; measures for determining success; and total resource requirements, including support activities such as information technology. This will be a dramatic change because we're getting away from traditional planning and budgeting along organizational lines and moving toward business lines with a focus on outcomes.

I regret that Commissioner Davis' statement did not report the progress VBA has achieved in implementing a strategic planning process. Specifically, her statement failed to note that VBA has established revised Mission, Vision, Values, Goals and Core Performance measures at a July 1995 conference of VBA executives. This work is the foundation for development of our VBA Business Plan.

She also failed to note that we submitted three business plans—Insurance, Loan Guaranty and Educational Assistance, with our 1997 Congressional Budget request. These plans include performance objectives and indicators, and link initiatives to specific resource requests.

She also failed to note that we're completing work on our first comprehensive business plan, which will cover all business lines and will integrate all initiatives—IRM, restructuring, reengineering—toward the common goal of improving benefits delivery.

VBA has much more work to do before we'll be satisfied with our abilities to present our operations on a fully coordinated and integrated basis. We've made progress to date and look forward to more successes in the future.

We appreciate the favorable support we've received from the subcommittee staffs in the briefings we've provided to them. We look forward to their continued input as our strategic planning efforts mature.

Once our plan is in place, all initiatives will be assessed against that plan. The decision to pursue a good idea will be based on its consistency with established strategic guidance and the availability of clear and appropriate performance objectives and indicators.

To ensure that an initiative undergoes a comprehensive and objective review, I've established a Strategic Management Committee chaired by the Deputy Under Secretary for Benefits, Doctor Stephen Lemons, and consisting of representatives from each of our business and support areas, as well as the area offices representing the field. They will review and prioritize all initiatives and provide me with a recommendation that best serves our veterans and gives us the best return on our investment.

An important, but complicated, aspect of our planning process is the integration of our information technology activities into our business plans. Mr. Chairman, you've expressed concern about the \$300 million we've invested over the last 11 years in technology enhancements and your perception that the benefits that came from that investment are negligible.

The modernization program started with a single goal of moving the Benefits Delivery System off Honeywell equipment. It expanded to include the development of a modern infrastructure with

the flexibility to respond to business needs. The development of specific program goals led to refinements in scope and the separation of the modernization project into three stages.

Today, the replacement of the payment system is the remaining component of Modernization. The ongoing effort to make maximum use of the VBA technology infrastructure through the development of applications supported by the Business Process Reengineering effort defines the future direction within VBA. The use of a new infrastructure and software solutions for improvement in service are components of the veterans service network, called VETSNET.

When we began our modernization program in 1985, there was but one measure for success at all levels of review, and that was FTE savings. We received support and funding for our modernization activities throughout most of the last decade based on savings projections associated with the implementation of specific initiatives. Beginning with our budget request for fiscal year 1991, VBA reflected savings annually which subsequently exceeded 1,000 FTE to offset the cost of those initiatives. The payroll and nonpayroll savings associated with that FTE amount to almost \$300 million to date. That means we've almost recouped the entire modernization investment through savings offsets based on that one measure alone.

Furthermore, our investments have allowed us to redistribute the way we use our employees. In 1987, our offices were staffed with dictation transcription units and typing pools. They don't exist today. Because of our automation investments, we've reduced positions in support operations and moved them into decisionmaking activities. Our support staff has declined from almost 28 percent of our work force in 1987 to 18 percent in 1996.

In the last few years, the criteria for success have changed and we believe they've changed for the good. We wholeheartedly embrace a balanced focus on customer satisfaction, timeliness, accuracy, and employee satisfaction, as well as cost. We are pleased that the culture is changing so that a positive cost-benefit ratio is no longer the singular deciding factor in approving an initiative. However, in our current budget environment, I think we'll all agree that the cost will always carry a heavy weight in the decision process.

The point, though, is that our investments have not been wasted. When we offset the savings against the cost, the entire modernization investment to date has yielded a savings to the taxpayer, not a cost. I'd like to match that record against any other comparable agency.

Our investment has allowed us to reduce the size of our operation and position ourselves for the information technology age. It doesn't stop here though. There are still many benefits to be derived from our investment once we have our business plans finalized.

In addition to our planning efforts, we have a number of constructive activities going at the present that will feed into our plans. However, GAO is asking us to stop them while we finish our strategic plan. We think that would be a mistake. We have a large workload that we need to keep working on as our plans develop. We cannot afford to stop making all needed improvements in our

work environment until we have a perfect strategic plan. We certainly hope that no one expects us to develop one plan, one time and never change it.

Planning is a dynamic process that will continue to evolve as the environment changes and new ideas are developed. I admit our activities are diverse and have not been encapsulated into a single focus yet. But that's what research and development are all about. To stop all activity would be suicidal to our future.

Let me give you an example. We are working with the Department of Defense on several initiatives and members of my staff will be meeting with yours next month to discuss our progress. Those initiatives are going to require technological support but we cannot afford to delay developing them while we complete our plan.

Ideally, we should have prepared a strategic plan about 10 years ago. We didn't. We acknowledge that. We realize the importance of having a plan. And we are working, as is the rest of the Federal Government, to prepare the strategic direction that will guide us and will guide our future. But we can't stop everything waiting for that.

In just a few short years, we will enter the year 2000. The implications for automated systems Government-wide are substantial, as Mr. Dodaro pointed out. The implications for us are even more critical because the age of our systems impairs our ability to complete the necessary reprogramming. We must proceed with moving our operations from the existing systems to a new environment even as we are looking at reengineering the way we do business.

We look forward to moving ahead. Improving our performance and resulting service to veterans and their families is our highest priority. While we will continue to improve our planning processes and will more carefully pursue IRM applications, we must not do this at the expense of further enhancements to service provided to our veteran customers. That's our challenge, to plan better and ensure our operations meet the needs of our Nation's veterans.

Mr. Chairman, my staff and I were more than dismayed to see yesterday's media advisory from this committee. It's my hope that your staff has let you down. I had looked forward to an open and constructive hearing. This appears to be, as reflected in the media advisory, an unbalanced effort to discredit the work that the VBA has done. The advisory claim has a number of glaring inaccuracies.

First, we've shortened, not lengthened, processing time. The year I was sworn in as Under Secretary, fiscal year 1994, I inherited a processing time of 226 days for an original compensation claim. We now have that down to 151 days, the same as the 1990 figure quoted by the GAO in the article.

This has been accomplished, despite three very well-known intervening factors, well known to those of us in the veterans arena: the Veterans Judicial Review Act, the Persian Gulf War, and the downsized military.

And we've improved across the board in all benefit areas: in Compensation and Pension; in Vocational Rehabilitation; in home Loan Guaranty; in GI Bill Education; and in the life insurance programs. And we've served our veterans with a staffing level of almost 10 percent less over the last several years.

Second, you are quoted as saying, "Regrettably, it appears that in the last 12 months no significant improvements have been made." Here's what we've accomplished in that time. We've taken a look at the scope of the original VETSNET project and refocused it on just a Replacement Payment System. We've aggressively begun a Business Process Reengineering effort, that is contractor assisted, which is already showing progress. We've obtained excess equipment at Hines which is being used to improve reliability of the Benefits Delivery Network. We've taken a look at our myriad of software development efforts and refocused our energies on just five critical projects: COVERS; the Claims Processing System (CPS); conversion from the Wang equipment; the payment system; and the year 2000 resolution. Stage I has been completed. Stage II Imaging Development Effort, for St. Louis and Atlanta is under-way.

Third, you said that we've spent hundreds of millions dollars for "a lot of useless hardware." The truth is that the major hardware purchases represent the Local Area Networks, or the VBA Stage I purchases, currently in operation at each of our field facilities. That includes personal computers, printers, regional office processors, and file servers which are needed to process and store data and make connections within the offices. Our need to connect the Stage I equipment to the 20-year old Benefits Delivery Network was resolved through the purchase and installation of mini computer and telecommunication equipment, which we referred to as Gateways.

These two efforts alone represent about one-third of the modernization expenditures.

Finally, you characterized our positive and efficiency-improving IRM applications as VBA waste which borders on scandal. Mr. Chairman, I find it incomprehensible that you would use a word like scandal.

[The prepared statement of Mr. Vogel appears on p. 43.]

Mr. EVERETT. Mr. Vogel, let me interrupt you. First of all, I have expressed regret for that, and that media advisory has been withdrawn.

Secondly, let me also say to you that—I reject completely your suggestion that this will not be a fair open hearing. Now, what I'd like—your time has run out, and what I'd like for us to do is move past that and get to the questioning stage.

Mr. VOGEL. Very well, Mr. Chairman.

Mr. EVERETT. Now, what we'll do is, we'll ask the GAO to come back up to the table, and if staff would get us more chairs up there I'd appreciate it.

If we could focus on what's important, and that is the modernization program of the veterans, in the interest of the veterans, I'd like to start the questioning with GAO. When would VBA's strategic—I'm full of antibiotics today, so excuse me—strategic plan be completed.

Mr. DODARO. John and his team have advised us that they are shooting to complete their strategic plan in time for the fiscal year 1998 submission of the President's budget, which would put it at the latter part of this calendar year into early next year.

Mr. EVERETT. When will VBA complete a comprehensive business strategy?

Mr. DODARO. I think that's basically along the same lines. They are shooting, basically, for the fiscal year 1998 budget cycle.

Mr. EVERETT. Has VBA set performance goals and measures?

Mr. DODARO. In some areas they have, but in other areas this still need to be done, particularly, in the compensation and pension area.

As John mentioned in his statement, they have got business plans in the insurance area and in some of the other areas, but the compensation and pension area, which is the largest area, that one still needs to be set in terms of more performance measures.

The other issue here that I think is important to point out is that the Government Performance and Results Act really contemplated that the strategic planning process developed out of that would be a good way to get some consensus with your stakeholders, in this case the veterans and other organizations that serve them, and the Congress. So, there needs to be a dialogue to get agreement on what the performance measures really should be and how VBA should be held accountable, and I think that can be a very constructive process to make sure everybody focuses on the same issues.

Mr. EVERETT. Have these goals and measures been shared with the Congress?

Mr. DODARO. John?

Mr. VOGEL. Mr. Chairman, they've been shared with staff as they've been developed in the program lines that Gene mentioned, the GI Bill, insurance, and home Loan Guaranty. And, as we develop them for the very largest area we have, which is compensation and pension, we'll be running them by both the committee staff and the VSOs to be sure that we are all singing off the same sheet of music.

Mr. DODARO. I might add, Mr. Chairman, I think it's very important to have, as these plans are developed, an exchange and a dialogue going between the Congress and the VSOs and the veterans. VBA's intention is to do. But, I can't emphasize enough how important I think that should be.

Mr. EVERETT. We're going to make a real effort in that, because we are going to go to monthly meetings, and some of this is probably going to be—we are going to have some sworn testimony.

Mr. DUFFY. Mr. Chairman, in that vein, I would simply point out to you that in the development of our strategic management process, our intent is to integrate the strategic plan, performance measurement and budgeting into one coherent process, all of which tie together leading the VA in a specific strategic direction.

In terms of working with our stakeholders and working with Congress, we are now in the process of doing an environmental scan, which includes interviewing congressional staff and members of this committee and the Appropriations Committees of both House and Senate. So, we are in the process of building that foundation for meeting the requirements of the Government Performance and Results Act.

Mr. CATLETT. Mr. Chairman, I'd add just one other point; the 1998 target that VBA set, they would be ahead of anyone else in the VA. The target in GPRA is to complete this by 1999. When the law was set, it basically gave everyone a 5-year target to get this

done, the strategic planning that needs to be done, the business plan that needs to be done. And, that is a huge task for everyone in Government, as Gene has noted, everyone has a long way to go. VBA, with the 1998 submission, as we have planned it, for all business lines, would be ahead of the rest of the VA in getting that done, towards the goal and the requirement in the law to having this by the 1999 budget submission.

Mr. EVERETT. Gene, has VBA completed the business process re-engineering initiative?

Mr. DODARO. They have started their effort in the compensation and pension area. It's not completed yet, and as John mentioned, they've hired a contractor and set up an office, which are all good starts in this endeavor. They are still in the process, my understanding is, of developing a proposal for how they would go about doing this and reengineering their processes, and that proposal is expected to be completed soon, I believe within the next month or so, we've been advised.

Mr. EVERETT. Is the Board of Veterans' Appeals part of the VBA's BPR initiative?

Mr. DODARO. Not as currently designed. This is one area that both we and the Adjudication and Claims Commission have pointed out that is an area that we believe VBA should look to to really broaden the scope of the reengineering effort.

The appeals process plays such an important role in the adjudication of the claims, and as I pointed out you have half the cases in the appeals process now that are remanded back to VBA. The number of appeals process are growing, as well as the backlog of appeals, and I think figuring out a way to reduce the number of appeals, the number of cases that get remanded back to VBA would have an important effect on its ability to process initial claims as well.

So, we've encouraged them to, perhaps, broaden that business process reengineering effort out to include the appeal process as well.

Mr. EVERETT. In other words, it's not possible for VBA to have a viable draft business plan.

Mr. DODARO. Well, I wouldn't say viable, I would say complete.

Mr. EVERETT. It is possible.

Mr. DODARO. I would think they could have a business process reengineering strategy focused solely on the initial processing of claims, but I don't think that would completely address the issue. I mean, there's such an intricate interrelationship between the appeal process and the initial determination of the claims, that I think solving one part of this problem without looking at it completely is only going to give you modest improvements. And, if you really want to get a breakthrough, you need to look at it from a systemic level from the veterans' perspective, of both initial processing of claims and how the appeal process is handled. I think that broadening it out and trying to get some agreement on this process would be the most beneficial way to approach it. It may be too narrow to just focus on the initial processing on a claim.

Mr. EVERETT. John, I saw you nodding. Have you got some input on that?

Mr. VOGEL. Yes, Mr. Chairman, Gene is exactly right, you have to approach this as an organization in toto. The Board of Veterans' Appeals, the Veterans Health Administration, that does about 200,000 C&P exams a year, and those of us who are in charge of making the initial decisions.

The Chairman of the Board of Veterans' Appeals, the Under Secretary for Health, and I meet regularly with the Deputy Secretary. We meet again on Tuesday next. Our objective is to marry up the decision-makers in the field with the Board so we have a common understanding. We have to proceed with compensation and pension claims as though all of them will be appeal-proof or ready for appellate review, and we've made some strides towards achieving that goal. We still have a way to go.

The Veterans Health Administration has stepped forward, as they have never in the past, to improve the quality of the compensation and pension examinations. Roughly 70 percent of the cases remanded back, in whole or in part, are because of an incomplete or an untimely VA compensation and pension examination. This is clearly a corporate or department-wide enterprise that we have to undertake, Mr. Chairman.

Mr. EVERETT. Gene, let's move to the cost of modernization. What is the total amount of money spent on VBA's systems modernization to date?

Mr. DODARO. The estimated cost for that is about \$300 million.

Mr. EVERETT. Is that an accurate figure or is it understated?

Mr. DODARO. We believe it's understated a bit, and depending upon how you characterize the modernization expenditures in different areas. We think there's about an additional \$25 million that should be counted in the modernization bucket, if you will, to establish a full accounting for the cost.

This is an endemic problem throughout the Government. We have reported on this in the Internal Revenue Service and other agencies that are spending a lot more money than VBA. The lack of accurate accounting for the costs associated with information technology efforts has been a problem in the past. That is one of the areas that has impeded making reasonable determinations on the Government's return for its investment.

I know VBA is trying to get a better handle on this and put a cost accounting system in place. We've endorsed that and think they need to move forward, so you have a more accurate accounting to the Congress of exactly what was spent in those areas. That's very important.

Mr. EVERETT. What kind of priorities should VBA assign to the data center consolidation investment initiative?

Mr. DODARO. That is one of many things they are considering. The major point that I have made in meetings that we've had with John and his team has been the need to really set priorities for all your information technology investments. So far, I do not think that they have fully accomplished that. They need to have a full strategy and a cost estimate for fixing the year 2000 problem. That has got to be a paramount concern that they need to address first. They need to have critical estimates for operation and maintenance, to make sure their existing systems don't break down, and

they need to be judicious about what additional activities they take on beyond that.

John mentioned that we said stop everything. We really were not saying stop everything, we were saying look very carefully at new software development initiatives, such as the benefit payments plan, really to make sure that you have enough talent to fix the 2000 problem, keep things running on a day-to-day basis, and not take on other high-risk initiatives that are going to divert management attention and don't have a clear demonstrated benefit.

As they develop their software development capability and their plans, then they can take on some of these other projects. I think it's very important that VBA not repeat problems that we've seen in other Federal agencies, which is to take on too many ambitious modernization projects at once, so setting a clear priority is very, very important.

Mr. EVERETT. How would you judge VBA's expertise to handle this entire program?

Mr. DODARO. We have encountered some very capable people in some of the regional offices and headquarters. I certainly think establishing a Chief Information Officer was a good initiative.

I do believe, however, that to take on the modernization initiatives that they are talking about, they need to make major improvements in their organizational capacity, and that is what we focused on, is building that infrastructure, both to develop software themselves, as well as manage contractors, which is another area that needs to be strengthened.

You can build software poorly, or you can contract for it poorly as well, so we have made recommendations for them to improve their capabilities in those areas. That is clearly important.

Also, setting a real investment process to make sure you have clear benefits and risks, so that when decisions are made by top managers they understand what you are going to get for the modernization effort up front, and you stop bad investments, is another area where they need to make major improvements. Now, I've offered to Newell to work with them and use our GAO experts in this area to help them put a discipline investment control process in place, and they've reacted favorably to that.

And, as I pointed out earlier, we are also pleased that they are going to work with the Software Engineering Institute to develop their capabilities. But, clearly, they've got a base, but they need to build upon that base if they are going to have the assurance that I think everybody wants to make sure that modernization is a success.

Mr. EVERETT. Did you point out in your written testimony that given the expertise level, which I think you described as level one on a one to five scale, that normally, not just, perhaps, VBA, but any organization that attempted what they are attempting to do was pretty much on a glide path to failure?

Mr. DODARO. The risks increase significantly with the lower levels of maturity. VBA has done a good job in scaling back from its initial modernization efforts, and that's an important first step. But I think they need to think about scaling back a little bit further because this year 2000 issue has come up on everybody suddenly. The Government is behind in this issue. They only have, basically,

2 years to get it fixed. While it may not be visibly apparent of improved service delivery, VBA and other Government agencies run a tremendous risk of a major degradation in the delivering of the benefit checks and other services that are now taken as a routine matter. So, VBA needs to reassess their modernization efforts in light of addressing the year 2000 problem, because the year 2000 problems are going to take their most experienced programmers to really fix this issue. They are going to have to go through millions of lines of code and identify where each of these date issues need to be fixed, and it's going to cost a lot of money. The cost to fix it will increase as the years go on, because the Government will be competing with the private sector as this is a major issue in insurance companies, motor vehicle administrations, State governments, all across the Nation, and there's going to be a limited pool of talented people that can help VBA address this issue. It is something that they really need to focus on, so setting priorities are paramount now, particularly in an era where you have constrained budgetary resources.

Mr. EVERETT. Did I understand your testimony to say that some of the VBA programs, and this would probably hold true for all Government agencies, that there are not even source codes available for these programs?

Mr. DODARO. I'm going to let Mr. Latham talk about that, because he's been out actually in the field looking at it; but a problem that we find across the board is that there's not always adequate documentation for these software systems. So, in other words, a lot of the expertises are in the minds of the computer programmers and it's not written down, so if a programmer computer, say, Sam B, leaves, you are losing a lot of institutional memory and you can't hand that system directly over to his replacement. I'll ask Mr. Latham to expand upon that.

Mr. LATHAM. I think Mr. Dodaro stated it correctly. We were not indicating a lack of source code. We basically looked at what was going on at Hines at the SDC there, and their software developers, and what we were saying is, in some cases there is a lack of documentation to lead the programmers to the areas in the code they need to change, and that's really the issue, it's not the absence of source code that we are talking about.

Mr. EVERETT. Does VBA have a plan in place to deal with this?

Mr. DODARO. They've begun to address this issue, but they haven't completed their plan yet. I know they are working on it, and they need to expeditiously, in my mind, complete it. They need to determine what the resource requirements will be for them and their time frames, and as I pointed out in my prepared statement, also have contingency plans available as well.

Mr. EVERETT. Okay.

John, does VBA have a plan?

Mr. VOGEL. Mr. Chairman, I think I'd like Newell Quinton to address the idea of the plan and do we have one.

Mr. QUINTON. Mr. Chairman, for more than a year we've been working with the Center for Naval Analysis Corporation addressing the concerns and certainly the complexity of the problem of the year 2000 issue. I certainly agree with the comments made by Mr.

Dodaro, that VBA's highest priority is to focus on the year 2000 issue.

We certainly recognize also that our in-house resources do not have the capability to address the resolution of the problem in toto. We are in the process of acquiring contractor support that brings with it the necessary tools, not only in the technical area, but also in management, to address the different components that are needed to resolve the replacement payment system.

In our description of the replacement payment system, in essence, we are defining the replacement system and addressing the year 2000 issue. Many of the comments already made address the age of the software and the lack of documentation. Our concern over the study of this problem indicates that we are not sure what the best approach is in pursuing the year 2000 issue. In terms of addressing the date changes, we believe that a better strategy would be replacing the code as opposed to correcting it. This is the approach that we have discussed and will pursue with contractor support. We believe there are certain portions of that code that can be replaced, certain portions of it that can be converted, and through a combination of these efforts, we believe, we will be able to resolve the year 2000 issue in sufficient time.

Mr. DODARO. Mr. Chairman, if I might add to that point, because this is an issue where we disagree a little bit with VBA. We think that it may be too high of a risk strategy to try to develop entirely new software for this issue, as opposed to just fixing their current systems and make them year 2000 compliant. That might be the most conservative approach, and this is an area where they need to be very, very careful that, particularly gives the fact that their development capability in need of improvement. Also, they are going to need experienced people to work on the year 2000, and while contractors will be able to help, the lack of documentation will make them rely a lot more on the current people in VBA, the programmers, to fix this issue.

So, we think it's too high of a risk, and we haven't seen the full risk assessment that would need to be done for the replacement system, the cost that it would take in order to do this, and the development techniques that they are using have been untested in VBA before. All make this, in my mind, a very high-risk endeavor and could drain precious resources away from fixing the basic problem with the year 2000.

So, we are going to continue to work with VBA on this issue, and look at it carefully, but right now our assessment is that that approach is too high risk.

Mr. EVERETT. I understand most experts agree that the year 1999 should be reserved for testing, and so that means all programs ought to be finished by the end of 1998.

Mr. DODARO. That's correct.

Mr. CATLETT. Mr. Chairman, one other point beyond VBA. We, for 6 months, have been surveying all parts of the VA on the issue of the year 2000. There's been much work done prior to the last 6 months as well.

We have a readiness review, a contractor in place, for the entire department. A report to be submitted by the end of September, which, of course, we'll be glad to share with you and all the mem-

bers, to give you an assessment of where we are. And, certainly the issue that Gene is raising is one that we are looking at, and his point on contingency planning is one that we support as we undertake this effort, because this is clearly the highest priority, in terms of what we are undertaking in the next few years.

Mr. EVERETT. The Chairman apologizes to other members, I've taken an unusual amount of time. I'd like to move over to Mr. Montgomery for any questions he may have.

Mr. MONTGOMERY. I'll be brief.

Mr. Chairman, I commend you for bringing both panels up on the table. That's very helpful, and it seems we are bringing some of this stuff right to the top that needs to be discussed.

I just have two brief questions to Mr. Vogel, to John. I do assume that you are not very happy with this report, is that true?

Mr. VOGEL. I thought the GAO report was balanced. It pointed out some of our failures. It also pointed out some of our strengths. I accept nearly all the criticism. It's really a question now of us developing a strategy to continue to deliver the benefits in view of the year 2000 issue on this antiquated system.

The question of how we go about solving that is the only area where we really have any disagreement, and that's really a matter of emphasis, rather than the core of the issue.

Mr. MONTGOMERY. Mr. Chairman, I think that's a good answer. He's not going to fight—you are not going to fight the report, you look at it and in the areas you think can make some improvement, you will do it, is that what you are telling us?

Mr. VOGEL. Yes, Mr. Montgomery, indeed, we will. We think the GAO has been very balanced, and our skin is fairly thick. We can accept criticism and try to fix things and move on, and that's where we are.

Mr. MONTGOMERY. Well, that's a good answer.

My other question is, you do need a new director for the Compensation and Pension Service. This person is important to get him on board, her on board, do you have any ideas when that slot will be filled?

Mr. VOGEL. You are absolutely right, Mr. Montgomery, that's a critical position. We've posted the position and are looking for applications. We have Jack Ross, who is the Director of our Cleveland Regional Office, in as the Acting Director of the Service. He is known to some members of the staff and members here with a great deal of expertise in the area of compensation and pension. He's an awfully good manager. He'll fill in for an estimated 2 months, or maybe 3 months, until we have the position of the Director of Compensation and Pension Service filled.

Mr. MONTGOMERY. It's going to take you that long?

Mr. VOGEL. Well, to actually get someone in town. The position was posted for approximately 2 weeks. After that applications must be reviewed. It sounds bureaucratic, but the decision was made to see what talent was out there that would be interested in the position. We think we've got it pretty well covered, Mr. Montgomery, with Jack Ross, at least on an interim basis. He brings a fresh approach. He's been a general manager in the field, and has raised questions that those of us who are close to it don't even think to raise.

Mr. MONTGOMERY. Why don't you make him head of the Compensation and Pension Service?

Mr. VOGEL. Well, I've twisted his arm until it almost broke. For business and personal reasons, Jack has expressed a desire to stay with his large family in Cleveland. He's a talented guy, and we'll be served well by his acting directorship.

Mr. MONTGOMERY. Thank you, Mr. Chairman.

Mr. EVERETT. Thank you, Mr. Montgomery. Mr. Evans.

Mr. EVANS. Thank you, Mr. Chairman.

Mr. Vogel, the appropriations process has resulted in the shrinkage of the total resources for VBA's central management. In addition, GAO states that the VA lacks trained personnel to manage software development contracts. Do you have sufficient resources to manage all of your planned information technology initiatives?

Mr. VOGEL. Mr. Evans, I'm going to ask Newell Quinton to respond to that. He's best equipped to do that.

Mr. QUINTON. Sir, as was said this morning, our initiatives are truly very focused. We have rescoped many of the previous plans to deal with only four areas, and one of those, as was said earlier, is to address the year 2000 issue as its highest priority. The only other two software developments that we anticipate over the next 2 years would be the control of veterans records, which virtually is complete. It's being installed in the regional offices this week. The other remaining effort is the claims processing system that looks at development of claims in our adjudication divisions.

Beyond those, our total effort is replatforming the payment system, and that, in essence, is addressing the year 2000 issue. There aren't any other software development issues anticipated in VBA.

The platforms that we are talking about reside on the Honeywell systems, our benefits delivery network. In order for us to address the year 2000 issue, we must determine between now and the end of 1998 how to get both the education system and the C&P payment system off the Honeywell. That is our total focus for the next 2 years. Using our in-house staff, with contractor support, and a managed approach is how we intend to do that. And, again, I will say that I do not really disagree with what Mr. Dodaro said in GAO's assessment in terms of the strategy. We will pursue what strategy gets us to that point with the least amount of risk.

So, at this point, we are certainly looking at the right approach. VBA has outlined one approach, and we are considering, certainly aggressively, the comments made by GAO that maybe a more reserved approach to conversion of existing code might be the best way to go.

But, in terms of initiatives, there are no new initiatives, other than addressing the year 2000 and moving our payments systems off the Honeywell platform.

Mr. EVANS. Mr. Quinton, we are hearing some rumors about RIFs at Hines, do you have any comment at this time on that?

Mr. QUINTON. Part of our response is to improve in-house management of those systems and one of our efforts was to minimize the changes made to the existing benefits delivery network.

VBA could not continue to move into the future with investment of resources in a platform that we frankly had decided was dying. Our effort then is to minimize changes to that system, and to de-

vote our entire resources effort into replatforming on the year 2000 issue.

Consequently, we could not continue to maintain the staff that we had in our Systems Development Center at Hines, Austin and Philadelphia, while at the same time, we devote our efforts to moving on with the year 2000 issue. We do not have the resources to do both. We had to decide which approach to take. The approach was to address the year 2000 issue, replatform the systems, and not to continue to maintain, or add enhancements to, the 20-year old platform, the 20-year old systems that we are in the business of replacing.

Mr. CATLETT. Mr. Evans, could I add a comment on that perspective. Mr. Weller raised the question about closing Hines. I'd like to clarify that. We are not talking about closing Hines, the facility there.

Clearly, there are changes that will take place at Hines, including less staff. The overall perspective is, in round numbers, VBA has 900 people doing IT support. They have a 12 percent reduction, more than 12 percent reduction, to be taken through the year 1997 if we get the budget that we requested. IT cannot be immune from that, as we, as GAO and others have highlighted, we have to get contractor support. We will be making changes at Hines. There will be changes made in Washington. There will be changes made at any place where we have IT support.

So, yes, I believe overall there are going to be fewer people at Hines, but that doesn't mean that we close Hines.

Mr. EVANS. All right. I just have become aware of this problem this morning, so I'd like to submit some additional written questions to you for your response and the record.

(See pp. 69 and 70.)

Let me just ask Gene one question. Gene, can you give us an example of a governmental agency or private organization that really has been exemplary in getting measured return on its investment, in terms of technology improvements? Could you give us an example?

Mr. DODARO. It's very difficult, to be honest with you, to find a lot of examples in the Federal Government, which is one of the reasons why we have worked actively with the Congress over the past few years to put in place legislation to really bring modern management practices to the Federal Government. That came this year with passage of the Information Technology Reform Act, which this Congress passed, the President signed, and becomes effective in August of this past year.

What we did was do research with leading organizations in the private sector to learn how they successfully applied information technology to produce change and get a good return on the investment. The Federal Government spent about \$200 billion in the last decade trying to modernize its computer systems. A lot of that has not produced an adequate return on the investment. We've spent a lot of money at the Internal Revenue Service, FAA, and we've yet to see major improvements.

Now, there are parts of the Federal Government that do things correctly and have good software development capability, particularly at NASA and parts of DOD, particularly, in the weapons sys-

tems development area. So, I don't mean to say that across the board it is as bleak as I might sound, but the Federal Government clearly lags behind the private sector in bringing to fruition information systems initiatives, and this is a critical area.

And, GAO, is giving a high priority to working with the agencies. We have designated some high-risk areas such as IRS' tax system modernization effort, FFA's air traffic control system effort, DOD's efforts to improve their business processes through their Corporation Information Management initiative, and the National Weather Service program to put in place technology to assist it in predicting the weather. So, those are all critical areas, and we're also working with VBA and the Social Security Administration as well.

So, it's difficult to single anything out. I hope to see a change in the next few years with agencies like VBA, beginning to put this legislation, the Information Technology Management Reform Act, in place. For the first time we will have chief information officers in each of the agencies to focus on this issue. So, you will have a management structure to help bring about disciplined changes, and I think it could result in some major improvements in how the Federal Government maximizes its investment in this area.

Mr. EVANS. I have no other questions, Mr. Chairman. I do want to compliment GAO for the good work that they do, and also John for his willingness to take this report on an even basis and try to implement it. That's a good attitude.

Thank you, Mr. Chairman.

Mr. EVERETT. Thank you, Lane. Mr. Kennedy.

OPENING STATEMENT OF HON. JOSEPH P. KENNEDY II

Mr. KENNEDY. Thank you very much, Mr. Chairman.

First of all, I want to apologize to the committee and to the witnesses for not being able to be here for your testimony, and it was—sometimes you've just got too many places to be at the same time, so I apologize to you.

But, I was just talking to the former Chairman of the Committee about the fact that several years ago, when I first got on this committee, there was a lot of controversy over the hospital-based system that had been ordered to be implemented.

And, I think when I first got on the committee, it was a very similar type of hearing that was pertaining to the fact that the hospital system that had been ordered, which cost an unbelievable amount of money, I can't remember, Sonny, how much it was, but it was something like a hundred million dollars, or some fantastic sum, had not been actually sort of capable of accomplishing the tasks, it was completely outmoded by the time the system was up.

Now, maybe, Mr. Vogel, you probably remember more about this than I do, but is this, in fact, a somewhat similar situation on the benefit side versus the hospital side, or not?

Mr. VOGEL. It's similar, Mr. Kennedy. I don't know a whole lot about the technical details of the computer system for the Veterans Health Administration, but it's a decentralized system which provides for a lot of processing based on care given at medical facilities and clinics, and it doesn't have all the information sharing that they need and that we need in order to make eligibility determina-

tions for health care and for benefits. That's one of our corporate failures.

Our system is more of a centralized processing system, with decentralized applications, because we are, essentially, doing monetary decisions as to benefits. There are some similarities. There are more off-the-shelf systems available in veterans health delivery than there are in claims processing for compensation and pension.

Mr. KENNEDY. Are any of you computer experts? Great. What's your name? I can't see your name, I'm sorry.

Mr. LATHAM. L.J. Latham.

Mr. KENNEDY. L.J.? Nice to meet you, L.J.

Listen, is there, in fact, a system, I mean with these new super computer systems and the like that are available, is there, in fact, a system that could cover both benefits as well as hospitals available now?

Mr. LATHAM. I think that there is not really a simple answer to that.

Mr. KENNEDY. Can you talk into the microphone?

Mr. LATHAM. I think you can't just say there is a single system. Each of these applications, each of these areas have to be looked at in terms of what is needed to do the work that has to be done, and then after doing an analysis, then select the platform and equipment that best suits that. So, I don't think it's quite appropriate to say, there is one system or one piece of computer equipment that can do it all.

Mr. KENNEDY. Is this the kind of situation where you would contract out for the work that you'd need done in both departments, or whatever departments?

Mr. LATHAM. I feel that's a decision the department has to make, based on the assessment of its capability, such as their software development capability including skills. If they don't have the skills, like many agencies, they do contract out.

But, the point in contracting out is, you want to make sure that the contractor that you do choose does have the strengths that you don't have.

Mr. KENNEDY. Well, good, but I don't know, Mr. Vogel, Mr. Quinton, are you appropriate to ask whether or not—

Mr. QUINTON. Yes, sir, I think so.

Mr. KENNEDY (continuing). Is there a plan to do something like this?

Mr. QUINTON. Yes, sir, Mr. Kennedy. VBA's approach is to address or move toward an open system architecture that industry has proposed for years, moving from what we've addressed to the committee before as the Honeywell or vendor-based platform. It has not enabled us, VBA, to take advantage of commercial systems or commercial software.

The effort, over the last 3 years particularly, has been in establishing, the Stage I platform and moving to the client service environment. The architecture that we have in place and will have in place with the year 2000 resolution and the replacement payment system positions VBA to take advantage of state-of-the-art technology, buy off-the-shelf software, use commercial available solutions, and build the bridge for us to integrate our systems with VHA, the Boards, and DOD.

A short answer, sir, is that the open system architecture that we have been building, and hopefully we will conclude before 1998 with the replacement payment system, positions VBA to integrate systems with BVA as well as with other agencies.

Mr. KENNEDY. That sounded really good, you know?

Mr. QUINTON. Well, that's where we are, sir.

Mr. KENNEDY. But, you know, listen, all of us now have some high-tech companies, almost every district in the country probably has some kind of high-tech company in it, mine has more than its share, but the truth is that if you go and you talk to the heads of, you know, Wang, or Digital, or any of these companies these days, they do, in fact, work in a very integrated fashion with one another.

You can hire, I was up with the head of Wang Laboratories a couple of days ago, and he was telling me about—and, Terry, you probably know as much about this as anyone, but they were telling me how they, in fact, now design, they are designing systems, not so much with the idea of selling particular pieces of hardware or software, but rather, just integrating all the different systems to try to meet whatever the customers' needs are, and they are selling a lot of systems to governments and to a whole range of different people.

Now, I don't know what the appropriate mechanism is, but I don't think, you know, we want to go through a circumstance where we see large outlays for hardware and software purchases that then end up not having the capability of meeting the changing needs of the VA as you enter the 21st Century, right? I mean, so you don't want to get yourself stuck in a system where you made some unbelievable capital investment that is simply unnecessary.

So, I don't know, if somebody knows about this I'd appreciate—

Mr. VOGEL. Mr. Kennedy, I can just make a comment. What you described is where we are trying to get.

Mr. KENNEDY. I think that's what Mr. Quinton was saying, but—

Mr. VOGEL. The VA bought a proprietary system from the Honeywell Corporation. We paid licensing fees and high maintenance fees on this equipment. We can't move out of that into the modern, as they call it, open architecture. We are trying desperately to get out of this. No one else has it, so you can't hire people to work with it.

What you describe is the box that we've gotten ourselves in. The decision was made 20 years ago to develop this system, and it served us well for a while. We were fairly content. We rested on our laurels far before we earned our laurels, and now we are trying to migrate out of that system.

Mr. DODARO. I think a good example, Mr. Kennedy, of where you can leap to a solution of the type that you are proposing, and it won't work unless you have good business requirements, is the FAA air traffic control system. They contracted out largely for the development of that system, spent several billion dollars, and really did not have anything produced because they couldn't control the requirements for the system.

The lesson that we've learned, is that, it really all starts with developing your case for your business needs and having your re-

quirements fully developed. And, any of the companies that you deal with will tell you that's step number one.

And, once VBA and VA can do that, then you can begin building the integrated systems that support that need.

Mr. KENNEDY. So, has that been done yet? What's your name?

Mr. DODARO. Gene Dodaro.

Mr. KENNEDY. Gene, so have they done that yet at the VA?

Mr. DODARO. Well, they are in the process of doing that at VBA for some of their areas, but that's why we've urged them to do business process analysis first, before they buy the computer equipment, because a lot of agencies buy the equipment and then don't have an application and use for it.

And, clearly, I don't think VA has done this in the integrated fashion that you are talking about, with both the benefits payment and the health care area, so we think it needs to be done.

Mr. KENNEDY. And, who do you work for?

Mr. DODARO. I work for the General Accounting Office.

Mr. KENNEDY. So, you are GAO. Okay.

Mr. DODARO. Right.

Mr. KENNEDY. So now, Mr. Chairman, maybe I could just ask you the question, whether or not there is a capability of making sure that the sort of development of the assessment of need be done prior to when we actually get into any hard or software purchases, and, in fact, it sounds to me as though you probably have the capability of going out and doing it, what I would hate to see is us to start, because you've identified specific problems in one area, I would hate to see us move forward on fixing that particular area and then finding out that if we had dropped back for a second and taken a look at the whole system that we might be able to, in a much more cost-effective way, develop the sort of computer-generated assessment with being fulfilled by a need that covers the whole system, rather than just a single slice, which might end up back in another hearing 5 years from now scratching our heads once again, or some other part of our body. Right?

Mr. EVERETT. Will the gentleman yield?

Mr. KENNEDY. Yes, sir.

Mr. EVERETT. I appreciate it.

Also, Newell, could you provide a real detailed answer to Mr. Kennedy's question for the record? I'd appreciate it if you would.

Mr. QUINTON. Yes, sir.

(Subsequently, the Department of Veterans Affairs provided the following additional information:)

Q: Should VBA halt all hardware and software purchases until VA has done a department-wide analysis of its computer needs and we are sure that any such purchases are consistent with the solutions to VA-wide computer needs?

Answer:

No, halting VBA's hardware and software purchases would be detrimental to the VA and a disservice to our veteran clients. VA-wide computer needs comprise an array of systems and applications depending on program requirements and systems architecture needs. The integration of VA systems is achieved through systems interface and the exchange of data between systems.

A prime example of this solution working successfully is the Master Veteran Record (MVR) project. MVR provides for gateways which allows the exchange of critical veteran information across systems based in VHA, VBA, NCS, BVA and others to ensure current, consistent and accurate information is available to our employees to best serve our veterans.

In addition to this integration solution which provides VA with the best return on investment, VA has three mechanisms for ensuring that hardware and software purchases are consistent with solutions to VA-wide computer needs:

- The first of these is the IRM (technology) plan which is valid for 1997-2001; an updated plan for 1998 - 2002 is in process. The IRM plan now links information technology plans with the Departmental budget process.
- The Department's IRM Framework developed over the course of fiscal year 1996 and now in the concurrence process, provides policy mechanisms to ensure that information technologies acquired meet the needs of component administrations and are consistent with solutions to VA-wide computer needs. This Framework integrates four specific phases of the information management process -- budget formulation, acquisition/development, deployment, and post-implementation review. Change is constant in the areas of technology, business practices, and benefits mandates. This process provides check points to identify potential integration efficiencies.
- VA has a Telecommunication Strategic Plan (TSP). A broader strategic plan encompassing all aspects of an information technology architecture is in development and will incorporate the existing TSP and the wider range of physical and logical computer configurations and information systems. Baseline information has already been derived.

As VA's needs change and priorities shift, these IRM oversight mechanisms coupled with the Department's Information Technology infrastructure baseline information, provide for continuous analysis of VA computer needs.

Mr. CATLETT. Mr. Chairman, I'd like to add one other point, in terms of the discussion about not investing until we have a plan put together.

Again, VBA, the Department decided last year to delay the Stage III of modernization, which was a \$25 million purchase to replace the—

Mr. EVERETT. First what?

Mr. CATLETT (continuing). Stage III of our modernization program. Last summer, we had \$25 million budgeted to replace the central data processors. VBA and the VA said, no, we are not going to do that, for many of the criticisms and the discussions that we're having here with GAO, we are not ready to do that.

Mr. EVERETT. Excuse me, I believe that was after we had a hearing on it in this committee?

Mr. CATLETT. I'm not sure of the timing, but we sent you a letter last August 2 saying we would postpone any investment.

But, I'm just making the point that we have made the decisions to not invest until we have a plan better defined.

Mr. KENNEDY. Yes. Mr. Chairman, if you wouldn't mind yielding right here a second. How many stages are there? I'm sorry, you are Mr. Catlett?

Mr. CATLETT. Yes, sir.

Mr. KENNEDY. How many stages have we got?

Mr. CATLETT. That was it. We did the first two, Stage III was to complete it, and we deferred it, and so we did not spend that \$25 million on new—

Mr. KENNEDY. Now, would that \$25 million have covered the entire VA system, or would it just have covered health care, or would have covered—

Mr. CATLETT. We're only speaking of VBA, I'm sorry, this is just the benefits portion.

Mr. KENNEDY. It's the benefits portion, okay.

Does anybody, Mr. Vogel, do you speak for the whole VA or just the benefits program?

Mr. VOGEL. My responsibility is for the benefits program, Mr. Kennedy.

Mr. CATLETT. I would speak for the VA for—

Mr. KENNEDY. For both.

Mr. CATLETT. Yes.

Mr. KENNEDY. But, the \$25 million just, in the Stage III decision, just covered the benefit program.

Mr. CATLETT. Yes, sir.

Mr. KENNEDY. Do you have any plans to cover both benefits as well as health care?

Mr. CATLETT. We need to develop and integrate the plans.

Mr. KENNEDY. I think that's a no, but anyway—

Mr. CATLETT. Excuse me?

Mr. KENNEDY. Was that a no, you don't have a plan at the moment. I'm not trying to give you a hard time, I'm just trying to understand.

Mr. CATLETT. Sure, I am trying to understand your question. No, we do not—

Mr. KENNEDY. You know, you were kind of wiggling there, so I'm just—

Mr. CATLETT. No, no, I understand the question. No, we have not completed the plans that were earlier discussed, and GPRA requires us to lay out strategic plans for our health care system, our benefit system, and our cemetery system. We are in the process of doing that now.

Mr. KENNEDY. For one integrated plan, now we've got the cemeteries as well, so one integrated plan will be developed for the cemeteries, the health care and the benefits system, which then will allow you to go out and ask for bids from various companies to meet the specific needs that you lay out in this assessment, and you are saying that you've got that under control.

Mr. CATLETT. What I'm saying is that we have to do strategic planning and business planning. I think you are back to the question for Mr. Latham, there is not one solution to the comprehensive and the diverse programs that we have.

Mr. KENNEDY. I didn't suggest that there was one solution, now come on, don't do this, I'm not—

Mr. CATLETT. I'm just making sure.

Mr. KENNEDY (continuing). Trying to suggest—I made very clear that I am not looking for one solution. I'm trying to make certain that you and I have a clear understanding about the fact that you need to do an assessment of all three of your areas, and that based on that assessment you will then go out and purchase the appropriate kind of hard and software, or contract out for those services.

Mr. CATLETT. Yes, sir.

Mr. KENNEDY. And, until you do the complete assessment in all three areas, you are not going to have a firm understanding of what your needs are. And so, the very simple question was, are you, in fact, implementing a plan to handle all three areas, yes or no?

Mr. CATLETT. Yes.

Mr. KENNEDY. You are sure?

Mr. CATLETT. Yes.

Mr. KENNEDY. Okay.

Thank you, Mr. Chairman.

Mr. EVERETT. Gene, would you like to comment on that? Where are we in a plan to implement to bring all of them together?

Mr. DODARO. We have been focusing a lot in the benefits area and a main point in our testimony was that they needed to come up with a credible business strategy in the benefits area.

Plans are being developed in the three separate areas. I'm not sure that a plan of the type that Mr. Kennedy is talking about, an integrated plan that looks at the opportunity to integrate each of those areas, is in the offing. There are plans being developed in each of the three main business lines that VBA has. VA is looking at the need for integration, but what we've said is that, basically, they don't have a business strategy yet just for the benefits and compensation part of VBA.

So, the planning efforts are critical. They have some areas underway, but I think this is an opportunity, Mr. Kennedy, as I mentioned earlier to Mr. Everett, for the Congress to work with VA as these plans are developed. That was the intention of the Government Performance and Results Act to encourage a dialogue so you

have a consensus on the plan of what are the priorities should be and how best to approach this.

Once that plan is developed then there needs to be agreement with the Congress that that's the right direction that we want to head in, and then you can purchase the right type of equipment to support that plan.

Mr. MONTGOMERY. Mr. Chairman?

Mr. EVERETT. Mr. Montgomery, go right ahead.

Mr. MONTGOMERY. I don't want to confuse the area, but to Mr. Vogel, like on the computers in the VA health care system, on benefit claims a person has got a diabetic problem. He's been discharged from the service, then the VA health care system looks at him. Do they computerize and send you that report for the benefits, or how do you get that claim to you so you can process it?

Mr. VOGEL. Mr. Montgomery, we do a lot of data sharing. When a veteran is hospitalized, or discharged from hospitalization for conditions, we have an automated link which informs us of those, so adjustments can be made in a timely fashion. There's a lot more that needs to be done, however.

We often need the medical report itself, and we are getting some of it now in computer text, but sometimes we need the documents. There's a lot of opportunity for the VA to put a single face forward for our veterans.

We have information exchanges on a regular basis for the purpose of award adjustments, but we don't get a lot of other data that's transmitted. Compensation and pension exam requests and results are now exchanged in an automated fashion. It used to be a paper exchange. But there's a lot more ground to cover, Mr. Montgomery, and we have to take advantage of that.

Mostly it's extracting information, rather than creating a lot of additional programs.

Mr. MONTGOMERY. Mr. Chairman, about 2 years ago, we had a gentleman that was working that came from the Armed Services Committee, and he made the suggestion, when you discharge a person out of the military, that that medical report be sent to the VA, a copy of that report be sent to the VA, and that speeded up the process. I see you nodding. It's the little things we do. How many days did that speed up the process of veterans benefit claims, by getting the center that discharged this person to send us the medical?

Mr. VOGEL. It took a process from something in the neighborhood of 65 days down to about 5 or 6 days, just by having the information sent directly to the VA. With all new discharges, the records come directly to the VA. It's the adjudication and other handling of discharges back at a distant point in time which requires us to go to the record centers and get the information.

We get Reserve records as well. With Reserve units that have been activated, especially in the Persian Gulf and in Bosnia, as those individuals are discharged from active duty status, their records will be sent directly to our Records Management Center.

Mr. MONTGOMERY. I guess to follow up, since this is a computer hearing, but just little things you do like that can speed up the process.

Mr. Chairman, I guess eventually you could computerize that process from the DOD to the VA.

Mr. VOGEL. It would be great to have a record that is on a computer imaged record from the military straight to the VA, no paper, no nothing.

Mr. MONTGOMERY. But, you can't do that now, correct?

Mr. VOGEL. We can't do that now, right.

Mr. EVERETT. Mr. Kennedy.

Mr. KENNEDY. Yes, Mr. Chairman, thank you very much, Mr. Chairman. I want to just go back to one issue. First of all, I think that one of the purposes that I sensed in Mr. Montgomery's question was that you have, in the past, taken steps to greatly improve the system. And, I don't think that it would be fair for this committee or anyone else to come in and just sort of whack around the VA or any of the other Federal agencies because your computer systems aren't as state of the art as what the private industry. That changes almost on a daily basis, in terms of what their capabilities are out there, and whatever they are today, 5 years from now, they are going to change as well.

And, I guess what I'm trying to suggest is that it would be best if you don't get defensive about some of the shortcomings of the existing system, but try, in fact, to design whatever the new system is to be able to take full advantage of whatever new technologies become available.

And, I think that means you want to get farther and farther away from actually owning anything, and farther and farther into having somebody else be required to provide you with that information.

I guess what I would be concerned about is, given the fact that this is such a changing world out there, whether or not you feel that you really have the capability in house to even do the assessment, or whether or not that assessment needs to be sort of outsourced as well, you know, in order to be able to really determine what you can put on a system, what the systems integrations that Sonny was referring to with regard to, you know, people that are currently in service and all the rest of that. I mean, I have no idea, I wouldn't even know what questions to ask or where to start, so I don't know whether you would have that information either, but you certainly could find people that would have that.

Mr. QUINTON. Yes, sir. Mr. Kennedy, we have been involved in assessing the situation, that issue in particular. Certainly the effort over the last year-and-a-half with the Center for Naval Analysis Corporation has led us along that path to say this is how VBA needs to be positioned in order to take advantage of commercially available products.

That assessment completed probably within the last month, did do sizing, it did talk about different options that VBA should pursue, many of those we have in the place. The remaining one, of course, ties into the approach that VBA should take to build our database, and that database needs to be very flexible, to do exactly what you are describing, to be able to buy commercially available software by applications, once we have defined the requirements, and connect those to our infrastructure.

When Mr. Catlett talked about the Stage III component of the modernization plan, a part of that, was and still is, building a new database that contains VBA's history or records for each of our veterans in our payment systems.

But, our intent is to have a modern database that will complete that infrastructure and then position us to take advantage of things in the commercial market.

Our approach is certainly not to develop systems in house. That has been our approach in the past, to do very inward looking. Our approach now is to say we will build an infrastructure, we will position ourselves to take advantage of what's available commercially that can satisfy requirements, the requirements being driven by the business process engineering effort, in conjunction with what's defined in our business strategies. In conjunction with those, that approach is what would drive our information technology community, once we have finished this infrastructure.

Mr. DODARO. If I might add to that, there is one additional resource that I think could be available to VBA. An issue in this area of getting outside help is always one of getting objective advice from the group, as opposed to, perhaps, self-serving advice from the contractors. The National Research Council, which is an extension of the National Academy of Sciences and Engineering, has been chartered to provide objective advice. They have a lot of technical resources, and a Computer Science and Technology Board. That is one resource that the VA could look toward to get a group of experts together that have both industry experience, as well as technical experience, to provide them with ongoing advice in this area.

Mr. KENNEDY. Maybe, Mr. Chairman, it might be a good idea to see if we could get them in here some time and talk with them, if you thought it was a good idea.

Mr. EVERETT. Absolutely.

Mr. KENNEDY. Thank you very much, Mr. Chairman.

Mr. EVERETT. You are very welcome.

We've got a vote, only I think we can wrap this thing up. We could stay here and spend several hours on this, but I'm not too sure how much this Chairman can absorb of it, beyond where we are.

However, I do have some closing statements, and we will be submitting additional questions for the record.

I want to thank both panels for their testimony today. Today we've heard VA needs to create a credible business strategy, develop an investment strategy, and strengthen its technical capabilities.

And, to its credit, VA is in the beginning stages of attacking these issues. There is a long way to go. We've heard that VA cannot qualify the effects of various initiatives on shortening claims processing times. We've heard about the need for goals and the management results, costs and benefits. We heard about the need to reengineer benefit processes before automation, instead of buying equipment to automate outdated processes. We've heard about the advantages of benchmarking, and VA's resistance on the grounds of a unique operation.

We heard that VA is not including the Board of Veterans' Appeals as a part of their system design. We've heard about VA's

plans to place imaging technology at the Atlanta Regional Office, without qualifying the results of imaging systems at their test site in St. Louis.

We heard that the VA and its contractor are not familiar with the need to do rapid applications development, thus creating a high risk for failure, and that despite being ranked in the bottom tier of software development skills, VBA intends to do much of the development in house.

We've heard that, despite being faced with the year 2000 issue, which could wreck the current payment system, VA is spreading its thin resources to address many different projects.

The question is, where do we go from here? It is obvious that VA must keep working on the year 2000 issue. They must continue to maintain current payment and transitional systems to make sure veterans benefits get paid. But, much beyond that, the long pole in the tent is getting their planning finished before proceeding with other projects. And, I intend to make sure that happens.

Therefore, I'm considering, strongly considering, legislation that would require VA to submit its modernization plan to an appropriate body for review before proceeding with new projects. I want to emphasize that this is not punitive, but it is my belief, and I think a lot of members of the committee share that belief, that an outside body, with appropriate expertise in management of large-scale information systems development would provide VA with a valuable tool to ensure the success of its modernization efforts and to allow us to move on to other important issues.

It is my sincere hope and expectation that VA will proceed in its efforts to improve its services to veterans, and I know they feel the same way.

This hearing is adjourned. Thank you.

[The subcommittee was adjourned at 11:46 a.m.]

APPENDIX

Honorable Terry Everett

Remarks

Subcommittee on Compensation, Pension, Insurance and Memorial Affairs
Hearing on
VA Computer Modernization
June 19, 1996

Good Morning. The Subcommittee will come to order. Today we will here testimony from the General Accounting Office and the Department of Veterans Affairs regarding VA's computer modernization program. This is our third hearing on the subject, and I am confident we will have more as VA proceeds, because up to now, VA has been slow to do the up front planning necessary to ensure that systems development is part of a disciplined and integrated planning process that revolves around a strategic plan. That's not just my opinion - it also comes from the GAO and the Center for Naval Analysis. We are here today because I am convinced that VA and VBA must conform to solid business planning methods in its operations and I am not going to sit by and let the old ways continue. Caring, dedicated employees on the front lines cannot make up for weak strategic management practices. Since GAO states that this is a government-wide problem, I want to see VA become the shining example of how to modernize computer systems.

As recently as the May 3 Senate Appropriations hearing, VA stated that they could not allocate improvements in claims processing to any particular initiative or factors such as reduced workload. That statement highlights the problem before us today. That is, in

a time of tight resources, how should an agency make resource allocation decisions? Where does an agency like VA get the best return for the dollars taxpayers provide to take care of veterans? It is bad public policy on our part to let those types of practices continue.

I have often mentioned the GAO's estimate of \$300 million spent for modernization since about 1986, and I believe Secretary Vogel will address that number in detail here today. That's three administrations and five Congresses that this has been going on, and there is no real end in sight. The recent retrenchment on restructuring is a good example of ad hoc planning that had budget considerations - not quality as its focus. But, as TQM proponents would say, if you take care of the quality, costs come down and customer satisfaction goes up. I would also say that while I support the concept of restructuring, it cannot be done in a vacuum. For instance, consolidation of compensation and pension claims processing is a good concept - provided that you have the necessary information systems in place ahead of time to ensure nation-wide access to information. Without such a system, the confusion and frustration that will be experienced by both veterans and employees will make today's customer satisfaction issues seem tame by comparison.

I'd like to just review a few quotes from the Center for Naval Analysis report issued in March 1995 just to illustrate the challenge VA faces internally.

“...the amount and complexity of change is seriously stressing the organization’s ability to integrate and manage effectively the modernization projects that are underway and planned.”

“...VBA is systematically pursuing a growing number of initiatives without a systematic and explicit corporate understanding of their consequences (benefits, resource effects, schedule, and risks). Initiatives within VBA generally are not analyzed or managed on a corporate-wide or project-wide basis in an integrated and systematic manner.”

“...VBA needs to strengthen its planning and control, and integration processes and structures for managing implementation of large, complex modernization projects and systems...we find them generally weak.”

“...VBA did not put in place the necessary management infrastructure improvements for implementing its modernization program. Responsibility for integration and management of complex programs of change is diffused with no one responsible and accountable.”

As a result, we asked GAO to monitor VA’s VBA’s development of a strategic plan, a business plan and business process reengineering projects with a focus on how those processes would be applied to ongoing and future information resources modernization projects. Mr. Dadaro, the Deputy Comptroller General will testify today about what they have found over the past year. Having read his written testimony, I am very concerned about VA’s future ability to improve its claims processing through

enhanced computer technology. Weaknesses in organization and skills noted by GAO and CNA do not lead me to feel confident we can continue to throw money at VA without some form of accountability that comes through the disciplined processes that GAO will discuss.

We also have a written statement from Ms. Rhoda Davis, a member of the Claims Adjudication Commission headed by Mr. Melidosian. The Committee appreciates the assistance and cooperation the Commission has given us and we look forward to future mutual efforts.

I will now recognize the ranking member for any remarks he may have.

Do any other members have opening statements?

Without objection, because of the small number of witnesses and to allow us follow-up questions, today's hearing will use a 10 minute limit instead of our usual five minutes. Our first panel is composed of Mr. Gene Dodaro, Assistant Comptroller General from GAO's for Accounting and Information Resources Management Division. He is accompanied by some of the GAO team working this issue, Ms. Patricia Taylor, Ms. Helen Lew, and Mr. L.J. Latham. Mr. Dodaro and team, welcome and please begin.

Thank you, Gene. Let's begin with a few questions.

I thank the panel for their testimony and to the members of the investigation team, our sincere thanks for doing a fine job. You may be assured that you have our full support. If this panel has time to stay for the VA's testimony, I would appreciate it.

Our next panel is composed of the Honorable John Vogel, Under Secretary for Benefits, and he is accompanied by Mr. Mark Catlett, the Assistant Secretary for Management, Mr. Dennis Duffy, the Assistant Secretary for Policy and Planning, and Mr. Newell Quinton, VBA's Chief Information Officer. Good morning John, please begin.

Thank you John. Just a few questions, please.

I thank both panels for their testimony today. Today we've heard that VA needs to create a credible business strategy, develop an investment strategy and strengthen its technical capabilities, and to its credit, VA is in the beginning stages of attacking those issues. But there is a long way to go. We've heard that VA cannot quantify the effects of various initiatives on shortening claims processing time. We've heard about the need for goals and measurement of results, costs and benefits. We've heard about the need to reengineer business processes before automating instead of buying equipment to automate outdated processes. We've heard about the advantages of benchmarking and VA's resistance on the grounds of their unique operations. We've heard that VA is not including the Board of Veterans Appeals as apart of their system design. We've heard about VA plans to place imaging technology at the Atlanta Regional Office without quantifying the results of imaging systems at their test site in St. Louis. We've heard that VBA and its contractor are not familiar with the tools needed to do rapid application development thus creating a high risk of failure and that despite being ranked in the bottom tier of software development skills, VBA intends to do much of the development in-house. We've heard that despite being faced with the year 2000 issue, which could

wreck the current payment system, VBA is spreading its thin resources to address many different projects.

So, the question is where do we go from here. It is obvious that VA must keep working on the year 2000 issue. They must continue to maintain current payment and transitional systems to make sure veterans benefits get paid. But much beyond that, the long pole in the tent is getting their planning finished before proceeding with other projects, and I intend to make sure that happens. Therefore, I am considering legislation that will require VA to submit its to an appropriate body for review before proceeding with new modernization projects. I want to emphasize that this is not punitive. Rather, it is my belief that an outside body with appropriate expertise in management of large scale information systems development would provide VA with a valuable tool to ensure success in its modernization efforts and allow us to move on to other important issues. It is my sincere hope and expectation that VA succeed in its efforts to improve services to veterans.

Congressman Jerry Weller
Subcommittee on Compensation, Pension,
Insurance and Memorial Affairs

June 19, 1996

Mr. Chairman, I want to add my appreciation to that expressed by my colleagues, to veterans organizations in general, and to those testifying before us today.

I also want to express my appreciation for the leadership and the hard work which my colleagues have put forth on behalf of Americas veterans. Your expertise and interest in this area is invaluable.

I'm sure we will all agree that it can never be said often enough that we owe all veterans more than a debt of gratitude. That is why I think it is important that we are holding this hearing, today, to report on the progress of the Department of Veteran's Affairs in their computer modernization process.

I am anxious to hear the testimony of Mr. Dodaro from GAO; and hear his assessment of VA's progress. I think is it very important that we work

to get the modernization process on the right track so we can serve our veteran's more quickly and efficiently. But, I also believe, and I think GAO will agree with me on this, that we must not be hasty in our efforts. Past experience shows us that to jump in and make impetuous decisions can further hinder the modernization process while costing taxpayers and veteran's millions of dollars.

I have a vested interest in this issue because part of the modernization process currently being considered will greatly affect hundreds of working men and women in my district. There is talk of closing the Data Processing Center at the Hines VA Facility and consolidating it with the facility in Austin, Texas. GAO's report makes more than one reference to the Hines facility for its progress and use of software development. I think it would be a shame to close the Hines VA without weighing the consequences of doing so.

It is clear that we need to make some changes in the modernization process of VA, but let's make sure we have adequate information and an organized strategy before we make dramatic changes that will hurt veteran's and working Americans alike.

Statement by Rep. Luis V. Gutierrez
Subcommittee on Compensation, Pension,
Insurance and Memorial Affairs
June 19, 1996

Good morning.

Mr. Chairman, I would like to thank you for allowing me to join your subcommittee to discuss the Department of Veterans Affairs computer modernization effort.

This issue is very important for veterans who receive disability compensation, educational assistance and insurance benefits, as well as those men and women who served our nation with pending claims and claims appeals before the VA.

Specifically, this hearing is of importance to the thousands of veterans who depend on the Hines Benefits Delivery Center in Illinois and the people who serve our nation's veterans through the Hines facility.

I am aware that the Department of Veterans Affairs is considering plans to consolidate the Veterans Benefit Administration's (VBA) data processing capabilities from the Hines facility to the Austin Automation Center in Texas.

I know that the Office of Management and Budget requested data processing consolidation/modernization plans from all federal agencies by June 3, 1996. This date has passed and the VBA has not complied with the aforementioned deadline.

Nor has the VBA demonstrated a technical or financial justification for such a consolidation. As Mr. Dodaro and his colleagues at the GAO have found, critical information regarding a consolidation at Austin in terms of costs and benefits has not been made public.

We still lack the crucial information needed to determine if this move makes fiscal sense, if the processing of benefits vital to veterans will be disrupted and if the technology and experience of the Austin center matches the 35 years of expertise the Hines staff have developed.

I have been recently informed that no final decision has been made about the consolidation. However, VA officials, in responding to questions I presented before the March 29, 1996 budget hearing implied that they had a plan ready and that it did include moving the Hines data-processing center to Austin.

Frankly, I am a bit confused. Has the VA made a decision, and on what facts has that decision been made?

The computer center at Hines is the brain center of the VA data processing system. The experienced staff at Hines have managed the system well, in fact current service levels for response time and system availability exceed industry standards. The current staff also possess the institutional knowledge to develop the VETSNET VA modification project, which is essential for the future of VA processing capability.

I have spoken to officials at the Hines facility and they strongly believe that they could process the twenty VBA applications residing in the Austin center and the Philadelphia VBA functions with a minimal increase in cost. They point to estimates that suggest it could cost \$44 million and take 4 years to replatform the Hines benefit systems to the Austin processors.

This seems an excessive amount to spend on data-processing consolidation.

I am hopeful that the VA considers the low-cost proposal to designate the Hines BDC as the main center for veterans' benefit payment processing. I believe that 35 years of success should merit consideration.

If, as I hope is not the case, the Va has moved close to making a decision, I urge it to immediately disclose a full description of costs, benefits and risks of consolidation. I want to repeat and emphasize that the GAO believes all of these considerations are lacking at this time.

Once again, Mr. Chairman, I would like to thank you and Ranking Member Evans for allowing me to express my concerns and those of thousands of veterans in the Chicago area.

STATEMENT OF
R. J. VOGEL
UNDER SECRETARY FOR BENEFITS
DEPARTMENT OF VETERANS AFFAIRS
BEFORE THE
SUBCOMMITTEE ON COMPENSATION, PENSION,
INSURANCE AND MEMORIAL AFFAIRS
COMMITTEE ON VETERANS' AFFAIRS
HOUSE OF REPRESENTATIVES
JUNE 19, 1996
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Mr. Chairman and Members of the Subcommittee:

I am pleased to be here today to provide you with an update on the Veterans Benefits Administrations' (VBA) strategic planning progress, the umbrella planning program under which our information technology and business planning activities are integrated.

Mr. Chairman, we have come a long way in the year since this Subcommittee's last hearing on this issue, and I am very enthusiastic about the path we are on now. There is, of course, much work yet to be done, but I believe that we are making real progress in addressing your concerns as well as those of our Nations' veterans.

Let me take this opportunity to acknowledge the assistance and support we have received this year from the General Accounting Office (GAO). GAO and VBA have formed an effective working relationship and that change has benefited us greatly as we adjusted our course.

The VBA strategic planning process, which we described last year as being in its infancy, is leading us toward a comprehensive, integrated, multi-year Business Plan. When the plan is completed, it will

serve as the foundation for all future VBA initiatives and will be integrated into the Department's Strategic Management Process.

The first step in our strategic plan development process was accomplished in July 1995, when VBA's top management worked together to revise and develop the VBA Mission, Vision, Values, Goals and Core Measures. Those guiding principles describe to us and to our stakeholders what we're all about, in terms of where we want to take this organization and how we'll get there. They are, in essence, a road map to the future of customer-focused benefits delivery. We will follow them closely as we proceed with our strategic planning process.

The second step, the development of VBA Business Plans, is an incremental one. Business plans were completed last fall for three of our benefit programs - Loan Guaranty, Education, and Insurance. Because these plans contained useful information on VBA performance objectives and indicators, we included those plans in VA's 1997 Congressional Budget submission. In December 1995, we established work groups to develop performance measures for all business line programs. This work was completed in February 1996, and these measures are being used as the basis for the overall VBA Business Plan which will form the foundation for our 1998 budget request.

Once the basic plans are in place, all VBA support activities will be integrated into the plans, including information technology projects and restructuring initiatives. Performance objectives and indicators are being developed to track progress and ensure the best impact on service to veterans. This will enable us to make better use of available resources and provide better justifications for future budget requests.

We appreciate the favorable reactions we have received from OMB and the Congressional staffs in response to briefings we provided on our strategic planning efforts. We know there is much more to do before our strategic planning process is fully implemented. However, we have taken a major step in the development of the comprehensive and integrated strategic plan that will describe and direct all our future activities. To quote one of our recent external reviewers, "VBA has come a long way in a short time."

In March of this year, the Under Secretary requested that all VBA components submit a summary of all ongoing or planned initiatives for fiscal years 1996 through 1998. We reviewed each initiative to determine

its consistency with established strategic guidance and whether it had clear performance objectives and indicators to measure progress. We coordinated these initiatives across program lines to ensure the integration of objectives and plans among related initiatives.

Our first draft business plan is nearing completion. Following a final staff review, it will be submitted to our Strategic Management Committee for decisions regarding priority initiatives that will accompany VBA's FY 1998 budget request to the Department. The plan will be further refined as it undergoes reviews by the Department and OMB.

Mr. Chairman, I cannot state strongly enough what a significant development VBA's strategic planning effort is in furthering our goal of being the best benefits provider in government. Our strategic planning activities and the resultant VBA Business Plan will tie together all our business and technology activities into one cohesive strategy. It will - enable us to ensure that all information technology activities directly support and better our business programs and prioritize our investment options.

Integration of information technologies with our overall Strategic Plan has been a long and complicated process, but we have made significant progress. It has been almost 11 years since we made the first investments toward "modernizing" VBA. Mr. Chairman, there has been much discussion about the \$300 million we have spent to date on modernization. I believe the following chronology will put that investment into perspective for you:

- Beginning in 1985, VBA implemented the Wang Office Automation program including local servers and intelligent servers connected to Wang processors with on-line access to IBM mainframes. (Total expenditure 1985-1996: equipment = \$30 million; maintenance = \$25 million)
- In 1988, the Model Station program was established to test software applications developed by Regional Offices as well as other short term initiatives targeted to improve the Regional Office environment. (Total expenditure 1988-1992: \$2 million)
- During 1991 and 1992, VBA developed, tested and implemented a Migration Gateway linked to a Regional Office Gateway. These gateways provided enhanced access to the Benefits Delivery

Network and Wang system. (Total expenditure 1990-1992: \$16 million)

- In 1992, VBA awarded the contract for Stage I Regional Office modernization to install intelligent workstations. VBA also initiated the in-house development of applications (Rating Board Automation, PC Generated Letters) to take advantage of Stage I capabilities. VBA completed the Stage I deployment at all 58 regional offices in 1995. (Total expenditure 1993-1994: \$66 million for acquisition of PCs, printers, RO processors, file servers and other LAN components, and software)
- In 1993, VBA initiated the VETSNET software development program. (Total expenditure 1993-1996: \$6 million for contractor support)
- In 1995, VBA awarded the Stage II imaging contract to replace existing equipment at the St. Louis Education Regional Processing Office with follow-on implementation planned for the remaining Education Regional Processing Offices. (Total expenditure - actual and estimated - 1995-1996: \$6 million)
- Also in 1995, VBA decided to defer the Stage III procurement and re-scope the VETSNET design for replacing the C&P payment system. In addition, VBA adapted a Business Process Reengineering (BPR) methodology for C&P claims processing.
- An additional \$65 million has been spent over the past 11 years for equipment and the development of software applications to support the short-term initiatives and VETSNET. Another \$20 million was spent on contractor studies. The remaining \$59 million was used during that time for operational expenses to support the office, such as maintenance (other than Wang), payroll, training, supplies, travel, etc., an average of approximately \$5 million per year.
- In 1996, VBA developed a strategy in concert with the Department's Chief Information Resource Officer to consolidate central processing and to migrate off the Honeywell and Wang platforms. Consolidation will be invisible to the user--services and access will not diminish no matter what decision we make.
- The Assistant Secretary for Management, Deputy Assistant Secretary for IRM, VBA top officials, and Chief Information Officer

have been working together to develop and refine the consolidation strategy. The agreement calls for developing a detailed consolidation plan by September.

VBA's acquisition of basic Wang office automation equipment for the regional offices in 1985 significantly improved our capability to communicate and transfer information rapidly between Central Office and the field and among the field stations through the use of electronic mail. The Wang systems provided our offices with simple yet powerful capabilities for performing word processing, electronic mail, calendar and other basic office functions. For the first time, we had the capability to mail or share documents throughout the nation.

In 1987, we developed a 12-point plan for modernization. That plan placed emphasis on the acquisition of hardware and systems operations software necessary to establish a new technology infrastructure. It led to a staged implementation strategy that would allow for adjustments and refinements, and create decision points not otherwise feasible with a single-procurement approach. Stage I, completed in March 1995, established a state-of-the-art information technology infrastructure consisting of workstations and local area networks at each regional office. Stage II, awarded in July 1995, will extend local processing capability through the use of imaging systems within the Stage I infrastructure.

Throughout the life of our modernization program, we realized many outstanding achievements. I would like to describe just a few of the applications that have contributed to claims processing improvements.

The development and processing of claims as well as the ability to respond to veteran inquiries is dependent upon the timely location of claims folders. The Control of Veterans Records (COVERS) provides automatic tracking of records within the regional office. It is projected from our beta test conducted at our Baltimore and St. Petersburg Regional Offices that the time previously devoted to processing incoming mail will be reduced by 50 percent or more.

Another initiative, PC Generated Letters, enables VBA to move away from computer generated form letters and allows adjudicators to compose letters reflecting the specifics of each case. With this feature, we can provide specific information about the veteran's claim, and more clearly communicate to the veteran the need for additional information. This application is being enhanced through a non-technology initiative we call,

Reader Focused Writing. Through this initiative, we are reviewing our system-generated correspondence to make it easier to understand by our veteran customers. At the same time, employees are being trained to change their own personal writing styles to reflect a reader focus.

An additional initiative that has allowed us to combine and eliminate time consuming, labor intensive tasks has been our Rating Board Automation system. This application allows rating specialists to prepare rating decision documents by using sophisticated programming and a large database of standardized phrases, sentences and paragraphs. Only minimal use of data entry is necessary. This application promotes consistency in our decision making and facilitates future changes to rating procedures, policy and legislation. This application also eliminates time previously spent on dictation, typing, and proofreading which has enabled us to speed up getting decisions back to veterans. Further, this initiative was the catalyst that enabled us to move FTE into decision making positions.

Our modernization program will be completed with the development of a modern data base. This data base will enable VBA to replace the existing payment systems which are currently processing on 1970 vintage equipment.

The new data base and payment system will provide the regional offices with the processing functions they currently have, plus enable VBA to resolve issues like the limited access to veterans records, which continues to limit our ability to improve service.

Our strategy for this effort also includes developing a plan that ensures our systems will operate beyond the year 2000.

All of VBA's information technology resources, both dollars and people, will ultimately be realigned to support only those projects and initiatives that are approved priorities. All activities that are currently supporting non-priorities will either cease or be dramatically reduced. The key to this strategy is quite simple – focus our information technology personnel, dollars and management efforts only on VBA business priorities.

Looking ahead, we have outlined a dramatic new direction for reshaping and refocusing the efforts of our information technology resources. The primary goal of this new direction is the provision of enhanced as well as ongoing support to VBA's changing business

requirements. This effort will be guided by our integrated planning process and business process reengineering.

The Business Process Reengineering (BPR) program is a systematic review of core VBA business processes to determine the most effective and efficient approaches to accomplishing our primary business missions. The intent is to apply a formal methodology, with a highly structured sequence of reviews, to the operations of each business process. The imposition of a discipline to improve operations builds a foundation for decision making that is predicated on the existence of business goals, performance measures and selected strategies.

We selected the delivery of compensation and pension benefits as the initial area of concentration for BPR. The designation of a team was a key part of the process. With the assistance of contracted technical experts, the team will follow a sequence of activities that

- (1) creates a simulation model of the C&P business process,
- (2) collects stakeholder perceptions and expectations,
- (3) benchmarks existing core business processes,
- (4) benchmarks the best practices of public and private sector businesses with similar processes,
- (5) creates a "to be" model that describes the optimal environment and set of business operations,
- (6) proposes alternatives to achieve the "to be" condition,
- (7) completes an economic analysis of the alternatives, and
- (8) produces a business case for the preferred method of proceeding with redesign.

Upon selection and approval of the desired business goals and objectives, we will develop the implementation plans.

VBA, The Assistant Secretary for Management and the Assistant Secretary for Policy and Planning are working diligently to develop a framework under which the remaining component of the modernization

effort will be closely managed. It will provide adequate controls to ensure that oversight requirements are satisfied and performance objectives are met on schedule.

In addition, we continue to work with other elements within the VA and the Department of Defense (DOD) in cooperative efforts to improve timeliness of service.

In a joint effort with the Veterans Health Administration (VHA), we have entered into an agreement with DOD to pilot separation medical exams using VA's protocol. This will eliminate the need for a veteran to undergo a second exam for a condition that exists at the time of discharge.

VBA is also working with DOD on the electronic transfer of DD 214s, thus reducing the time it takes currently to obtain copies and reducing the dependency on paper copies.

We fully expect to explore other opportunities with VHA and DOD to assist our veterans in processing their claims.

In closing, I will repeat, VBA is on the right track! We are making good progress in improving the way we plan and manage our operations. Whether it's a new IRM application, a training initiative, or a restructuring proposal, we are committed to ensuring that it is integrated with other activities and that we can clearly measure the benefits to our veteran customers. These changes take time but will eventually result in improved VBA performance and concurrent increases in the levels of service provide to our Nations veterans and their families.

Mr. Chairman, this concludes my statement. I will be happy to respond to any questions that you or other members of the Subcommittee might have.

United States General Accounting Office

GAO

Testimony

Before the Subcommittee on Compensation, Pension,
Insurance and Memorial Affairs
Committee on Veterans' Affairs
House of Representatives

For Release on Delivery
Expected at
10:00 a.m.
Wednesday,
June 19, 1996

**VETERANS BENEFITS
MODERNIZATION**

**Management and Technical
Weaknesses Must Be
Overcome If Modernization
Is To Succeed**

Statement of Gene L. Dodaro
Assistant Comptroller General
Accounting and Information Management Division



Mr. Chairman and Members of the Subcommittee:

I am pleased to have this opportunity to discuss the Veterans Benefits Administration's (VBA) efforts to modernize its operations by streamlining its business processes and taking greater advantage of information technology. Successfully meeting this challenge is key to improving critical services to almost 27 million veterans and their dependents and lowering VBA's operating costs.¹ VBA is, however, experiencing many of the classic, fundamental management and technical problems that have prevented federal agencies from realizing the benefits expected from substantial investments in information technology. While it is clear that dedicated employees at VBA who care about veterans and service delivery are working to overcome these difficulties, major, sustained improvements in critical service delivery and operating performance have eluded VBA.

Unless VBA takes more aggressive action to effectively address its serious management and technical weaknesses, its modernization efforts will not succeed. My testimony today will focus on what VBA needs to do in three major areas to increase the likelihood of success. These are.

- creating a credible business strategy and supporting information resources management plan,
- developing a much improved investment strategy for selecting and managing its portfolio of information technology projects in a more disciplined, businesslike manner, and
- strengthening its technical capability to develop software applications that will be critical to supporting efforts to improve service to veterans and control costs.

BUSINESS STRATEGY NEEDED TO SOLVE ENTRENCHED SERVICE-DELIVERY PROBLEMS

VBA's business environment encompasses many difficult challenges. These include a backlog of disability claims, improving a number of relationships with other organizations that affect how VBA does its work, and responding to its customers who are frustrated about the long-standing need to improve the accuracy and timeliness of processing claims. To deal with these issues, as well as cope with today's constrained budgetary climate, the agency is undertaking a number of major initiatives, including beginning a business process reengineering effort for its compensation and pension programs,² restructuring its regional office responsibilities, and consolidating its data centers.

VBA has, however, been proceeding without an overall business strategy clearly setting forth how it will improve its performance and tackle entrenched service-delivery problems. For example, the reported backlog of original and reopened disability claims increased from 378,000 in fiscal year 1990 to a high of 571,000 at the end of December 1993. This rise was due to several factors, including increasing complexity in claims processing and the use of inexperienced regional claims raters. VBA instituted several conventional stopgap measures to deal with this backlog. It authorized extensive overtime, shifted workloads among regional offices, purchased information technology equipment, increased the number of claims raters by about one third (from 667 to 897), and relaxed some paperwork requirements, such as accepting photocopies of certain documents. As a result the backlog has been reduced, but it is now still about 380,000—similar to the 1990 level.

¹VBA is one of three major components of the Department of Veterans Affairs, which also includes the Veterans Health Administration and the National Cemetery System.

²VBA has five major business areas. compensation and pension (the largest), loan guarantee, vocational rehabilitation and counseling, educational assistance, and insurance.

Similar trends have been experienced in the processing times for original disability compensation claims, which rose from an average of 151 days in fiscal year 1990 to 213 days in fiscal year 1994. The stopgap measures used to decrease the backlog have also reduced the average processing time in fiscal year 1995 to 161--10 days more than the level in fiscal year 1990. VBA officials acknowledge that these measures cannot be sustained over a prolonged period of time. VBA must, therefore, find other solutions to achieve greater service-delivery breakthroughs.

Other entities also affect the speed with which VBA processes claims and the agency's overall direction. For example, VBA relies on the Veterans Health Administration for most medical information needed to substantiate a disability claim, and the Department of Defense for information relating to a veteran's service time and conditions of discharge, as well as medical information from the veteran's tour of active duty. Delays by either of these organizations can have a significant impact on the timeliness of VBA's claims processing.

Judicial review organizations also affect VBA's workload and backlog. For example, the Board of Veterans' Appeals returns almost half of its cases to VBA regional offices for additional development and reconsideration each year. The Board itself also has a significant and increasing backlog of cases; its appeals grew from about 19,500 in fiscal year 1990 to more than 50,000 in fiscal year 1995--an increase of more than 150 percent. It takes the Board about 2 years to render a decision from the date it receives an appeal.

In addition, VBA--like most federal agencies--must deal with constrained resource levels and, at the same time, maintain existing levels of service and operations. VBA is in the process of restructuring its regional offices in an effort to cope with declining resources. At the same time, funding for VBA's information technology initiatives is discretionary and, as such, comes under close budgetary scrutiny by the Congress and the Office of Management and Budget (OMB).³

A comprehensive business strategy is needed--one that includes developing strategic and information resources management plans, setting performance goals and measures, and incorporating the results of major agency initiatives, such as business process reengineering. VBA is moving in this direction; currently, however, it has no clearly articulated business strategy.

Recent legislative changes provide the framework for VBA to develop such a strategy and identify the tools needed to implement it. For example, the Government Performance and Results Act of 1993⁴ requires agency heads to submit to OMB and the Congress a strategic plan for program activities, including a mission statement, goals and objectives, and a description of how these will be achieved and what key factors could affect their achievement. The act also requires that agencies prepare annual performance plans for each program--performance indicators that will allow measurement of outputs and service levels. In addition, the Information Technology Management Reform Act of 1996⁵ requires agency heads to establish goals for improving the efficiency and effectiveness of agency operations and, as appropriate, the delivery of services to the public, through more effective use of information technology and business process reengineering.

VBA's weaknesses in planning have been well documented since 1987. VBA's planning process has been cited by us and others for (1) not having specific, measurable goals and

³The Budget Enforcement Act of 1990 discusses required reductions in budget authority and outlays, while the Federal Workforce Restructuring Act discusses limitations on personnel levels.

⁴P.L. 103-62; 5 USC 306 and 31 USC 1115; Aug. 3, 1993.

⁵P.L. 104-106, Division E, Feb. 10, 1996.

objectives against which progress can be assessed and (2) not analyzing the costs and benefits of alternative approaches to modernization. According to VBA officials, they are in the process of developing strategic and information resources management plans and will have them ready to use in preparing the agency's budget submission for fiscal year 1998. Assistance in this area could come from the National Academy of Public Administration, which has recently been commissioned by the Senate Appropriations Committee. In the Committee's September 1995 report on the 1996 appropriations bill,⁴ the Committee provided \$1 million to the Academy for a comprehensive assessment of VBA, with particular emphasis on the specific steps required to make claims processing more efficient and less time-consuming. The Academy will evaluate the modernization initiative and its link to strategic goals and priorities, efforts to reengineer VBA's claims-processing methodology, performance measures for restructuring, and the roles of the Board of Veterans' Appeals and the Court of Veterans Appeals. As of a few weeks ago, VBA was still working out the details of this study with the Academy.

VBA also needs to develop a full set of performance goals or measures. At present, processing timeliness is the primary performance measure that VBA uses. Customer-focused goals, aimed at improving the quality of service, are needed. For example, a VBA survey of "stakeholders"⁷ indicated that, in their view, an emphasis on quality over productivity alone would be the key to service excellence at VBA. These stakeholders defined quality as making the correct award decision the first time, which would improve the timeliness of claims processing and reduce the number of appeals filed.

VBA's current goal for claims processing was set without the benefit of any clear plan. For example, its goal is to reduce average original compensation claims processing time to 106 days by 1998,⁸ this goal was set as part of a 1993 agreement with OMB to establish outcome-oriented performance goals. The performance goal is not linked to a business strategy or plan that explains how the agency intends to achieve this goal.

Reengineering is key to achieving major performance improvements that VBA establishes as business goals. As our 1994 study pointed out,⁹ organizations that successfully develop information systems do so only after thoroughly analyzing and redesigning their current business processes. Information system projects that do not first consider business process redesign typically fail, or reach only a fraction of their full potential.

In response to concerns raised by us and others over the past 3 years, VBA is preparing to reengineer its compensation and pension claims-processing operations, and has taken several positive steps. In November 1995 the agency established a Business Process Reengineering Office, and subsequently adopted a business process reengineering methodology. It also hired a consultant to assist with reengineering. By the end of this month, a business process reengineering team comprised of VBA staff and the consultant is expected to have completed a key step in the process by developing a proposal for changing the compensation and pension business processes. This proposal will be submitted to VBA management for review and approval before implementation. VBA also plans to begin a different business analysis project each year for its other four business areas. The next area planned for such an analysis is educational assistance.

⁴Senate Report 104-140.

⁷Stakeholders included veterans, VA employees, top VA management, congressional veterans' committees, agencies such as GAO and OMB, veterans' service organizations, the Social Security Administration, and components of the Department of Defense.

⁸According to the Secretary of Veterans Affairs, an interim goal is 117 days by 1997.

⁹Executive Guide: Improving Mission Performance Through Strategic Information Management and Technology—Learning From Leading Organizations (GAO/AIMD-94-115, May 1994).

It is still too early to judge whether the current business process reengineering effort will help VBA achieve its goals, but we continue to have some concerns about VBA's current business process reengineering focus and approach. For example, VBA has not yet set quantifiable performance measures using the experiences and performance of other leading claims-processing organizations. Also, the scope of VBA's analysis and reengineering of its business processes in the compensation and pension area does not address the claims appeal process, which has a significant impact on the timeliness and quality of some claims-processing decisions. Finally, as I will discuss later, we are concerned that reengineering is not the driver behind all of VBA's information technology initiatives.

To solve entrenched problems and sustain long-term improvements in service delivery and operations, VBA must first know exactly what it needs to pay attention to and where it wants to go. A business strategy containing specific goals and performance measures is absolutely essential. By effectively using the framework established in recent legislation to develop the business strategy and complete its strategic and information resources management plans, VBA will go a long way toward setting out a clear path to be followed.

MANAGING INFORMATION TECHNOLOGY IS ESSENTIAL TO VBA'S SUCCESS

VBA's investment in modernization activities has yielded some improvement in hardware and software applications. However, it is difficult to measure return on any of these investments.

As shown in attachment 1, between fiscal years 1986 and 1995, VBA reported that it obligated about \$688 million for information technology, of which about \$284 million, or about 40 percent, was for systems modernization. In December 1992 VBA awarded the first contract in its planned three-stage procurement. During stage I, VBA acquired a number of personal computers, local area networks, minicomputers, and commercial off-the-shelf software for its 58 regional offices; during stage II, VBA procured imaging equipment and associated software. Stage III was suspended in 1994; during this stage, VBA was to procure mainframe computers for its data centers in Hines, Ill., and Philadelphia.

VBA has also realized some limited benefits from the development of several short-term, targeted software applications that are being used on equipment acquired during stage I. These projects include the following:

- Control of Veterans Records--used to track the location of veterans' claims folders containing application-related information;
- Rating Board Automation--used to generate letters to veterans regarding award decisions; and
- Personal Computer-Generated Letters--used to prepare general letters to disability claimants.

To help manage its information technology investments in a way that will lead to major returns, VBA must now meet the challenges of new information technology legislation that has been modeled after the best practices of leading private and public organizations. For example, the Information Technology Management and Reform Act and the Paperwork Reduction Act require agency heads to

- analyze the agency's mission and, on the basis of this analysis, revise business processes as appropriate;
- design and implement a process for maximizing the value and assessing and managing the risks of information technology acquisitions;

- integrate budgetary, financial, and program management decisions in this process; and
- use this process to select, control, and evaluate the results of information technology initiatives.

VBA needs to make major improvements in the way it manages its information technology investments to meet these legislative requirements. Our analysis of past and current VBA information technology initiatives shows that VBA lacks the critical cost, benefit, and risk information necessary to determine whether it has made worthwhile investments. Our analysis also shows that these initiatives preceded VBA's business process reengineering effort, which increases the risk that they may need to be substantially changed or abandoned once reengineering results become available. For example:

- Between fiscal years 1993 and 1995, VBA purchased 24 minicomputers without having a clear understanding of the software applications to be placed on the equipment or the benefits to be derived from this investment. Although VBA expected to use these minicomputers in processing claims, they were not put into use until recently, when VBA began testing its software application to track claims folders. This was done at four sites: Baltimore; St. Petersburg; San Juan, Puerto Rico; and Winston-Salem, N.C.
- At VBA's educational assistance processing sites in Atlanta and St. Louis, the agency has acquired and is in the process of installing imaging equipment to scan all documents in the chapter 30¹⁰ education claims folders, which contain an average of 30 documents each. VBA has not, however, performed any reengineering analysis for the educational assistance area to assess how the imaging equipment could be used to improve education claims processing. In addition, while VBA has begun to collect baseline information to compare against post-implementation data in order to determine what impact the equipment will have on its operations at the Atlanta site, such information has not been collected for St. Louis, which has been using such equipment since 1987.

Also, this past March VBA embarked on a 2-year effort at its St. Petersburg regional office to replace its current benefits payment system. The objectives of this replacement system were to (1) permit more timely updating of master benefit files through on-line access; (2) provide national access to service organizations that must respond to veterans' questions about the status of their claims; and (3) address the potential effects of processing benefits payments and other critical information after the turn of the century.

This recent project has several inherent risks that must be assessed before VBA can determine if this initiative will be worth the investment. First, the project team, comprised of VBA staff and contractor personnel, will be using a new software development language¹¹ and a rapid application development methodology.¹² While this methodology is used more frequently in the private sector, it has not been previously used at VBA. When it is used, highly skilled and experienced people are a necessity. Given both VBA's and the contractor's unfamiliarity with using this methodology, the staff and contractor must learn the new tools and become proficient with them so as not

¹⁰Chapter 30 relates to the Montgomery GI bill which provides education benefits for veterans on active duty after July 1, 1985.

¹¹Called JAM7, this commercial, off-the-shelf, 4th-generation software development tool is designed to be used with relational database management and transaction processing systems. Relational database management refers to a method of organizing data elements so that a specific, defined relationship exists among those elements—such as an individual's social security number being related to only one specific name.

¹²An application development methodology that emphasizes prototyping and the use of advanced tools. A critical element of this methodology is rigid adherence to a schedule.

to jeopardize the implementation of the replacement payment system, scheduled for 1998.

We believe that this initiative is high risk because the payment replacement system timetable was based on unrealistic assumptions about the productivity and skills of newly-trained, inexperienced people, and the level of complexity of the task. Further, as I will discuss in more detail in a few moments, although VBA is in the process of developing software for its replacement system, our evaluation found that VBA is very weak in its ability to develop software and manage software-development contracts. This factor substantially increases the risks associated with this project.

Another risk is that this project was not following sound systems-development practices. For example, VBA's system development guidelines--policies and procedures used to design and develop computer software and systems--call for verification and validation of the system requirements before proceeding from one phase of system development to the next phase. VBA's implementation of the standard systems-development process consists of four phases: planning, analysis, design and construction. It has been demonstrated that proceeding to a subsequent phase without reviewing the work done in the current phase for correctness, consistency, and completeness will almost always adversely impact on the project's cost, its performance, and the delivery schedule. VBA directed the project team to proceed into the system design phase, however, without completing this important first step. Further, the data model¹³ that is being used to develop the replacement payment system has not been completed, although this should have been done prior to proceeding into the system design phase. The incomplete requirements verification and validation and incomplete data model increases the risk that the system will be designed incorrectly. Also, VBA does not have cost-benefit information with which to assess its return on this investment. For example, it has not estimated the total amount of software that must be developed, or its cost.

In addition to lacking the information to determine whether or not specific projects will pay off, VBA also lacks a process that ranks and prioritizes its investments in information technology as a consolidated portfolio. VBA is undertaking several projects simultaneously, without a full consideration of the resources required, costs, risks, and potential impact on agency operations. Current system-development activities--including addressing the year-2000 issue, data-center consolidation and related software conversion, and replacement of the benefits payment system--are all examples of investments that have not been ranked or prioritized.

Year 2000. Like all other federal agencies--and private businesses--VBA must address the effects of processing information in light of the change of century. Most of the computer software in use today employs 2-digit date fields. Consequently, at the turn of the century, computer software will be unable to distinguish between the years 1900 and 2000, since both would be designated "00." Industry and government experts have already gone on record saying that the effort to correct this problem will become extremely costly and time-consuming, and requires early and detailed planning. If the year-2000 problem is not addressed, it will render the vast majority of date-sensitive computer information unusable or obsolete. For example, calculations based on incorrect dates in service could result in errors in processing benefit checks in the compensation and pension programs. In VBA's educational assistance program, VBA could

- send threatening debt-collection letters to veterans who do not actually owe money;
- charge incorrect interest rates to veterans or charge interest to veterans who do not owe money; or

¹³A graphical representation of data and its interrelationships. Data models are used to specify database requirements.

- send debtor information to the Internal Revenue Service for refund withholding, to the federal government for wage garnishment, or to private credit firms to go on a veteran's credit report.

In our opinion, the year-2000 issue is an absolutely critical challenge that VBA faces over the next 2-3 years. Some of the computer code was developed more than 20 years ago, using nonstandard coding techniques. In some cases, the software documentation may be incomplete or nonexistent.

It is essential that VBA develop and implement a strategy to address the inherent risks that accompany the year-2000 change. First, a sufficient number of experienced staff must be devoted to this task, especially since VBA must maintain its current software and service levels at the same time that it is correcting date-sensitive code. Second, it will need to complete the programming by 1998, since industry experts recommend that 1999 be reserved for thoroughly testing the year-2000 changes. Third, VBA must have a contingency plan that outlines alternatives for processing claims if systems are not corrected.

Data-Center Consolidation and Related Software Conversion. In response to a request from OMB,¹⁴ VA and VBA are in the process of developing a strategy paper to reduce operational costs by consolidating their data centers. However, critical information in terms of costs and benefits is missing—information needed to determine how and when this should be done and how this effort ranks in terms of priority with competing demands, such as the year-2000 activities.

Currently, VA's data center is in Austin, Texas, and uses IBM computer equipment to process the Department's accounting and financial management information related to administrative operations. VBA's two data centers—Hines and Philadelphia—use mostly Honeywell equipment; the Hines facility primarily processes disability (compensation and pension) claims, while Philadelphia processes insurance claims. The joint VA/VBA data-center consolidation strategy paper is due to OMB in July.

Because the data-center consolidation approach must also consider converting the current software to run on more modern computer equipment, added risks must be considered. Specifically, VBA is considering converting the Benefits Delivery Network¹⁵ software—currently in use at Hines—to more modern computer equipment. The cost and time frames for this conversion will depend upon which of the three data centers is chosen as the site for Benefits Delivery Network processing. To date, two studies have been commissioned to evaluate the software conversion. The first, commissioned by VA, estimated the cost and time frames for moving the current Benefits Delivery Network to IBM equipment; the second, commissioned by VBA, assessed the feasibility of converting the Benefits Delivery Network software. The finding was that such a conversion is feasible, and could likely take 2-3 years to complete.

Neither study, in our view, provides enough information on all three sites to adequately assess the investment needed, nor do they fully address GSA criteria¹⁶ for making software conversion decisions. Neither contains an analysis of alternative approaches or a full description of the cost, benefits, and risks of conversion. We have discussed our analysis with VA and VBA officials, and they agree with our assessment of these studies. VA has since hired another consultant to analyze the costs and benefits and to develop a strategy for data-center consolidation. Until the results of this study are available, VBA will not be able to identify the best approach to take.

¹⁴OMB Bulletin No. 96-02 (Consolidation of Agency Data Centers), October 4, 1995.

¹⁵VBA's existing computer and software infrastructure for processing claims.

¹⁶GSA's Preparing Software Conversion Studies, OIT/FCSC-84/001, January 1984, updated December 1989.

The conversion of the Benefits Delivery Network software must be carried out correctly in order to realize the potential benefits of data-center consolidation. This conversion will require much work and a dedicated staff with in-depth knowledge of the existing network software. In-depth knowledge of the Benefits Delivery Network software currently resides at VBA's Hines data center. It will also be necessary, despite limitations on personnel and funding, to maintain the current network software and service level of operations while converting the software. The conversion risk will be further compounded by VBA's need to address the year-2000 issue.

Replacement of the Payment System. In addition to the previously mentioned risks associated with the replacement of the payment system, we believe that VBA did not adequately consider alternative approaches for achieving the reliability and additional functionality expected in the replacement. The Federal Information Resources Management Regulations require that agencies use their systems requirements as the basis for analyzing alternatives, commensurate with the size and complexity of the agency's business needs. The regulation stipulates that agencies should calculate the total estimated cost of each feasible alternative, and assess the risks.

Further, VBA recently acquired excess computing equipment from GSA to replace some of the equipment at Hines and Philadelphia. According to staff at both centers, the excess equipment is more reliable, has greater capacity, and is less expensive to maintain. This newer equipment allows VBA more time to analyze and assess alternatives because it makes the computing environment more stable.

Lastly, critical to VBA's ability to identify the true return on any of these information technology initiatives is the need for accurate and reliable cost information. Our analysis of VBA's modernization obligations to date shows that the cost of these activities may be understated because VBA lacks a managerial cost-accounting system to track payroll benefits and indirect costs associated with modernization. VBA also appears to have miscategorized some items in its information technology budget as nonmodernization items when, in our opinion, they were modernization-related and should have been categorized in that way. In addition, VBA has not updated its modernization life-cycle cost estimate of \$478 million in over 3 years. Therefore, precisely how much VBA's systems modernization effort will ultimately cost taxpayers remains uncertain. VBA's chief financial officer is currently in the process of developing guidance for implementing a cost-accounting methodology.

Our work indicates that VBA has much to do to develop an investment strategy that can assure the Congress that scarce information technology dollars are being spent on the highest priority projects with the greatest potential for a substantial return on investment. The recent acquisition of excess equipment now provides VBA with an opportunity to effectively develop this kind of approach. VBA must

- expeditiously develop an effective investment process for selecting, controlling, and evaluating information technology initiatives in terms of cost, capability of the system to meet requirements, risk, timeliness, and quality;
- give top priority to addressing the year-2000 problem; and
- improve its accounting of obligations and costs associated with the modernization.

**SOFTWARE DEVELOPMENT FOUNDATION
TO EXECUTE TECHNOLOGY INVESTMENT
NEEDS URGENT ATTENTION**

Once technology investment processes have identified the most beneficial information technology projects in terms of cost, benefit, and return, the focus then shifts to the technical capabilities necessary to make the projects a reality. The agency must be able to quickly determine if it has the necessary in-house capability to develop the software

for the new system or whether this development should be performed by an experienced contractor.

In order to mitigate any risk of not being able to deliver high-quality software within schedule and budget, agencies must have a disciplined and consistent software-development process. Software development has been identified by many experts as one of the most risky and costly components of systems development.

To evaluate VBA's software development processes, we applied the Software Engineering Institute's¹⁷ software capability evaluation methodology to those projects identified by VBA as using the best development processes. This evaluation compares agencies' and contractors' software development processes against the Institute's five-level software capability maturity model, with 5 being the highest level of maturity and 1 being the lowest. As shown in attachment 2, these levels—and the key process areas described within each—define an organization's ability to develop software, and can be used to measure improvements in this area.

On the basis of our analysis, we determined that VBA is operating at a level-1 capability, defined as ad hoc and chaotic. At this level, VBA cannot reliably develop and maintain high-quality software on any major project within existing cost and schedule constraints, placing VBA modernization at significant risk. In this context, VBA relies solely on the various capabilities of individuals rather than on an institutional process that will yield repeatable, or level-2, results. VBA does not satisfy any of the criteria for a level-2 capability, the minimum level necessary to be able to significantly improve productivity and return on investment. For example, VBA is weak in the requirements management, software project planning, and software subcontract management areas, with no identifiable strengths or planned improvement activities. However, VBA can build upon its strengths in the software configuration-management and software quality-assurance areas.

Our report on this matter is being issued soon and will contain recommendations to better position VBA to develop and maintain its software successfully and to protect its software investments. Specifically, we recommend in that report that VBA

- obtain expert advice to improve its ability to develop high-quality software and expeditiously implement a plan that describes a strategy for reaching the repeatable (i.e., level-2) stage of process maturity,
- delay any major investment in new software development—beyond what is needed to sustain critical day-to-day operations—until the repeatable level of process maturity is attained, and
- ensure that any future contracts for software development require the contractor to have a software development capability of at least a level 2.

VBA agreed with all but one recommendation. VBA agreed that a repeatable level of process maturity is a goal that must be attained, but disagreed that "all software development beyond that which is day-to-day critical must be curtailed." VBA stated that the payment system replacement projects and other activities to address the change of century must continue. We agree that the software conversion and development activities required to address issues such as the year 2000 must continue; we would, in fact, characterize these as sustaining critical day-to-day operations. However, systems-development initiatives in support of major new projects, such as the replacement of the payment system, should be reassessed for the risk of potential delays, cost overruns, and shortfalls in anticipated system functions and features. We are pleased to see that VBA is already initiating positive actions relating to our other recommendations, including

¹⁷This is a nationally recognized, federally funded research and development center established at Carnegie Mellon University in Pittsburgh, to address software development issues.

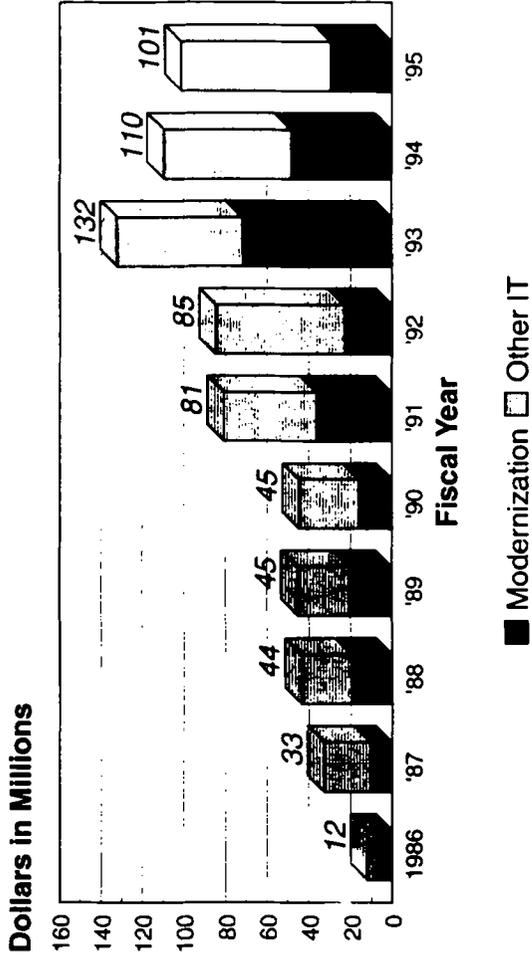
acquiring expert advice to assist it in improving its ability to develop high-quality software, consistent with criteria set forth by the Software Engineering Institute.

CONCLUSIONS

The business and operational problems facing VBA are complex and not easy to resolve. VBA has begun to take action to improve agency operations and service delivery, but it has not yet implemented enough of the right kinds of actions—actions that involve developing a sound business strategy and the supporting plans, approaches, and measures to guide them into the next century. The need for more rigorous management and technical methods is critical if VBA is to successfully develop modern, efficient, and cost-effective business processes and computer systems that will allow them to deliver truly improved services to veterans.

Mr. Chairman, this completes my testimony this morning. I would be pleased to respond to any questions you or other members of the Subcommittee may have at this time.

GAO VBA Information Technology Obligations, FY 1986-FY 1995



Source: VBA.

GAO **Software Capability Maturity Model: Levels and Descriptions**

Level	Name	Description
5	OPTIMIZING	Continuous process improvement
4	MANAGED	Detailed measures collected; process/products controlled
3	DEFINED	Process documented, standardized, integrated
2	REPEATABLE	Cost, schedule, functionality are tracked; earlier successes can be repeated
1	INITIAL	Ad hoc process, occasionally chaotic

Source: Software Engineering Institute, Carnegie Mellon University, 1993.

STATEMENT OF RHODA M. G. DAVIS, MEMBER,
 VETERANS' CLAIMS ADJUDICATION COMMISSION
 JUNE 19, 1996
 SUBCOMMITTEE ON COMPENSATION, PENSION, INSURANCE AND MEMORIAL
 AFFAIRS
 COMMITTEE ON VETERANS' AFFAIRS
 U S HOUSE OF REPRESENTATIVES

Thank you Mr. Chairman and members of the Subcommittee for your invitation to the Veterans' Claims Adjudication Commission to present information today. I am here as a member of the Commission to discuss the Department of Veterans' Affairs progress in computer modernization with respect to processing of Compensation and Pension Program workloads and its relationship to overall strategic management. The Commission was established by the Congress to determine: 1) the efficiency of the current processes and procedures, 2) means of reducing the number of claims for which final disposition is pending, and 3) means of enhancing the ability of VA to achieve final determination in a prompt and appropriate way.

My statement today is in two parts. Under the able leadership of Chairman S. W. Melidousian, the Commission issued a report of Preliminary Findings and Conclusions on February 7, 1996 covering the full range of areas of explicit, stated interest to the Congress. The first part of this statement covers the conclusions and findings of the Commission regarding Information Technology as they appeared in that initial report. Subsequent to the initial report, the Commission developed additional areas for research relating to our mission. One of the topics that I researched is "strategic management." My findings in this area were presented at the Commission public meeting on May 8, 1996. **The second part of my statement covers these findings and represents my personal conclusions and findings. These matters have not been adopted by the Commission at this time.** However, all Commissioners have heard them and endorsed further work in this area preparatory to our final report.

PART I. PRELIMINARY FINDINGS AND CONCLUSIONS

The authorizing legislation for the Commission asked for an evaluation and assessment of "The effect on the system of actions taken by the Secretary to modernize the information management system of the Department, including the use of electronic data management systems" (PL 103-446, Title IV, Sec. 402 (c)(4)).

To do this assessment, we interviewed key executives of the Veterans' Benefits Administration and the Board of Veterans' Appeals, reviewed published IRM plans as required at that time by the Paperwork Reduction Act, and visited regional offices to get first-hand feedback from operating personnel. We also drew upon comparative process information provided by Darryl Moody, Senior Manager, KPMG Peat Marwick, who has been assisting the Commission in this area.

The major findings and conclusions related to information technology presented in the Commission's February 7 report (at page 67) are:

- There is no formal, joint VBA and BVA strategic and business planning process for identifying specific goals and improvements to be addressed through automation.
- VBA and BVA's exploitation of automation to support claims and appeals processing significantly lags comparable public and private sector claims processing activities.
- VBA has initiated a Business Process Re-Engineering effort, but it has been in place for only a short time. The Commission cannot predict whether this effort can fully correct previous deficiencies. The scope of the effort omits the BVA process.
- The Commission considers its findings in this reporting area to be validated by GAO reports of December 1993 and September 1995 and by the CNA Corporation's Organizational Assessment of VBA Modernization Activities study dated March 31, 1995.
- The separate and minimal VBA and BVA business planning activities have yielded inadequate ADP investment strategies, seriously limiting the potential effectiveness of the two organizations' ADP investments.

- VBA's five "Transitional Applications," while improving the processing of individual cases, have not directly affected the overall claims processing system

PART II STRATEGIC MANAGEMENT

Following publication of the Preliminary Report, the Commissioners identified strategic management as an area where we needed to do additional research and possibly develop specific recommendations to address the root causes of problems identified in the Preliminary Report. In addition to the Information Technology area, findings & conclusions throughout the Preliminary Report relate to perceived failures to manage strategically. Of the 12 major findings in the executive summary, seven relate directly to weaknesses in strategic management.

As part of this assessment, we conducted a series of interviews with key executives in OMB, GAO, DVA, including VBA, BVA, and VHA, as well as the Chief Actuaries for the Social Security Administration and the Health Care Financing Administration. The interviews explored three areas of inquiry: strategic management policy, strategic management process, and opportunities and obstacles to success. The discussions with the actuaries were held to obtain further insights into the potential value of a requirement for actuarial analysis and projections for the Compensation and Pension Programs based on experience in other programs.

For purposes of this effort, we defined strategic management as

- Setting direction & goals (need clear purpose & values for both program & operations/stakeholders involved)
- Developing strategies and performance measures keyed to program and operational direction and goals (strategies need to be based on reliable data and reflect customer input)
- Working with blueprints for action (integrated timetables, budgets and intermediate performance measures)
- Assessing results (accountability)

We began our study by reviewing the GAO Report "Management of VA, Implementing Strategic Management Process Would Improve Service To Veterans," issued in August 1990. There were two statements in that report that really capture the essence of the need for strategic management at DVA:

"The purpose of a strategic management process is to establish a direction for VA based on the priority needs of the veteran." (Page 3)

"A strategic management process should foster a shared understanding of the Department's future direction among the three components, enhancing consistency between their day-to-day actions and the Department's aims." (Page 4)

In their overall conclusion, GAO said that VA needs a strategic management process that will

- Involve key line officials
- Ensure that strategic direction shapes the budget
- Focus on key issues
- Balance component aims with departmental direction
- Seek participation of key external groups

The absence of strategic management is not unique to DVA. Congress has moved to strengthen management of all agencies in a series of statutes, creating Chief Financial Officers and accountability reporting, establishing critical aspects of strategic management in the Government Performance and Results Act (GPRA), and most recently, in the provisions of the Information Technology Management Requirements Act (ITMRA) establishing the Chief Information Officer position in each agency and requiring integration of information technology planning with business planning. The importance of monitoring the implementation of these mandates was recently emphasized in the March 6, 1996 testimony of the Comptroller General of the United States, Charles A. Bowsher: "Achieving GPRA's Objectives Requires Strong Congressional Role."

From our interviews of key officials both inside and outside of DVA, we heard a number of things that I characterize as "good news" regarding strategic management at DVA. If these activities continue and flourish, they should result in better program administration. These are

- Many executives are aware of the need for strong strategic management & recognize that much remains to be done
- The DVA Assistant Secretaries for Management and for Policy & Planning are collaborating in implementation of GPRA/CFO Act requirements for establishing goals, strategic plans, performance measures, and accountability reporting. The "embryonic stage" of a strategic management infrastructure at the Department level is emerging
- Efforts are underway to build a "corporate data repository" with several components agreeing to participate
- VHA has moved well along in developing a strategic management agenda, setting a model for others
- Under Secretary Vogel announced the formation of a Strategic Management Committee for VBA on 4/26/96
- Deputy Secretary Gober convenes biweekly meetings with Under Secretary Vogel, Chairman Cragin and Deputy Under Secretary Garthwaite

My tentative list of findings of "bad news" is longer. I have characterized the items below as bad news because I believe that they represent barriers to successful program management. (The Commission has asked that DVA respond to the extent that any of the following are not correct or current.)

- Component executives do not see the advantage of working at the Department level and are not committed to doing so
- The embryonic Department strategic management infrastructure is not yet driving component directions
- Department officials do not regard BVA as an operations component and are not encouraging integrated activities with VBA such as technology planning and performance measure development
- Workload projections for VBA and BVA are done in isolation. VBA is not participating in the "corporate data base" activity
- No program or workload projections are done beyond the budget year requirements unlike other government benefit programs
- Neither Congress nor the DVA projects costs of proposed program changes beyond the near term
- No long term program policy planning is underway for the Compensation and Pension Programs. Program policy is not being addressed by the VBA reengineering effort
- VHA has included VBA/BVA as stakeholders in developing their vision but recognition of the VHA role in Compensation and Pension programs is not explicitly stated
- While the new VBA strategic management committee holds promise, integration of major initiatives has not yet occurred
- Other VBA/BVA Officials are not aware of the Deputy Secretary meetings and have no input nor action items from them. The Assistant Secretaries that might do agenda planning and integration with strategic planning and performance measure setting as well as accountability are not participating

After presenting these findings to the Commission at our May public meeting, I suggested further analysis in five areas where we ultimately may wish to make recommendations. These are

RECOMMENDED DIRECTIONS FOR FURTHER ANALYSIS

- Congress has established the framework for strong strategic management in the CFO Act, GPRA, & the ITMRA. Routine tracking by Authorizing & Appropriations Committees on how DVA is carrying out the key elements of these statutes would be beneficial.
- Key Department leaders need to accelerate the development of an integrated Department strategic management infrastructure.
- Program purposes need to be clarified and measurable program objectives established so that strategic policy development can be undertaken.
- Long and short range actuarial analyses should routinely be done for all veterans benefit programs. Long range costs of proposed program changes should be evaluated by the Congress and Administration.
- Data collection and analyses functions should be integrated and strengthened at the Department level. Workload projections should be consistent with actuarial program assumptions.

We will be evaluating these and other potential recommendations to determine whether their implementation will bring about effective strategic management, which, in turn, will improve the processing of Compensation and Pension Program workloads.

Again, I wish to stress that the recommended directions stated above are mine and not the final recommendations of the Commission.

In closing, I again thank the Subcommittee for the opportunity to present this information.

WRITTEN COMMITTEE QUESTIONS AND THEIR RESPONSES

POST HEARING QUESTIONS
CONCERNING THE JUNE 19, 1996 HEARING
ON VA'S PROGRESS IN
COMPUTER MODERNIZATION AS A PART OF
THE OVERALL STRATEGIC PLANS

FOR THE DEPARTMENT OF VETERANS AFFAIRS

TRANSMITTED BY THE HONORABLE TERRY EVERETT
CHAIRMAN, SUBCOMMITTEE ON COMPENSATION, PENSION,
INSURANCE AND MEMORIAL AFFAIRS
COMMITTEE ON VETERANS' AFFAIRS

Questions for Mr. R. J. Vogel, Under Secretary for Benefits, VA
from the Honorable G. V. (Sonny) Montgomery

Question 1: Mr. Vogel, How much did VBA pay CNA for its advice on information technology management issues?

Answer: VBA obligated a total of \$2,575,000 for CNA. This included \$463,000 in 1994 and \$2,112,000 in 1995.

Question 2: The establishment of the St. Petersburg redesign project was characterized by CNA as a "risky undertaking" with an increased risk of failure? Why did VBA proceed with this undertaking instead of the less risky course which CNA recommended?

Answer: VBA recognized CNA's concerns as well as other oversight concerns by incorporating many of the CNA and GAO recommendations into the management and development of information technology (IT) projects. Among these recommendations was to acquire contract support services to assist with integration activities, develop a technology plan and establish and maintain a strategic IT decision making body. All these recommendations and more have been implemented. Additionally, VBA adopted a parallel effort, specifically recommended by GAO, to adapt its current legacy system environment to be Year 2000 compatible. This action significantly reduces the risks associated with the redesign project.

Question 3: Mr. Vogel, the appropriations process has resulted in a shrinkage of the total resources available for VBA's central management. In addition, GAO states that VA lacks trained personnel to manage software-development contracts. Do you have sufficient resources to manage all of your information technology initiatives?

Answer: VBA has taken several critical steps to assure that sufficient trained personnel are available to manage IT initiatives including the management of software development contracts.

VBA has obtained contract integration services, the SRA Corporation, which is providing us with management and integration expertise to assist our efforts. SRA is also assisting us in establishing a uniform methodology for managing all of our IT projects. Also, VBA has developed an advanced project manager training course of instruction to help staff become certified project managers. We believe that these activities are providing VBA with appropriately staffed and skilled project management.

**Question for Mr. R. J. Vogel, Under Secretary for Benefits, VA
from the Honorable Lane Evans**

Question: The Department of Veterans Affairs has indicated that the VA Reinventing Government Phase II Proposal to consolidate the VA insurance operations currently located in the St. Paul, MN VA Regional Office and Insurance Center (VAROIC) to the Philadelphia, PA Regional Office and Insurance Center will be initiated in Fiscal Year 1998. Some insurance work has already been moved from St. Paul to Philadelphia, although the formal plan has not yet been submitted to Congress. What is the status of this consolidation? What is the planning to utilize the skilled VA insurance personnel at the St. Paul center in serving veterans in other capacities?

Answer: The Reinventing Government II initiative to consolidate the St. Paul Insurance activities into the Philadelphia VAROIC is scheduled to begin in FY 1997. Too few employees are affected by the consolidation for it to meet the definition of an "administrative reorganization" under 38 U.S.C. 510. Therefore, it is not necessary to submit a detailed plan to Congress under that statute. However, this initiative was discussed in the 1997 Congressional Budget and will also be included in the 1998 budget.

The consolidation is scheduled to be phased in over a three-year period in order to minimize the impact on St. Paul Insurance employees. In anticipation of the consolidation, a hiring freeze was placed in effect at the St. Paul VAROIC in June 1995. Consideration has been and will be given to St. Paul Insurance employees for any job openings that occur in other activities at that Center. In addition, the Veterans Benefits Administration (VBA) established a new Call Center in St. Paul to handle overflow calls from other VBA offices that are experiencing heavy call volumes. The hiring freeze, in combination with the new Call Center, has already resulted in the placement of 23 Insurance employees in other positions. Another four employees have retired. The number of employees in Insurance operations has declined from 60 at the beginning of FY 1996 to 33 at the end of the year.

In order to stay current with workloads so that Insurance customers are not negatively impacted, a number of steps have been taken, including the increased use of overtime, details from other divisions in the St. Paul office, and the brokering of work items to the Philadelphia office. Brokering of work began in May 1996.

**POST HEARING QUESTIONS
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COMPUTER MODERNIZATION AS A PART OF
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FOR THE DEPARTMENT OF VETERANS AFFAIRS

**TRANSMITTED BY THE HONORABLE TERRY EVERETT
CHAIRMAN, SUBCOMMITTEE ON COMPENSATION, PENSION,
INSURANCE AND MEMORIAL AFFAIRS
COMMITTEE ON VETERANS' AFFAIRS**

**Questions for Newell Quinton, Chief Information Officer
Veterans Benefits Administration, VA
from the Honorable Lane Evans**

Question 1: Please explain the rationale behind the planned Reduction in Force (RIF) at the Hines Data Center? What factors were examined in determining Hines as the site of a RIF?

Question 2: Have you considered conducting a RIF across all of the VBA data centers? If not, why?

Question 3: It is my understanding that conducting a RIF of Hines Systems Development Center employees will eliminate a great deal of institutional knowledge that is vital in ensuring the development of new payment systems. Can you tell me how you plan to maintain this institutional knowledge in the face of planned RIF's? Do other centers rely on the expertise of the staff at Hines?

Answer (Questions 1-3): Authorized staffing levels for FY 1997 for the Office of Information Management are higher than originally anticipated. Therefore, it is not necessary to conduct a RIF at the Hines Data Center. However, we anticipate that significant realignment of the staff at each of VBA's Data Centers and Central Office will occur to achieve efficiencies in operations. This will also enable the organization to fully endorse a project management concept. The adjustments in staffing levels as these changes occur will result in fewer FTEE devoted to the maintenance of the legacy systems. We anticipate that the planned reductions will occur through attrition, reassignments, and retirements.

**POST HEARING QUESTIONS
CONCERNING THE JUNE 19, 1996 HEARING
ON VA'S PROGRESS IN
COMPUTER MODERNIZATION AS A PART OF
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COMMITTEE ON VETERANS' AFFAIRS**

**Questions for Mr. R. J. Vogel, Under Secretary for Benefits, VA
from the Honorable Terry Everett**

Strategic and IRM Planning

Question 1: What is the status of VBA's strategic plan?

Answer: VBA's Chief Financial and Information Officers met with your staff members during July on a variety of issues. At that time, we provided them a copy of the FY 1998 VBA Business Plan (strategic plan) and the Secretary's Budget Request without any FY 1998 funding references. That version did not include the Compensation and Pension nor the Vocational Rehabilitation business line plans as both programs were undergoing a rewrite of their plans.

A complete FY 1998 VBA Business Plan and Budget Request was provided to the Office of Management and Budget (OMB) in September 1996. Sanitized versions of the document were provided to the House and Senate Veterans' Affairs Committee staffs on October 1, 1996.

We are awaiting the OMB passback. Once the passback is received and its impact assessed, business lines and support offices will receive guidance from the Under Secretary so that appropriate adjustments can be made enabling us to generate the FY 1998 VBA Business Plan and Congressional Budget Request. This document will be forwarded to the Committee by early February 1997.

In Spring 1997, we will begin working on the FY 1999 Business Plan and will complete work on it in June 1997. The first version of the FY 1999 Business Plan will be sent to the Committee in July 1997.

It is our intention to keep the Committee informed of our strategic planning efforts through submission of updated business plans and regular briefings.

Question 2: How will quantifiable performance goals in VBA's agency-wide strategic plan link to the agency's business process reengineering (BPR) effort?

Answer: VBA's agency-wide strategic plan is hierarchical with regard to goals. The strategic goals articulated for VBA to improve Customer Service, Timeliness, Accuracy, Employee satisfaction, Unit cost, and provide best value for taxpayers are incorporated into business plans at a more detailed level. Goals and performance measures are the guide and test mechanisms for reengineering efforts.

Question 3: What is the status of VBA's Information Resources Management (IRM) Plan?

Answer: VBA's Information Resources Management Support Plan has continued to be enhanced and modified since its original release on June 10, 1996. A new version of the plan, dated September 20, 1996, has been developed and released within VBA and provided as well to interested parties in VA. In addition, the plan was sent to OMB as a companion document to VBA's 1998 Strategic Business Plan and budget request. A sanitized version of the September 20, 1996, Information Resources Management Support Plan has been provided to the House and Senate Veterans' Affairs Committee staffs on October 1, 1996. With the creation of the Chief Information Officer in VA in August, the VA Deputy Secretary requires the administration to submit information technology plans to that office for approval. This will be done for IRM Plan publication and changes in FY 1997 and beyond.

Business Process Reengineering

Question 4: Does the BPR effort include an analysis of the appeals process and possible privatization?

Answer: The vision for claims processing produced through the BPR effort proposes significant changes to the appeals process within operational control. Privatization of the decision making regarding entitlement to compensation and pension benefits was not analyzed.

Question 5: It is our understanding that VBA will reengineer a different business area each year. Does VBA have a BPR plan that describes how various reengineering efforts will be integrated and coordinated.

Answer: VBA will apply BPR methodology to all business areas. The business case for change produced for each program will recommend strategies and initiatives. Proposed actions within the business case will proceed through the VBA Strategic Management process for decision.

Information Technology

- Year 2000

Question 6: What problems do you envision in meeting the year 2000 change? What is your estimate of the cost of this change? (Note: VBA's FY 1997 budget calls for \$191,000 for the year 2000 change.)

Answer: The Year 2000 problem is one of the major challenges facing Information Technology professionals. Some of the challenges we expect to encounter are as follows:

Our goal is to have all of our systems compliant by November 1998. As a contingency plan, we are making our Legacy Compensation, Pension and Education systems Year 2000 compliant in the event our redesign efforts are delayed or do not meet their functional goals. The time frame for the Contingency plan completion is mid-1999. The time frame for the Insurance system being made compliant is December 1998, which is right before its "fail date" of 1999. Contracting out could possibly be a means of alleviating this risk, but given the proprietary nature of this code, VBA feels that contract support will only be useful in certain aspects of our overall Year 2000 project.

VBA can control its own destiny with regard to its corporate systems. However, our experience with Year 2000 thus far indicates that the third party product issue may be the most challenging. Industry analysts estimate that perhaps twenty percent of software vendors will go out of business rather than make their products compliant. It has been hard for VBA to obtain reliable information on our third party products in some cases. In other cases, the vendors have not made decisions on their products. If VBA must replace a third party product that is used at all of its Regional Offices, the cost is significant. In addition, if applications are used with a third party product, these applications must be changed also. If vendors do not make decisions on their products soon and make this information available, VBA and other agencies will be coordinating many last minute actions to implement compliance.

The \$191,000 figure presented in the 1997 budget submission represented only some of the contractual services costs and did not account for the full cost of this effort. We currently estimate the need for approximately \$1.5 million in contractual services in both 1997 and 1998 to identify and correct Year 2000 problems. As recommended by GAO, VBA is also assigning approximately 40 FTE (approximately \$2.5 million) in both years to develop a redundant Year 2000 solution as a contingency plan for the ongoing VETSNET and education redesign efforts.

In addition to these Year 2000 costs, the VETSNET C&P redesign at St. Petersburg and a similar effort at Hines to re-platform the Education programs will also contribute to solving the Year 2000 problem. The total cost for these Year 2000-related efforts (including support for approximately 35 FTE at the two sites) is approximately \$5 million in both 1997 and 1998.

Thus, we estimate the total for Year 2000-related efforts, including our VETSNET C&P and education redesign efforts, in 1997 and 1998 at \$9 million per year.

Question 7: Could you discuss the impact failure to adequately address the year 2000 change might have on services to veterans and agency operations?

Answer: Year 2000 problems will manifest themselves primarily in date calculations. On January 1, 2000, many computers may see the date as 00/01/01, a seemingly earlier date than the day before (99/12/31). In general, "old" will seem "young" and future events will have already occurred. Failure to make VBA applications and hardware and software platforms Year 2000 compliant will cause severe misprocessing. VBA systems will fail by rejecting legitimate entries, by computing erroneous results, or by simply not running. If older operating systems are not replaced, key utilities, such as tape, and disk management cause misprocessing by having wrong retention dates, scratch dates, etc. Files that are needed for processing would have been scratched. VBA benefit delivery systems will not pay veterans or will pay veterans in error if entitlement dates or other key dates are computed incorrectly or if the dates become corrupted. The effort to find and correct these mistakes would be almost impossible, especially if the application or system changes were not made and the problems were allowed to proliferate. The following scenarios provide an illustration of these problems:

An original award could not be established for any benefit claim. If the veteran was released from active duty before the year 2000 and filed an application in the year 2000 or later, we would not be able to establish the award. The veterans application date would appear to be earlier than the service date.

If a veteran entered on active duty before the year 2000 and was released on active duty in the year 2000 or later, the "released from" date would appear to be earlier than the entered active duty date. This claim would be rejected.

Money owed the U.S. Government would not be collected correctly, if at all. VBA's accounting system for the management of government overpayments and for the computation of interest and administrative charges would misprocess. Veterans could be overcharged or undercharged. Dates for computing interest would be incorrect.

Other dates that would be affected in the same manner and would affect benefits and entitlements to veterans include institutionalization dates; hospitalization dates; nursing home confinement dates; VA domiciliary confinement dates; granting and removal of aid and attendance; granting and removal of house bound. In addition, any withholding and/or deduction dates for retired pay, severance, separation, and readjustment are similarly affected.

- **Data Center Consolidation**

Question 8: How did VBA determine the priority that should be assigned to the data center consolidation investment initiative?

Answer: Many factors contributed to the VBA position in response to data center consolidation. Among these were the efforts taken internally with the Department to develop a VA plan in response to the Consolidation of Agency Data Centers, OMB Bulletin No. 96-02. Secondly, the decision against entering into stage III procurement required VBA to consider the use of the Austin mainframe for central processing support. From an architectural point of view, VBA must have some central processing capability for its systems, including payment systems. The Data Center Consolidation Strategy Report, that was forwarded to OMB, contains cost comparison and cost effectiveness information. VBA also plans to perform a detailed cost benefits analysis.

- **Replacement of Payment System**

Question 9: How will VBA's initiative to replace the benefits payment system enable it to achieve its performance goal of processing an original compensation claim in 106 days by FY 1998?

Answer: The replacement of the benefits payment system includes the development of a new relational database. This new architecture will provide the infrastructure upon which VBA will be able to implement the initiatives outlined through the BPR process. The current system does not allow VBA the degree of flexibility it needs to support changes in processes or to offer additional functionality. The local area network and the new database for the replacement payment system, due to be implemented in 1998 will provide a baseline system to build upon for the future. Implementation of the BPR initiatives in conjunction with the baseline system will assist VBA to meet processing goals.

Question 10: How will you mitigate the risks of the replacement system effort?

Answer: VBA has taken steps to decrease the risks associated with the replacement effort. VBA has followed the advice of oversight and expert consultants by acquiring the services of integration contractors, conducting a parallel Year 2000 effort and commencing the implementation of software maturity practices that will allow VBA to advance its expertise in the software development area. While no effort is without risk, we believe these steps, and other like positive practices, will significantly reduce the risks.

Question 11: Since VBA's data centers recently acquired GSA excess computer equipment with higher capacity, performance levels, and reliability to stabilize the benefits delivery system, why is it important for VBA to replace its benefits payment system?

Answer: The current legacy environment is costly to maintain and is inflexible with respect to implementing required longer term critical changes. VBA cannot implement critical enhancements associated with implementing BPR changes, nor can it meet the demands of

restructuring (VBA organization environment) using the older generation of equipment and existing data base. These efforts require an IT architecture that is flexible enough to adapt to business changes that mandate greater access to more information. This cannot be done with the current systems. In addition, although improved performance levels and reliability are realized with the newly acquired excess items, this equipment is not current and does not enjoy the performance and reliability standards available from more current equipment.

- **Costs of modernization**

Question 12: What is the total amount spent on VBA's systems modernization program to date?

Answer: To date, through the end of fiscal year 1996, VBA has obligated a total of \$305.1 million on its systems modernization program.

Question 13: Explain why some items are not categorized as modernization.

Answer: VBA information technology costs associated with maintenance and operation of the current system, including the regular, periodic replacement of existing equipment like personal computers, are not considered to be modernization costs.

Question 14: What is the total estimated life cycle costs of VBA's systems modernization?

Answer: The total cost of modernization over the life of the project is estimated at \$318.5 million.

Question 15: What progress has VBA made in developing the cost accounting guidelines and procedural manuals in conformance with VA's cost accounting handbook?

Answer: In 1995, VBA decided to use the Activity Based Costing (ABC) methodology for developing a full-cost accounting system as well as the guidelines and procedural manuals. A performance measure task force and a unit cost work group were established to incorporate field and service ideas for developing our business plan. An Information Bulletin on ABC was developed and distributed to the program officials.

Two contracts were awarded. One is to determine the full cost of managing the Insurance program using ABC. The second one will review and validate the work accomplished by the St. Louis Regional Office using the ABC methodology in developing the Unit Cost per trainee.

VBA plans to use the results of these studies in implementing a nation-wide VBA cost accounting system. Our target date for developing the cost accounting guidelines and procedural manuals is September 30, 1997.

Software Development Capability

Question 16: How do you plan to improve your software development capability?

Answer: In early 1996, VBA launched a Software Process Improvement (SPI) initiative to lay the foundation and build the context for a sustainable, measurable improvement in its software development capability. There are several key elements associated with this initiative:

Organizational Commitment. This year, the Chief Information Officer commissioned a Software Process Group. This group serves as the operational focal point for the improvement effort. We agree that a repeatable level of process maturity is an important goal and have taken actions to incorporate process improvements into our organizational culture, projects and policies. We initiated a software process improvement program as a key component in restructuring our software development program. We made Software Process Improvement part of the performance evaluation criteria for senior project coordinators.

Expert Technical and Procedural Assistance. VBA has already taken action to obtain expert assistance. In May 1996, VBA began discussions with the Software Engineering Institute (SEI), and in September 1996 we completed the interagency agreement with SEI. SEI will assist in the development of an integrated set of software practices that position VBA for successful, lasting improvements. They will help to formulate an improvement program and will provide expertise in executing improvement activities identified by the SEI Capability Maturity Model (CMM) Level 2. SEI will provide expert assistance in strategic and tactical improvement planning, training planning, policy preparation, action planning and other process improvement activities. In addition, Systems Research and Applications Corporation (SRA) is tasked to work specifically on the Key Process areas of Project Planning and Project Oversight and Tracking. Note that the recent VTAPS (VBA Technical Assistance and Programming Services) software development contract was awarded only to companies with at least a Level 2 rating.

Improvement Planning/Implementation. SEI will facilitate Improvement Planning Workshops to identify process issues and develop action plans. We plan to identify improvement activities that are already underway and ways to leverage these efforts. Implementation involves defining effective processes, promulgating documentation for these processes, executing pilots and facilitating the adoption of new practices in the organization.

Training. VBA has prepared preliminary training plans with the goal of making all levels of the organization conversant with the concepts and terminology of the CMM Level 2. An equally important goal is the development of change management skills through training. The chairman of the VBA Software Engineering Process Group (SEPG) attended the national SEPG conference and provided management briefings on the importance of sponsorship and resources to attain sustainable improvements. In addition, we have realigned systems development personnel into project-oriented teams and are providing

these teams with specific instruction in the key process areas in Level 2. The instruction began in October 1996.

Question 17: What time frame are you using as a goal to be a level 2?

Answer: Our best estimate at this time is 18 to 24 months.

Question 18: Have you set any cost goals for this software improvement activity?

Answer: Current estimates are between \$600,000 and \$800,000 depending on the level of training needed.



United States
General Accounting Office
Washington, D.C. 20548

Accounting and Information
Management Division

B-275107

October 18, 1996

The Honorable G. V. (Sonny) Montgomery
Ranking Minority Member
Committee on Veterans' Affairs
House of Representatives

Dear Mr. Montgomery:

This letter responds to your October 2, 1996, letter. You requested that we answer three questions relating to our June 19, 1996, testimony¹ on information technology investment management by the Department of Veterans Affairs' (VA) Veterans Benefits Administration (VBA). Your questions, along with our responses, follow.

1. *I'd like your view as to whether the VA budget provides enough resources for VBA to manage and implement all of the priorities that must be addressed in the information technology area.*

We do not have sufficient information at this time to answer this question. While VBA's overall fiscal year 1997 budget is known, the amount planned for VBA information technology is not yet available. VBA officials told us that they are currently in the process of determining this allocation. In addition, VBA's Information Resources Management (IRM) Support Plan, dated September 20, 1996, and covering information technology needs for a 7-year period (fiscal years 1996 through 2002) does not include resource allocation figures. The resource estimates in this Plan are currently embargoed, pending release of the President's fiscal year 1998 budget in February 1997.

To determine the appropriate amount of resources needed in the information technology area, it is essential that an agency prioritize its information technology projects in terms of costs, benefits, and risks. Then, after appropriate review, the agency should consider providing the resources necessary to attain its priorities.

VBA's September 1996 IRM Support Plan calls the year-2000 issue the agency's number-one priority, and VBA has drafted a year-2000 plan. The plans, however, do not contain a discussion of estimated costs or of resources needed. Although VBA officials told us that they had performed substantial analysis to determine the extent of the year-2000 problem, VBA has not yet completed this analysis. Until this analysis is completed, the magnitude of effort that will be required to modify systems to run beyond December 31, 1999, will not be known.

According to industry and government experts, the effort to correct the year-2000 problem could become costly and time-consuming and requires early and detailed planning. If the year-2000 problem is not addressed, it could render the vast majority of date-sensitive computer information unusable or obsolete. For example, calculations based on incorrect service dates could result in errors in processing benefit checks in the compensation and pension programs.

¹Veterans Benefits Modernization: Management and Technical Weaknesses Must Be Overcome If Modernization Is to Succeed (GAO/T-AIMD-96-103, June 19, 1996).

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Given this scenario, it is essential that VBA develop and implement a strategy to address the inherent risks that accompany the year-2000 change. First, this strategy must help ensure that a sufficient number of experienced staff are devoted to the task, especially since VBA must maintain its current software and service levels at the same time that it is correcting date-sensitive computer code. Second, VBA should complete the system changes in 1998, since industry experts recommend that 1999 be reserved for thoroughly testing these changes. Finally, VBA must have a contingency plan that outlines alternatives for processing claims if systems are not corrected in time.

2. *On balance, in GAO's view, is VBA making progress in its information technology management?*

VBA has made some progress in its information technology management. As noted in our June 19 testimony, VBA's modernization investment activities have yielded some improvement in hardware and software applications. For example, VBA acquired a number of personal computers, local area networks, minicomputers, and commercial off-the-shelf software for its 58 regional offices. VBA has also realized some limited benefits from the development of several short-term, targeted software applications that are being used on equipment previously acquired. These projects include the Control of Veterans Records, Rating Board Automation, and Personal Computer-Generated Letters.

If VBA is to meet the challenges of the Clinger-Cohen Act of 1996,² major improvements in the way it manages its information technology investments will be required. This act requires that agency heads (1) design and implement a process for maximizing the value and assessing and managing the risks of information technology acquisitions and (2) use such a process to select, control, and evaluate the results of information technology initiatives. Our analysis of past and current VBA information technology initiatives shows that the agency lacks the critical cost, benefit, and risk information necessary to determine whether it has made worthwhile investments. Our analysis also shows that these initiatives preceded VBA's business process reengineering (BPR), which increases the risk that initiatives may need to be substantially altered or even abandoned once the results of the reengineering become available.

According to the VBA Chief Information Officer (CIO), VBA needs a baseline infrastructure to implement BPR and he knows of no situation in which BPR results will affect current information technology projects. In our view, however, BPR results are very important because should processes be changed, information technology projects may need to be altered accordingly.

3. *Can you give us a good example of how other government agencies that you are familiar with have been able to measure the return on investments they have made in information technology? If you can't think of a government agency, how about an example of how a private company has measured its return on investment? How can VBA get the cost, benefit, and risk information necessary to determine whether future investments are worthwhile?*

The management of information technology projects has long been a significant problem for many federal agencies. While the federal government obligated more than \$23.5 billion for information technology products and services in fiscal year 1994, federal information systems have failed to produce significant improvements in the speed, quality, or cost of federal programs.

On the other hand, some private- and public-sector organizations have achieved significant performance improvements by managing their information technology resources within an overall management framework that aligns technology with

²Public Law 104-106.

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business needs and priorities. In a May 1994 report,³ we identified 11 fundamental management practices found in leading organizations that led to short- and long-term performance improvements. One key practice identified by this research was the management of information technology projects as investments. By following this practice, the organizations minimized risk and maximized return on those information technology projects having the best chance of significantly improving organizational performance.

On September 30, 1996, we issued a report comparing the information technology investment practices of leading organizations with the management of information technology activities at five agencies.⁴ While some federal agencies project their return on information technology investments, we do not have an example of an agency that compares actual return to planned cost, returns, and risks. However, of the five agencies we reviewed, the Coast Guard had the most comprehensive selection process for information technology investments.

Specifically, the Coast Guard used an information technology investment process to select projects for funding. Information technology project proposals were screened, evaluated, and ranked, using explicit criteria, by a group of senior information resources management officials. These decision criteria included (1) risk assessments of schedule, cost, and technical feasibility dimensions, (2) cost/benefit implications of the investment, (3) mission-effectiveness measures, such as delivering service with fewer mistakes, (4) degree of alignment with strategic goals and high-level interest (such as Congress or the President), and (5) the organizational impact on personnel training, quality of work life, and increased scope of service. The decision criteria were weighted and scored, and projects were evaluated to determine those with the greatest potential to improve mission performance. The ranked list—with recommended levels of funding for each project—was submitted for review to a board of senior Coast Guard officers and then forwarded to the Coast Guard chief of staff for final approval.

Similarly, we reported in our May 1994 Executive Guide that the Xerox Corporation was a good example of how a private-sector organization selects its information technology investments. Specifically, the corporation used a disciplined decision-making process that focuses on increasing the quality and impact of investments. Under this process, managers reviewed project proposals and made selections more carefully than previously; cost, benefit, and risk analyses and projections were more realistic than before; and managers worked harder to ensure that information technology initiatives delivered on their promise.

Senior line managers' responsibility and accountability for information management at Xerox was structured within an organized decision-making and tracking process for information systems investments. The corporation used a "portfolio investment process"—based on explicit decision criteria assessing costs, benefits, and risks—to select, control, and evaluate information systems projects. These explicit decision criteria include the (1) level of customer satisfaction, (2) level of business results, (3) level of employee satisfaction, (4) amount of benefit and risk, (5) project longevity, (6) percentage impact on current or future processes, and (7) amount of dollar investment. Over a 3-year period, Xerox saw a nearly 14-fold increase in its return on investment from information systems projects. Such a turnaround was possible because line managers and information professionals were more visibly accountable for project delivery, rigorous results

³Executive Guide: Improving Mission Performance Through Strategic Information Management and Technology (GAO/AIMD-94-115, May 1994).

⁴Information Technology Investment: Agencies Can Improve Performance, Reduce Costs, and Minimize Risks (GAO/AIMD-96-64, Sept. 30, 1996). The five agencies that we reviewed are the Coast Guard, Environmental Protection Agency, Internal Revenue Service, National Aeronautics and Space Administration, and National Oceanic and Atmospheric Administration.

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reporting, and post-implementation reviews. Consequently, they were more careful in what they promised for a proposed information system and in measuring what a system actually achieves.

The Office of Management and Budget has published a guide designed to assist agency and OMB staff in creating and evaluating a portfolio of information technology investments.⁵ This guide provides an example of decision and scoring processes used to rank information technology projects, taking into consideration the (1) investment size, (2) project longevity, (3) technical risk, (4) business impact or mission effectiveness, (5) customer needs, (6) return on investment, (7) organizational impact, and (8) expected improvement.

In order for VBA to obtain the cost, benefit, and risk information necessary for determining whether future investments are worthwhile, we believe that it must develop a process and obtain the necessary tools to allow it to follow a three-phased management approach for *selecting, controlling, and evaluating* information technology-related projects. It must assess all information technology projects—proposed, under development, and operational—and then prioritize and make funding decisions on the basis of several factors, including cost, risk, and return, as well as how well the project meets mission needs.

As we stated in our June 19 testimony, VBA does not have the critical cost, benefit, and risk data it needs to determine whether it has made worthwhile investments. Examples in which this lack of information became apparent include the education imaging and replacement of the compensation and pension payment system projects.

VBA also lacks a process with which to rank and prioritize its investments in information technology as a consolidated portfolio. It has undertaken several projects simultaneously, without a full consideration of the resources required, costs, risks, and potential impact on agency operations. For example, investments in current systems development activities—including addressing the year-2000 issue, data-center consolidation and related software conversion, and replacement of the benefits payment system—have not been ranked or prioritized.

According to VBA officials, the agency has begun to implement the three-phased management approach for selecting, controlling, and evaluating information technology-related projects. We plan to evaluate this as part of our ongoing review of actions taken by VBA to address management and technical weaknesses identified in our June 19 testimony.

In answering the above questions, we reviewed and analyzed agency documents relating to information technology investment management—such as VBA's strategic and IRM plans—to identify milestones, costs, and benefits; and we interviewed key VBA IRM and budget officials. We also discussed a draft of this letter with VBA officials, including the VBA CIO, and their comments have been incorporated where appropriate. We conducted our work from October 7 through October 18, 1996, in accordance with generally accepted government auditing standards.

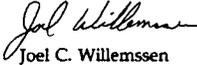
We are sending copies of this letter to the Chairman of the House Committee on Veterans Affairs, other interested committees, and the Secretary of Veterans Affairs. Copies will also be made available to others upon request. If you have any questions regarding this letter, please contact me at (202) 512-6253 or Helen

⁵*Evaluating Information Technology Investments: A Practical Guide*, Executive Office of the President, Office of Management and Budget, November 1, 1995.

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Lew, Assistant Director, at (202) 512-9356. You may also e-mail us at willemsenj.aimd@gao.gov or lewh.aimd@gao.gov.

Sincerely yours,



Joel C. Willemsen
Director, Information Resources Management

(511210)

