



Veteran Population Model

VetPop 2007

OFFICE OF THE ASSISTANT SECRETARY
FOR POLICY AND PLANNING
Office of Policy (008A2)

Executive Summary

Introduction

The Department of Veterans Affairs (VA) provides official estimates and projections of the veteran population using the Veteran Population Model (VetPop). The model is updated periodically for improved methodology, more recent data, and changing needs. For each year from April 1, 2000 to September 30, 2036, VetPop2007 generates the number of veterans by selected characteristics: at the state and/or national levels — by Age, Gender, Period of Service, Race/Ethnicity, Rank (Officer/Enlisted), and Branch of Service; at the county level — by Age and Gender.

History

The earliest efforts at projecting the veteran population, based primarily on military records from the Spanish-American War and World War I, date back to the 1920s. In 1947, the Veterans Administration began making routine projections of veterans, but only for wartime veterans.

During each subsequent decade, enhancements in the estimates and projections were made by improvements in the scope and quality of input data and in the technology and methods used to analyze the data.

- In the 1960s, decennial Census data were first used to estimate wartime veterans by state and gender. At that time, VA began using Census data on residency to measure state-to-state migration.
- In the 1970s, VA began projecting the number of peacetime veterans and estimating the veteran population by county.
- During the 1980s, the role of the decennial Census was expanded to form the baseline for projections.
- The 1990s saw the incorporation of administrative data from DoD's Defense Manpower Data Center (DMDC).

In July 1999, following a recommendation by the Veteran's Claim Adjudication Commission, VA created the Office of the Actuary (OACT) to establish a capacity for actuarial analysis at the Department level. The Commission noted that such analysis would help the Department meet its long-term financial commitment to veterans and their beneficiaries.

Since its inception, OACT has played an important role in the planning of VA programs by providing more detailed demographic characteristics of the veteran population, using a succession of VetPop models. Future VetPop models may project eligibility, utilization, workload, and cost for major VA business lines and services.

The VetPop2007 Model

Highlights

VetPop2007 is consistent with the previous model primarily in that the estimate as of April 1, 2000, is based solely on Census 2000 veteran counts (custom tabulations) by single year of age, gender, state, and other characteristics. VetPop2007 reflects an update of several data sources and a few methodological enhancements.

- The model uses more recent DoD data on actual separations through September 30, 2006.
- VetPop2007 introduces a new summary table for Gulf War veterans, allowing the distinction of those who served since October 1, 2001.
- State to state migration incorporates American Community Survey (ACS) data to supplement the migration data from Census 2000. This improves state estimates by using more current information of veterans' whereabouts, as the accuracy of the Census 2000 data diminishes with time.

Results

You can find the VetPop2007 results by going to <http://www1.va.gov/vetdata/> and clicking on Demographics. Reports 1, 2, and 4 are state level; reports 5, 8, 9 and 10 are national level. Separate reports are provided for living (L), deaths (D), and separations (S).

TABLE 1. VETPOP2007 STATE AND NATIONAL TABLES

| Row | Column | Pages | Living | Deaths | Separations |
|-------|--------------------|----------------------------------------|--------|--------|-------------|
| State | Age (5-yr) | Year, Gender, Period of Service | 1L | 1D | 1S |
| State | Period of Service* | Year, Gender, Age (5-yr) | 2L | 2D | 2S |
| State | Race/Ethnicity | Year, Gender, Age (5-yr) | 4L | | |
| Year | Race/Ethnicity | Age (1 -yr), Gender, Period of Service | 5L | | |
| Year | Branch of Service | Age (1 -yr), Gender, Period of Service | 8L | 8D | 8S |
| Year | Officer/Enlisted | Age (1 -yr), Gender, Period of Service | 9L | 9D | 9S |
| Year | Gulf War Division | Age (1 -yr), Gender, Period of Service | 10L | 10D | 10S |

* Differs from the "Period of service" variable appearing in all other reports, in that it contains subtotals of certain periods.

Processing

The VetPop2007 processing occurs in three steps:

Step 1: The April 2000 baseline estimate is established from Census 2000 data.

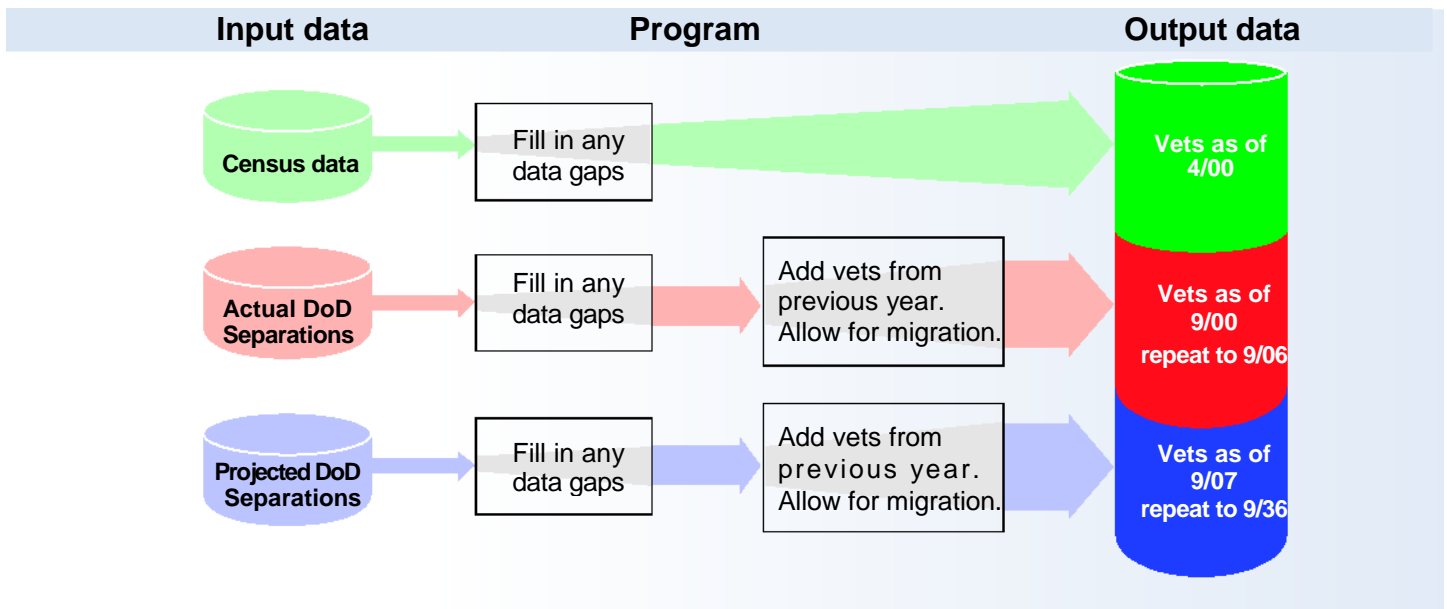
Step 2: For each successive time period, we add new separations, referred to as "births," using DoD data. (Actual data are used through September 30, 2006; projected separations are used thereafter.) At the same time, existing veterans (separated in a prior year) are "aged" one year, and deceased veterans ("deaths") are taken out.

Step 3: At the state level, annual migration is taken into account. County estimates are allocated down from state estimates.

Note: At each step, gaps in the data are “filled in” with auxiliary information.

The graphic below illustrates the processing procedure.

FIGURE 1. PROCESSING PROCEDURE



Data Quality

Although the data are given as point values rather than as a range of values, users must understand that uncertainty exists in these data. As such, OACT recommends that point values be rounded to the nearest 1,000.

Keep in mind that, in general, the reliability of the estimates and projections will vary directly by geographic size and inversely by time. For example:

- National estimates are more reliable than state estimates.
- State estimates are more reliable than county estimates.
- Estimates for large states are more reliable than for small states.
- Estimates of recent years are more reliable than projections of future years.

As mentioned above, the model determines subsequent years’ estimates by adding separations (“births”), subtracting deaths, and taking migration (address changes) into account. Ultimately, we would like to perform each of these steps at the county level. Because sufficient information about the veteran population after Census 2000 is not yet available at that level, we rely on an allocation from the state level, while maintaining characteristics and projections of the general population at the county level.

Organization of Report

The VetPop2007 Technical Documentation is laid out in modules to allow maximum flexibility, depending on whether you are looking for:

- a general overview;
- a sense of the data used; or
- a detailed, step-by-step understanding.

Each major section will include an introductory summary and visual, if possible, followed by more detailed explanations.

Executive Summary Simple introduction to the VetPop2007 model.

Overview More detailed description of the VetPop2007 model.

Data Sources Description of input data used in determining the number and characteristics of veterans.

Parameters Specific probabilities needed by the model — such as mortality and migration; parameters are the “vehicle” used to fill in the gaps in the input data.

Programs Description of the actual methods employed to come up with the final estimates and projections.

Appendix Additional detail.

Contact

You can contact the Office of the Actuary via e-mail at VetPop@VA.GOV.



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