

# **GUIDE TO WORKFORCE PLANNING at the Department of Energy**

Forecasting our future demands to  
getting the right people; with the right skills;  
in the right place at the right time

September 2005

**Human Capital Management Strategic Planning and Vision**

# **GUIDE TO WORKFORCE PLANNING**

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# WORKFORCE PLANNING GUIDE

## INTRODUCTION

Often we express that the most important asset at the Department of Energy is our people. Without the right people, it is unlikely that even the most comprehensive and business plan/strategies will deliver the changes in performance being demanded by Government Performance and Results Act of 1993, President Management Agenda, Congress and Leadership of the Department.

The vast majority of an organization's improvement comes when the right people with the right knowledge, skills and behaviors are deployed appropriately throughout an organization.

Workforce planning is about how you achieve that match of skills, knowledge and behaviors.

It is about:

Developing an understanding of everything possible about the internal and external environment and how those factors will affect our current and future workforce. It is about understanding the makeup of our current workforce and the necessary skills, capabilities and aptitudes that will be required to achieve business outcomes in our current and changing environment.

It is about assuring that we link our human resources strategies with business outcomes and that our workforce plans reflect those initiatives/ strategies and provide our managers with a framework for making informed decisions in line with our mission, strategic plan and financial resources.

Also, it provides the opportunity for longer term thinking about future service pressures and needs, and what you need to do now to get workable strategies in place – not only for employee development, but for strategic financial and human capital management.

Workforce planning has a critical role to play in delivering improved services, and is an important issue for the Leadership of the Department of Energy.

This guide begins with an executive summary discussing an overview of workforce planning, main drivers, benefits, timescales and scope for workforce planning. Following the executive summary is a detailed description and implementation guide for a five phase model for workforce planning for the Department of Energy business elements. The five phases include analyzing, forecasting, planning, implementing and evaluating. The model described can be used for authority-wide workforce planning, or can be adapted for smaller pilot schemes in individual services.

This guide provides supporting information that will help us align human resources processes to create short and long-term solutions for current and future human capital issues and provide a means of integrating and giving meaning to many areas of human resources initiatives that are at times over looked.

## **EXECUTIVE SUMMARY**

### **What is workforce planning?**

### **Why undertake workforce planning?**

At its simplest, workforce planning is a planning process and analytical capability to measure and compare the current workforce (supply or faces) with the future workforce (demand or spaces). This planning process provides insight into the best policies and initiatives needed to improve the overall human resources system. It has a critical role in developing personnel requirements/data elements, which should be linked to Department of Energy strategic planning, budgeting processes and all recurring recruitment needs, training requirements and planning activities.

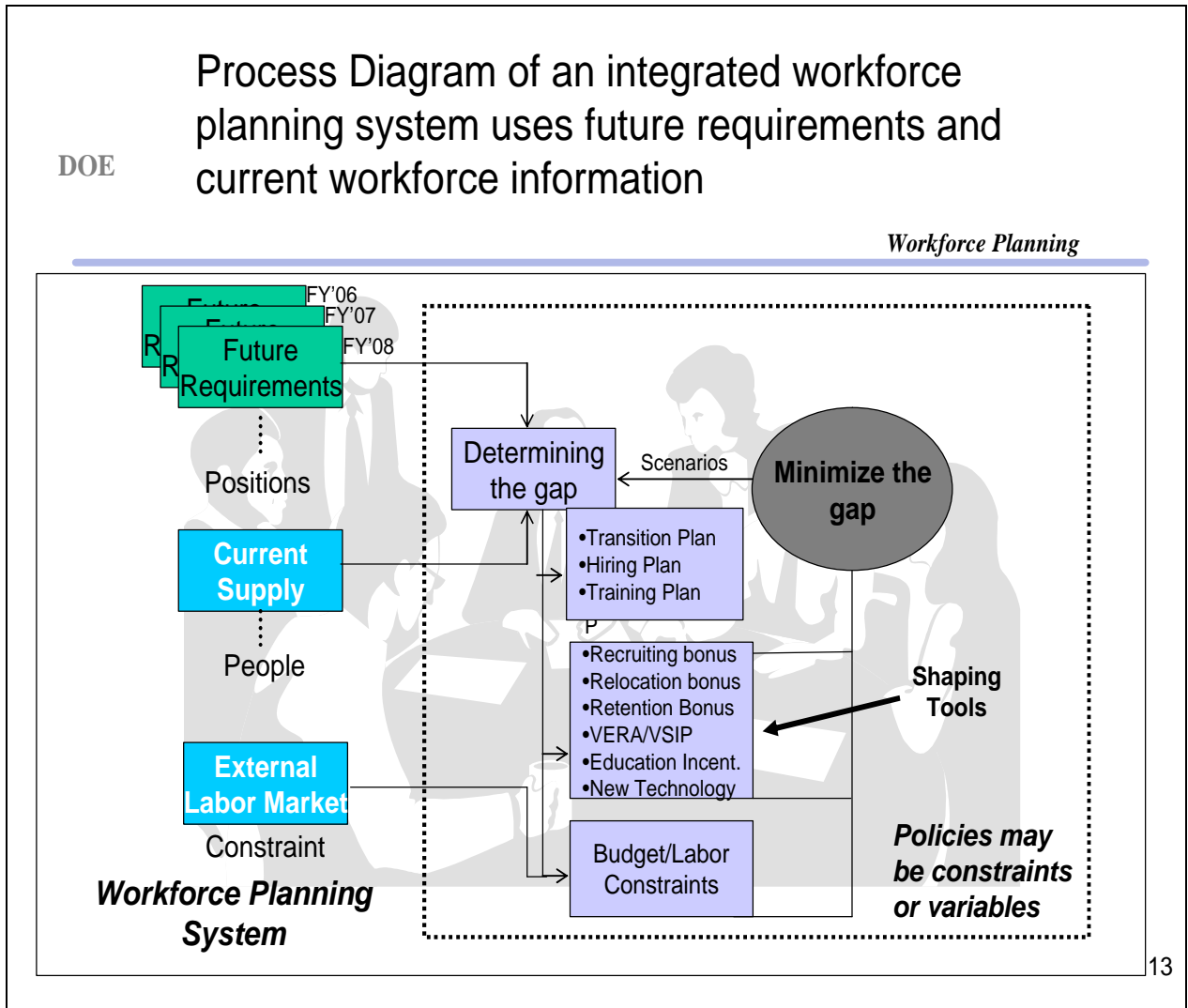
There is no one set model of workforce planning but the underlying concepts are similar. All models are concerned about analyzing your current workforce, and then extending that analysis to identify the future skills and competencies needed to deliver new and improved services that are aligned with achieving the Department's mission. (Demand versus Supply analysis) The comparison between the present workforce and the desired future workforce will highlight your shortages, surpluses and competency gaps, whether due to external pressure or internal factors. (Gap Analysis) These gaps become the focus of each detailed workforce plan in identifying and implementing strategies that will build the relevant skills and capacity needed for organizational success. Additionally, as the Department continues to update the Human Capital Strategic Plan, your workforce plan will outline short and long term strategies to help move the Department further in meeting these organizational needs.

An ideal workforce planning system should be:

- holistic in its approach linked with strategic planning and budget processes
- built around our service needs and the skills required to deliver quality service
- responsive to change variables such as the economic, technological, congress mandates
- supportive of continual learning and development concepts
- data driven that allows for scenario building because of changing assumption
- for different desired outcomes

Below is a diagram of a workforce planning system!

**Diagram 1: Process Diagram**



**Main drivers for workforce planning**

**Before beginning the workforce planning process,** you need to have a firm grasp on the main drivers for workforce planning and any influence of those drivers on the workforce planning exercise being done. These drivers set the context for everything you will be looking at throughout this process. The four main drivers for workforce planning are:

**Organization Direction:** includes Department of Energy Strategic Plan, Budget Forecasts, new technology, working practices, organization culture and what is rewarded in our organizational or individual reward systems.

**Internal Labor:** includes a determination of workforce profile by multi dimensions (gender, age, grade, occupations length of service, etc.); identification of any internal management issues like retention, separation, promotion patterns, etc; identify potential area of our workforce that are vulnerable to current or future skills gaps imbalances and look at geographical issues that could be the cause of issues identified. All of these factors have implications for recruitment and retention of our workforce across the Department.

**External Labor:** Demographic change in our potential workforce is affecting both the demand for services and workforce supply to fill our vacancies.(Researching information from various sources such as the Bureau of Economic Analysis and Bureau of Labor Statistics)

**Business Change:** Technological changes are leading to changes in service/information delivery, ways of working and the skills needed in the workforce. Consequently, this will change the competencies for positions and how we need to recruit, hire and engage our current and future workforce.

## **Benefits of workforce planning!**

Workforce planning is vital in helping our leadership draw a clear picture of the nature of the current and future human resources decisions. It provides a clear agency/workforce profile so that we can obtain an appropriate composition of the workforce to deliver future services. It will help to ensure the delivery of quality and timely services, and could cut costs associated with filling vacancies and the cost of turnover. Other benefits of workforce planning include:

Provides more effective human resource management through accurate, efficient alignment of the workforce with strategic objectives and performance measures.

Links expenditures to organization's long term goals and objectives.

Ensures replacement availability to fill critical vacancies, especially in those positions that might take a long developmental phase to be productive in their position.

Links recruitment, development and training decisions to organizational goals.

Provides for a systematic way to continually address any new drivers that could change your workforce.

Provides understanding of the present in order to confront the future.

Ensures that long term thinking is not clouded by short term needs or focus.

Links HR information/ plans to business/corporate plans so as to optimize overall Department effectiveness and decisions.

Links expenditures by anticipating changes in organization direction; environmental factors or labor in a strategic manner.

Implements diversity policies effectively.

Optimizes the use of all information that will make our strategic planning more flexible.

Provides a process to assess and challenge any assumptions that could lead to inaccurate decisions based on limit leadership perspectives on the process.

One of the most important tasks for your senior leadership team is to focus on workforce planning, its alignment with the strategy of the organization and also to understand the benefit of long term planning.

## **Timeframe and scope**

In most circumstances the shortest time to collect the data to begin your process is twelve months. In our organization, we have a five year strategic plan that is linked to the budget process which should be taken into account when beginning the workforce planning process. Additionally, one needs to consider that in any calendar year, there are three separate budget exercises occurring. For example, in calendar year 2005 the organization is conducting long range planning for 2007 and beyond, short range planning for FY2006 execution and monitoring FY2005 current year performance.

The scope of workforce planning is to build a longer term context within which shorter term staffing decisions can be made. Workforce process is a living process and needs to be periodically reviewed in order to respond to changing circumstances. Regular monitoring will ensure that your business element will avoid strategic drift and ensure that your workforce plans remain current.

Remember this process is still about ensuring that sufficient people with the right skills are in place to deliver a seamless service to the internal and external stakeholders.



# FIVE PHASES FOR WORKFORCE PLANNING

## PHASE 1-ANALYZING

### WHAT ARE THE KEY WORKFORCE INFORMATION NEEDS?

The overall workforce planning system should be well thought out, systematic and well documented. The effectiveness of planning depends on the detail, accuracy and reliability of the information sources. It is important to identify all factors that could influence future demand for outputs/service as well as competencies of the internal and external supply of labor. Information gathered during the analyzing phase must be reliable and accurate as this will be the basis for your forecasting phase.

To begin the analyzing phase, there are four information sources that will provide key workforce information needs. They include: organization direction and environmental factors (demand analysis); internal and external labor (supply analysis). Each source is listed below and provides ways to collect this information. You are simply analyzing your supply (current workforce profile) against your demand (future workforce profile). During the next phase, you begin identifying the discrepancies between supply and demand analyses.

#### **Suggested checklist for Organization Direction information:**

##### **Demand Analysis**

- Strategic Plan/business priorities
- Internal or External reports that could affect business outcomes
- Budget Estimates for Short and Long terms
- Plans for new technology
- Employee survey information
- Any work arrangements with other agencies
- External Contracts for services
- Organizational Culture
- Changing competencies in mission critical occupations

#### **Suggested checklist for Environmental Factors Information:**

##### **Demand Analysis**

- White House/Congressional expectations
- Demographic changes to our client base
- Analysis of the influence of technology on our work
- Changes in economic forecast and how that will effect our organization
- Analysis of current and future levels of accountability and compliance

**Suggested checklist for Internal and External Labor Profile Information:**

**Supply Analysis**

**Internal**

- FTEs
- Age and Gender distribution
- Identification of Mission Critical occupations
- Length of time necessary to become proficient in mission critical occupations
- Retirement rates overall but more in mission critical occupations
- Competencies of Mission Critical occupations
- Location of Workforce
- Diversity Characteristics
- Length of Service
- Resignation rates
- Internal Career Paths
- External Contracts for services

**External**

- Labor trends in mission critical occupations
- Internal vs external acceptance rates
- Bureau of Economic Analysis profile on how occupations is changing
- Trends in student majors at University/Colleges
- Public view of DOE

Remember: Overall you need to address what are the internal factors that are influencing your workforce capability and what external factors are influencing your workforce capability?

## **PHASE 2- FORECASTING**

(Demand versus Supply Analysis)

Forecasting is considering the future needs of your organization. One of the most useful outcomes of this phase is the identification of potential problems or issues facing your organization. This analysis will be based on the data collected from the information sources in the Analyzing phase. The results of this phase will help develop gap analysis and emergent strategies to manage the future. It involves the identification of any predicted changes and/or developments that may result from your demand/supply analysis. Business elements may have varying issues identified based on needs of their organizations. The aim is to create necessary resources/strategies to optimize the future position of your organization. There are 4 steps in the Forecasting phase; identifying key workforce assumptions, validating

assumptions, utilizing assumptions for scenario building and performing gap analysis. There are three questions that need to be addressed in the forecasting process. They are as follows:

1. Where does my business element want to be? (Utilizing assumptions information to suggest Future demand)
2. Where are we now? (Base on your workforce analysis)
3. What are our gaps in meeting this demand? (Demand versus Supply Analysis)

The first step is to identify key workforce assumptions/issues for your elements based on the data/information collected from the information sources during the Analyzing Phase. Ensure that all of these forecasting assumptions describe the potential impact on your business element, any inherent risks and any likelihood of occurrence based on element culture.

The second step is to validate these assumptions by utilizing focus groups or administering questionnaires/interviews to various leaders in your organization. The feedback provided will ensure that gathered assumptions are valid and based on the best data available. Additionally, feedback should provide insight in the reasoning behind the assumptions.

The third step is utilizing these assumptions in scenario building. Scenarios are a way to develop alternative futures based on different combinations of assumptions, facts and trends that will help you meet your forecasting goals mentioned earlier. Scenarios are generally a descriptive statement presenting a particular picture of the future that includes comments on the probability of certain events occurring. Moreover, scenarios are usually accompanied by qualitative or quantitative information. Hopefully after you have suggested some scenarios it will help you better understand all of your options. The following scenarios should be outlined based on your assumptions:

Best Case Scenario- Any warning indicators(metrics) in the narrative description

Worst Case Scenario- Any warning indicators(metrics) in the narrative description

Most likely Scenario- Any warning indicators(metrics) in the narrative description

The next step after outlining best, worst and most likely scenarios is to create a preferred scenario detailing what your organization wants as an outcome taking into account the assumptions previously identified. Additionally use the information from any warning indicators above which should be used to monitor changes consistent with your preferred outcome.

It will be useful to apply SWOT or PESTLE Analysis to help you through this phase. SWOT is an acronym for Strength, Weakness, Opportunities, and Threats. Strengths and weaknesses are **internal** factors. Opportunities and threats are **external** factors. It is a simple technique as it uses four perspectives for decision making and summarization. For example what are the strengths, weaknesses, opportunities and potential threats of your scenario. This should be done for each scenario suggesting the best, worst and most likely outcomes. (See Table 1 for model) PESTLE is essentially the same technique but is useful for examining the **external** factors

affecting a problem. The acronym stands for Political, Economic, Sociological, Technological, Legal and Environmental. (See Table 2 for model)

The above tools (SWOT or PESTLE) are useful for handling qualitative data. Either tool will help to organize and promote thinking about issues or problems that are facing your business elements. It will help to clarify/identify your future trends and to apply those trends to your organization to help explicitly identify any underlying assumptions and to set priorities. For example in using the SWOT analysis, step one is to identify your assumption(s) and utilize matrix using the demands and supply information obtained in the Analysis phase. Step 2 is to identify assumptions/key workforce issues from step 1 and take into account the potential impact on your business elements, potential impact of assumption, risk inherent in the assumption and the likelihood of its occurrence.

The final phase of forecasting is performing **gap analysis**. After completing your preferred scenario you need to look back at your current workforce and your future demands to identify any gaps in skills, people needed to meet preferred scenarios, etc. Demand is based on the preferred scenario and competencies/skills need to meet demand requirements. The Gap Analysis should indicate the skills gap, surplus, any recruitment issues, and retention issues to meet the demand, etc. You would continue this exercise for each scenario until you have developed your suggested strategy/initiative/action to deal with the preferred outcomes to meet your organization's needs. To help you in your gap analysis you need to address these questions:

1. What will be the potential sources of your new staff that will be required?
2. What attrition and retirement can be expected over next five years?
3. Will attrition make it easier or harder to achieve workforce objectives?
4. What kind of positions will need to be filled?
5. How can training /re-training help?
6. Succession planning implications?
7. Competitive Sourcing solutions?
8. Impact of budget decisions on any mission critical occupations?
9. Any redeployment concerns or issues with current staff?
10. Are new hires going to be required, and if so are they going to replace current employees or go into newly established positions?

### PHASE 3-PLANNING

After completing the supply/demand analysis, gap analysis, scenario building exercises, SWOT, etc, you will begin the planning phase. Strategies, initiatives, programs and policies should be developed to address the gaps identified in the analyzing phase. This will ensure that your element will recruit, develop and retain the critical staff needed for a successful workforce plan. A few factors should be considered when deciding upon strategies to address a workforce gap.

Your workforce plans should include a wide range of strategies around staff development, succession planning, redeployment, recruitment, technology improvements, competitive sourcing, changes in work practices, etc. Your plan should be flexible to address your workforce but must be realistic.

## PHASE 4-IMPLEMENTING

After you have analyzed, forecasted and planned, it is critically important to put together an implementation plan to carry out the planned activities included in the workforce plan. This will be the process of using all the information gathered in the previous phases and devising a plan to execute the new strategies. There are a few basic considerations that should be addressed before beginning the implementation plan: They include:

- Ensuring organization buy-in and support
- Allocating necessary resources to carry out workforce strategies
- Clarifying roles and responsibilities in implementing strategies. This includes identifying who is involved in implementing what, and where coordination among different parts of the organization or with different agencies is needed
- Establishing timelines
- Determining performance measures/milestones and expected deliverables
- Communicating the plan

## PHASE 5-EVALUATING

Ongoing evaluation of your workforce plan is imperative in determining if the devised strategies are addressing the gaps specified. It is important to obtain feedback concerning the effectiveness of outcomes. There are several methods in getting feedback such as surveys, focus groups, meetings, etc. Regardless of the method, listed below are some questions that should be asked to determine effectiveness of the strategies:

- Are there any needed adjustments to the plan and strategies?
- Were the strategies completed?
- Are the assumptions of the need and supply analysis still valid?
- Have there been any new workforce and organizational issues that have occurred?
- Did you meet your business outcomes?

## TABLE 1-SWOT Analysis Model

Strengths

Weaknesses

Opportunities

Threats

## Table 2-PEST/LE Analysis Model

Political Issues

- Accountability
- Equal opportunity
- Diversity
- Partnership working
- E-government

Economic Issues

- Skill shortages
- Cost of living

Social Issues

- Changing customer expectations and needs
- Changing demographics
- Changing employee expectations and needs i.e. work life balance issues
- Inequalities and deprivation
- Qualifications, skills and competencies

Technological Change

- Innovation - new equipment, new techniques, new methodologies
- Information technology
- Communications
- New ways of working

Legislation

- Service obligations
- Employment legislation
- Environmental

Environmental Issues

- Increased awareness & expectations