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**HEALTH POLICY  
INITIATIVE**

# INTRODUCTION TO POPULATION PROJECTIONS

## An E-learning Course

### What Is DemProj?

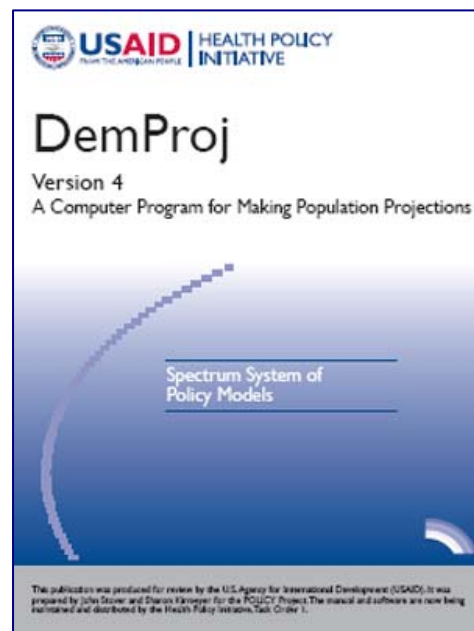
**DemProj** is one of the most widely used software models for making population projections. The model is the main building block of the **Spectrum** suite of computer models, originally developed by Futures Group to utilize demographic projections as a basis for generating various family planning and reproductive health (FP/RH) and HIV/AIDS projections.

Researchers, planners, and policymakers use population projections for planning, research, and development applications. Demographers project the population of an entire country or a specific region, province, or state using the component method. The methodology involves dealing with different key demographic components, starting with the population by age and sex of the base year and making assumptions about future fertility, mortality, and migration levels. The DemProj e-learning package focuses on making demographic concepts, measures, and projections understandable.

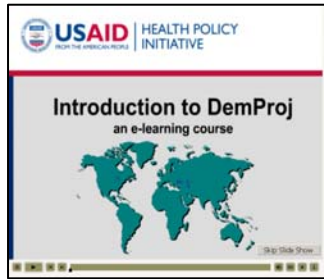
Through DemProj, a full set of demographic indicators can be displayed for up to 50 years into the future. The model also has a built-in resource called EasyProj, which contains the latest population estimates published by the Population Division of the United Nations. DemProj and all other Spectrum models (explained more fully in the e-learning package) are maintained by the USAID | Health Policy Initiative, Task Order 1.

### Contents of DemProj E-learning Package

The e-learning package instructs learners on using the DemProj model and understanding basic demographic concepts. Divided into three parts, the package explains the basic measures of population and the processes that influence population growth and then provides step-by-step instructions in making population projections. After seeing simple example projections that use data from developing countries, users go through a series of questions and useful exercises to better understand concepts. Each part is narrated by a different instructor.



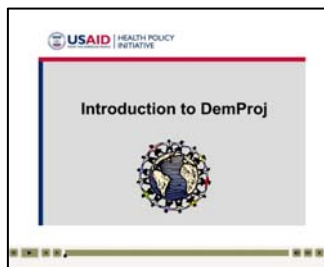
## The DemProj e-learning course contains three parts:



### Part 1: Introduction to Population Projections

*Instructor: John Ross*

Part 1 introduces basic demographic concepts and measures, particularly those dealing with fertility, mortality, and migration—the three factors that determine population growth and thus the main indicators used to prepare population projections. This part explains how demographic projections are prepared and the effects HIV/AIDS can have on population growth and structure. The overview of demography in Part 1 is a valuable teaching tool on its own.



### Part 2: Introduction to DemProj

*Instructor: John Stover*

Part 2 begins by describing the Spectrum suite of computer models, which generate future population, fertility, FP/RH, or HIV/AIDS scenarios that are being used not only in research and evaluation but also for policy dialogue and decisionmaking. Users learn how to access Spectrum and open the DemProj Model. Detailed, step-by-step instructions demonstrate how to prepare population projections for a sample country, use EasyProj (the database containing the latest UN population projections), and examine different assumptions.



### Part 3: Applications of DemProj

*Instructor: Karen Foreit*

Through three exercises, Part 3 illustrates how the outputs of DemProj can be used to answer specific policy or program questions that can guide decisions and plans. Users first learn how to formulate a specific program question that involves assessing future needs, such as immunization doses, and then create population projections using DemProj, locating needed outputs from the projections. The user also learns how to export the information into a Microsoft Excel spreadsheet to calculate future program requirements.

## E-learning Features

- Is an interactive, computer-based learning methodology designed to engage the learner.
- Incorporates several teaching approaches to accommodate different learning styles.
- Uses real country examples and relevant program questions to encourage users to think about demographic problems and potential solutions.
- Can generate greater interest in demographic issues and population analysis and encourage users to learn to use other projection models.
- Is a cost-effective instructional tool, employing the latest technology to make demography lessons fun.

## Instructors

The instructors for the DemProj e-learning package are highly respected international demography experts. These experts are profiled briefly below.



### **John Ross, Senior Demographer, Constella Futures**

John Ross is a demographer with 30 years experience in the fields of family planning, fertility, and reproductive health, focusing on applied research, evaluation, program design and evaluation, assessment of family planning program effort, analysis of unmet need, and a variety of demographic issues in the international context. These wide perspectives are often tapped for various global activities. Dr. Ross has served as resident advisor to the governments of Indonesia, Korea, and Turkey; and has worked in numerous countries in Africa, Asia, and Latin America. He has published extensively on his various research and country work, served as editor of the International Encyclopedia of Population, and co-produced a series of statistical compendia of international demographic and program data to facilitate wider use of this information.



### **John Stover, President, Futures Institute**

John Stover has more than 30 years of experience in assisting countries worldwide in policy analysis, awareness raising, strategic planning, and resource allocation in the fields of family planning, HIV/AIDS, child survival, and safe motherhood. He has developed several population and health policy tools, notably *Spectrum*, a modular system of software packages that are used to examine the consequences of current trends and future interventions in FP/RH and HIV/AIDS. He leads the Health Policy Initiative's use of these models in policy analysis, dialogue, and advocacy. International donors (e.g., USAID, World Bank, and UN agencies, particularly the WHO and UNAIDS) tap Mr. Stover's technical expertise in model development. He has worked on various policy and service delivery projects including the POLICY Project, RAPID (Resources for the Awareness of Population Impacts on Development), OPTIONS (for Population Policy), SOMARC, EVALUATION, and PASCA (Central America HIV/AIDS Prevention).



### **Karen Foreit, Senior Research and M&E Advisor, Constella Futures**

Karen Foreit has 30 years of experience in policy, program design, social research, and monitoring and evaluation of FP/RH and HIV/AIDS programs in Africa, Asia, central Europe, and Latin America. Fifteen of those years were spent as a resident advisor to developing country programs. Dr. Foreit has an extensive publication history. Her leadership has also been central in the development of tools for monitoring and evaluation. In 2001, she received the Novelli Award for Outstanding Contribution to Social Marketing Practice. In her current role on the Health Policy Initiative, Dr. Foreit assists the Mozambique country team with strategic information and HIV/AIDS workplace policy development. Dr. Foreit has been with Constella Futures since 1990, working on a variety of policy and service delivery projects, such as the POLICY Project, OPTIONS, SOMARC, Commercial Market Strategies, and MEASURE Evaluation.

## Instructions for Using DemProj E-learning:

### Using the DemProj e-learning CD

Insert the DemProj e-learning CD into your computer's CD-ROM drive. If the course does not automatically load, click "My Computer" and find the CD drive.

### Accessing the course online

Access the DemProj e-learning course on the Health Policy Initiative's website, [www.healthpolicyinitiative.com](http://www.healthpolicyinitiative.com). Search "DemProj" on the website to find the e-learning course.

### Where to begin

If it is your first time using the course, start with Part 1: Introduction to Population Projections. Part 1 opens with a slideshow of pictures. Click on "Skip the Slideshow" to start your e-learning session immediately. The illustration below explains how to use the icons on the navigation bar at the bottom of the screen.



### Computer requirements:

- PC with CD-ROM drive or Internet connection
- Speakers or headphones
- Screen resolution higher than 800x600. See instructions below for checking screen resolution.

### To set your screen resolution

Your screen resolution must be 800x600 or higher to effectively use this course. You may not have to reconfigure your screen resolution. When you open Part 1, if the slideshow appears larger than your screen or too small for you to read, follow these steps to change your PC's display settings:

1. Right-click on your desktop, select "Properties."
2. Go to the Settings tab in the "Display Properties" box.
3. In the Settings menu, there will be a slide bar in a box marked "Screen Resolution." To increase or decrease the resolution, slide the bar left or right. Make sure the resolution is set at 1024x768 or higher.
4. When finished, hit "Apply" in the bottom right hand corner of the box and close the Display Properties menu.

## For More Information on DemProj and the Spectrum Suite

DemProj and the full Spectrum suite of FP/RH and HIV/AIDS models can be accessed at [www.healthpolicyinitiative.com](http://www.healthpolicyinitiative.com). Select "Software" and click on "Spectrum download single exec.file." Spectrum is a Windows-based program that will run in Windows 95 and higher versions. The file size is 11MB and the installed program requires about 38MB of hard disk space. Most models are available in English, French, and Spanish; some are also available in Portuguese, Arabic, and Russian. Each model includes a detailed manual that describes how to use the software, as well as sections on data sources and interpretation and use of the results, a tutorial, and a description of the methodology.

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