

Health Workforce Planning Tool

Information Guide

December 2008

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TABLE OF CONTENTS

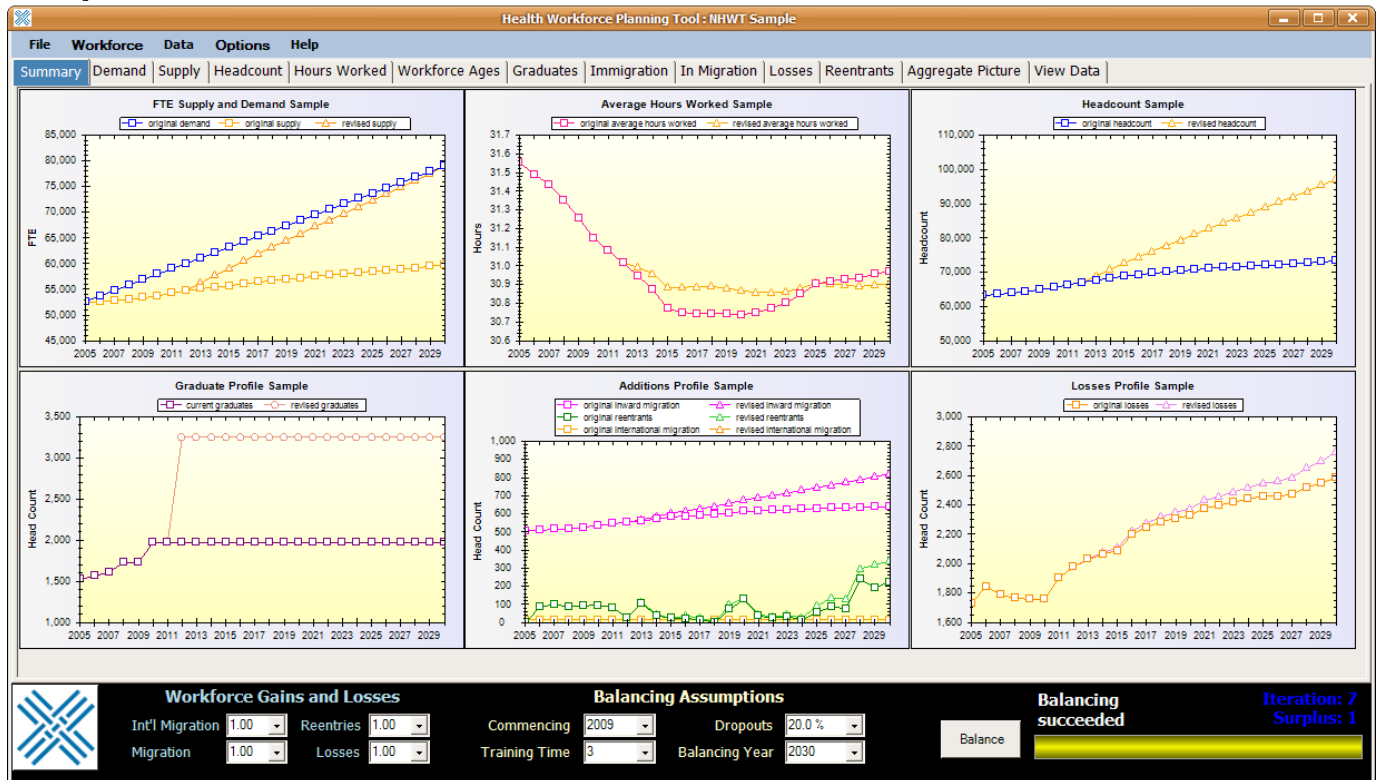
1	Introduction	1
2	Requirements.....	2
	Hardware	2
	Software.....	2
	User skills	2
3	Balancing supply and demand	3
4	Viewing and exporting scenario data	4
5	Structure of the scenario workforce.....	5
6	Requesting the software	6

1 Introduction

Welcome to the Health Workforce Planning Tool. This guide is intended to provide you with basic information on the main functions of the model.

Figure 1: Main Window

This is the summary window that opens when you first run the software. You can right-click on any chart in the program and it will let you save it.



2 Requirements

Hardware

- Processor: 400 MHz Pentium processor or equivalent (minimum); 2.66 GHz Intel Core2 Duo processor or higher (recommended)
- RAM: 96 MB (minimum); 2 GB (recommended)
- Hard disk: Up to 500 MB of available space may be required.
- CD drive: Only required if the software has been delivered to you in that format.

Software

You must have one of the following operating systems or later installed on your computer:

- Microsoft Windows XP
- Microsoft Windows Vista
- Microsoft Windows Server 2003 family
- Microsoft Windows Server 2008 family

To run the programme, you require the Microsoft .NET Framework, which is included in the CD that is provided upon request. You may also need administrator rights to install software on your machine, so if you are having trouble installing any of the software, please contact your IT administrator for assistance.

Microsoft Excel or similar spreadsheet programmes are useful, but not essential, for viewing and modifying the scenario output data. The model does not require any additional spreadsheet programme to run.

User skills

To manipulate the scenario output data, users should be familiar with Microsoft Excel or equivalent. However, anybody able to use a PC with a Microsoft Windows operating system should be able to use the application with minimal training or time.

3 Balancing supply and demand

The software will allow you to input your own demand and supply assumptions. You can then balance these assumptions by activating the balancing algorithm. Note that the balancing process will only start if the projected demand for FTE is more than the estimated supply of FTE i.e. the blue demand line in the top left chart of the *Summary* tab is higher than the orange supply line in the balancing year. You may need to adjust some of the assumptions until this occurs (increase the loss assumptions or decrease the addition assumptions). To change any assumptions once you have balanced, you can just reset the scenario.

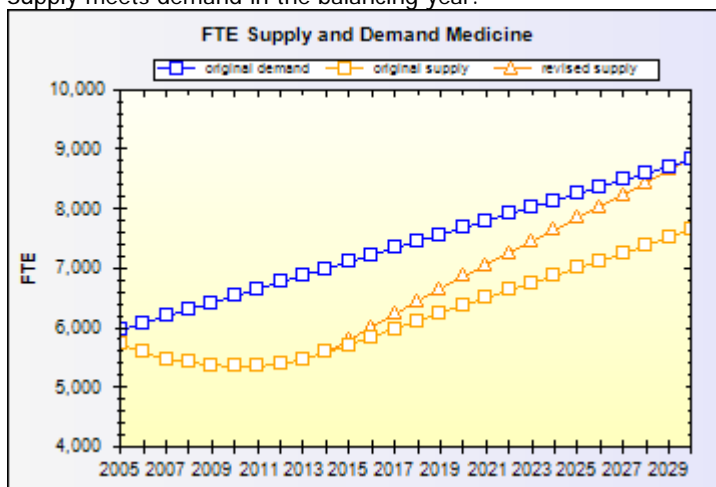
The balancing process takes your current workforce, and iteratively adds a small number of graduates to the supply, until the supply FTE is greater than the demand FTE for the chosen balancing year. After each iteration of additional graduates the projected workforce (supply) must be recalculated.

Prior to starting the balancing process you can select the balancing accuracy that you would like to use. This adjusts the compromise between speed and accuracy. When *Low* is selected the number of graduates added at each iteration step is higher, so that less iteration is required, but supply may exceed demand in the balancing year. We would recommend that you set the accuracy to high.

When the balancing operation is finished, you will have a new estimate of the FTE workforce which meets the projected demand. The algorithm uses all your addition and loss assumptions to create a detailed depiction of the workforce in each year. The algorithm iteratively adds a small number of graduates and recalculates the workforce structure in each year until supply meets demand (Figure 2).

Figure 2: Balanced supply and demand

The dark orange line with triangles indicates the number of FTE in each year if the additional graduates were implemented. Supply meets demand in the balancing year.



This chart is found on the *Supply* tab as well as on the *Summary* tab. If you hover your pointer over each line you can see the actual values. The blue line represents your demand for FTE workers. The light orange line with squares is the estimate for the supply of FTE based on the assumptions given. The dark orange line with triangles is the revised supply of FTE resulting from the addition of more graduates.

4 Viewing and exporting scenario data

Click the *View Data* tab to see either a summary or a detailed analysis of how the algorithm reached its final outcome (Figure 3). Summary and detailed data as well as detailed flow data are available on separate sheets within this tab. You can scroll across using the horizontal scroll bar on the tab page to see all the forecast values.

Figure 3: Viewing the scenario data

The 'View Data' tab contains a summary and a detailed output of the numerical values for your scenario compared to the status quo projections, as well as detailed flow data. Use the horizontal scroll bar to see across all the forecast values.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Status quo and scenario headcounts for NHWT Sample													
2	Assumptions	Demand	Migration	Reentries	Losses	Immigration	Starting	Training	Dropouts					
3	Status Quo assumptions	2.0%	1.00	1.00	1.00	1.00	2009	5 years	20.0%					
4	User assumptions	2.0%	1.00	1.00	1.00	1.00	2009	5 years	20.0%					
5														
6	Projection Years	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
7	Required FTE	5,963	6,077	6,192	6,306	6,421	6,535	6,649	6,764	6,878	6,993	7,107	7,221	7,336
8	Status quo FTE	5,720	4,805	4,779	4,797	4,814	4,849	4,925	5,016	5,138	5,284	5,430	5,580	5,714
9	Status quo FTE gap	-243	-1,272	-1,412	-1,509	-1,607	-1,686	-1,724	-1,748	-1,740	-1,708	-1,677	-1,641	-1,622
10	Adjusted FTE	5,720	4,805	4,779	4,797	4,814	4,849	4,925	5,016	5,138	5,284	5,535	5,787	6,021
11	Adjusted FTE gap	-243	-1,272	-1,412	-1,509	-1,607	-1,686	-1,724	-1,748	-1,740	-1,708	-1,572	-1,434	-1,315
12														
13	Status quo graduates	150	145	169	159	168	192	212	246	273	280	288	288	288
14	Additional graduates required	0	0	0	0	0	0	0	0	0	90	90	90	90
15	Adjusted graduates	150	145	169	159	168	192	212	246	273	370	378	378	378
16														
17	Status quo placements	187	181	211	199	210	240	265	308	341	350	360	360	360
18	Net extra placements	0	0	0	0	0	0	0	0	0	113	113	113	113
19	Revised placements	188	181	211	199	210	240	265	307	341	463	473	473	473
20														
21														
22														
23														
24														
25														
26														
27														

Workforce Gains and Losses

Int'l Migration: 1.00 | Reentries: 1.00

Migration: 1.00 | Losses: 1.00

Balancing Assumptions

Commencing: 2009 | Dropouts: 20.0%

Training Time: 5 | Balancing Year: 2030

Balancing succeeded

Iteration: 1
Surplus: 44

This view can be saved on your PC as a .xls file. You can then use this file for further analysis or reporting.

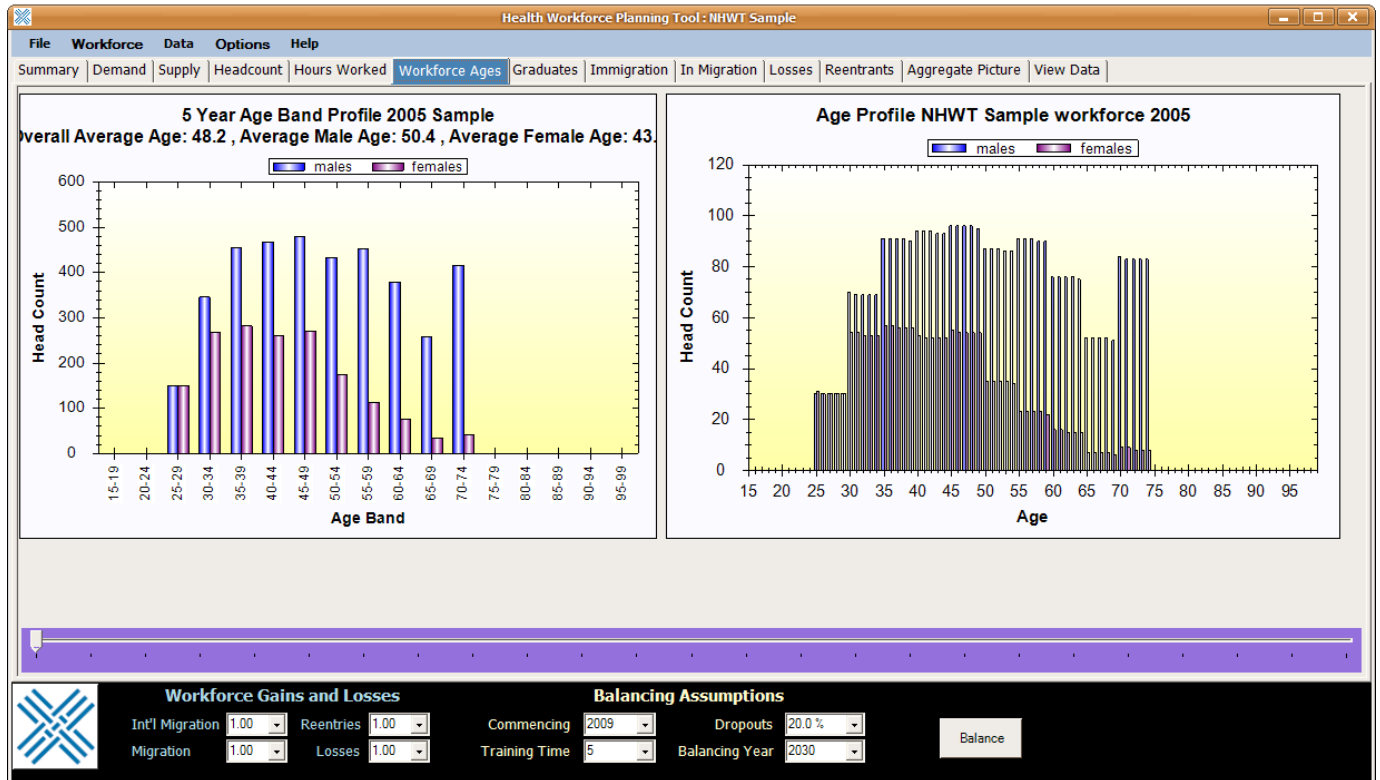
The exported spreadsheet has four worksheets, being scenario summary, scenario detail, detailed flow data and flows pivot.

5 Structure of the scenario workforce

The 'Headcount', 'Hours Worked' and 'Workforce Ages' tabs will show you what the workforce will look like in each forecast year. For instance, the 'Workforce Ages' tab contains both 5-year and 1-year age distributions over time (Figure 4).

Figure 4: 'Workforce Ages' tab

This tab shows 5-year and single-year age groups by gender. A full time-series forecast can be shown in real time by sliding the purple track bar to view each forecast year.



6 Requesting the software

You may request a compact disc containing the software and accompanying files from the NHWT. Please obtain a PDF copy of the request form from the NHWT website.