Veteran Population Projection Adjusted to Census 2000 & Implications for CARES

Dr. Stephen Meskin, Chief Actuary
Dr. Allen Berkowitz, Senior Actuary
Office of the Actuary
Office of Policy and Planning, VA

January 24, 2003

Topics

VetPop2001 vs. Census 2000

Adjustments to VetPop2001 to reflect Census 2000

u Impact of VetPop projections on CARES demand forecasts

CARES Prequel

- Veteran population projections have a significant impact on projected new enrollment BUT
- U Only a moderate impact on projected total enrollees

Census 2000

- u Counts as of 4/1/2000
- Releases of veteran counts:
 - June 2002 -- totals by state, county, place
 - Aug Oct 2002 -- over/under 65 & gender, period of service, race
 - March 2003 -- single year of age up to age 85 and cross tabs limited only by privacy concerns

Veterans in US and PR as of April 1, 2000

u Census 2000

u VetPop2001

26,550,000

25,820,000

u Deviation

-730,000 -2.8%

Veterans in US and PR as of April 1, 2000

u Census 2000 26,550,000

u VetPop2001 25,820,000 -2.8%

u C2SS* 25,700,000 -3.2%

u VetPop2000 25,600,000 -3.4%

u CPS* 25,470,000 -4.1%

*includes 650,000 for PR and group quarters

From 1990 to 2000

- u Census 1990 @ 4/1/90
- Census undercount
- u Separations '90 to '00
- u Deaths '90 to '00
- out migration/rounding
- vetPop2001 @ 4/1/00
- u Deviation (-2.8%)
- u Census 2000

- 27,620,000
 - + 760,000
- +2,920,000
 - -5,430,000
 - -50,000
- 25,820,000
 - +730,000
- 26,550,000

VETERANS BY AGE & SEX (in thousands)

	Census 2000	Census 2000 VetPop2001		ation
Females				
Under 65	1,251	1,037	-214	-17.1%
Over 64	349	324	-25	-7.2%
Female Total	1,600	1,361	-239	-14.9%
Males				
Under 65	15,576	15,167	-409	-2.6%
Over 64	9,374	9,289	-85	-0.9%
Male Total	24,950	24,456	-494	-2.0%
Under 65 Total	16,827	16,204	-623	-3.7%
Over 64 Total	9,723	9,613	-110	-1.1%
Grand Total	26,550	25,817	-733	-2.8%

VETERANS BY PERIOD (in thousands)

	Census 2000	VetPop2001	Devi	ation
Gulf War	3,039	2,696	-343	-11.3%
Vietnam Era	8,419	8,513	94	1.1%
Korean Conflict	4,074	4,071	-3	-0.1%
ww II	5,739	5,603	-136	-2.4%
ww i	0	1	1	N/A
Peacetime	6,593	6,278	-315	-4.8%

VETERANS BY PERIOD (in thousands)

	Census 2000	VetPop2001	Devi	ation
GW Only	2,710	2,402	-308	-11.4%
GW, VNE Only	330	294	-36	-10.9%
GW, VNE, KC Only	-	-	0	
VNE Only	7,652	7,755	103	1.3%
VNE, KC Only	276	285	9	3.3%
VNE, KC, WWII Only	162	179	17	10.5%
KC Only	3,250	3,197	-53	-1.6%
KC, WWII Only	386	409	23	6.0%
WW II Only	5,191	5,015	-176	-3.4%
WW I Only	-	1	1	
Btwn GW & VNE	3,467	3,381	-86	-2.5%
Btwn VNE & KC	2,883	2,773	-110	-3.8%
Pre KC not WWII	243	123	-120	-49.4%
Total	26,550	25,816	-734	-2.8%

VETERANS BY RACE (in thousand	ls)
-------------------------------	-----

2,583

196

313

375

388

26,550

COMPARISON

*For Census 2000 these categories consist of people who checked only one category

	Census 2000	VetPop2001	Deviat	tion			
White*	22,695	22,510	-185	-(

Black or African American*

American Indian and Alaska

Asian/Native Hawaiian and

Other Pacific Islander*

Some other race*

Two or more races

Native*

Total

2,618

165

252

271

25,816

-0.8%

1.4%

-15.8%

-19.5%

-27.7%

N/A

11

-2.8%

293

-31

-61

-114

-388

-734

VEIERAND BY DIAIE (In thousands)						
	Census 2000	VetPop2001	Deviat	ion		
Utah	161	137	(24)	-15.2%		

121

786

563

137

44

COMPARISON

24,737

26,550

Hawaii

Virginia

Arizona

Others Combined

Idaho

D.C.

Total

105

723

518

126

49

24,159

25,816

(16)

(64)

(45)

(11)

(579)

-734

-13.3%

-8.1%

-7.9%

-7.8%

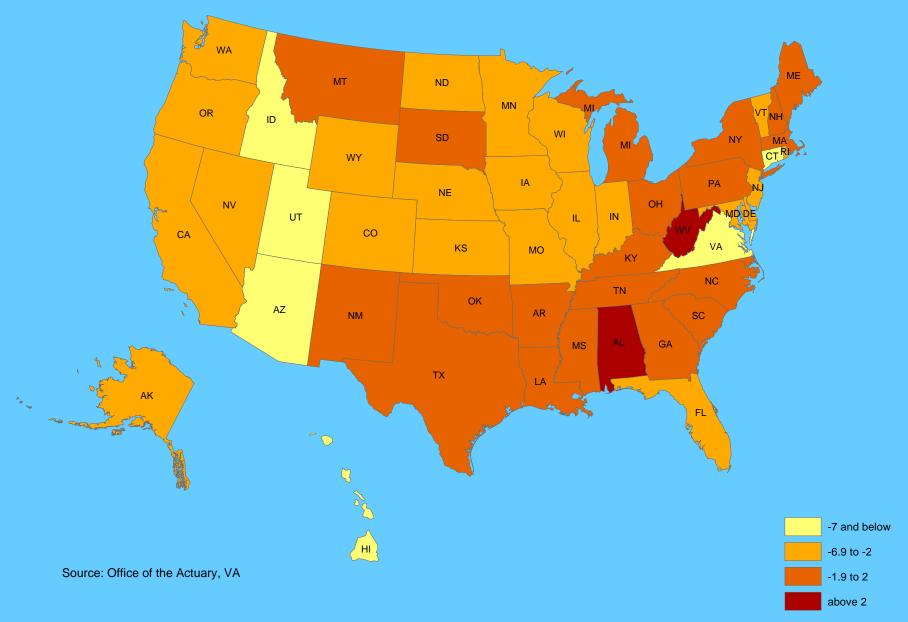
-2.3%

9.9%

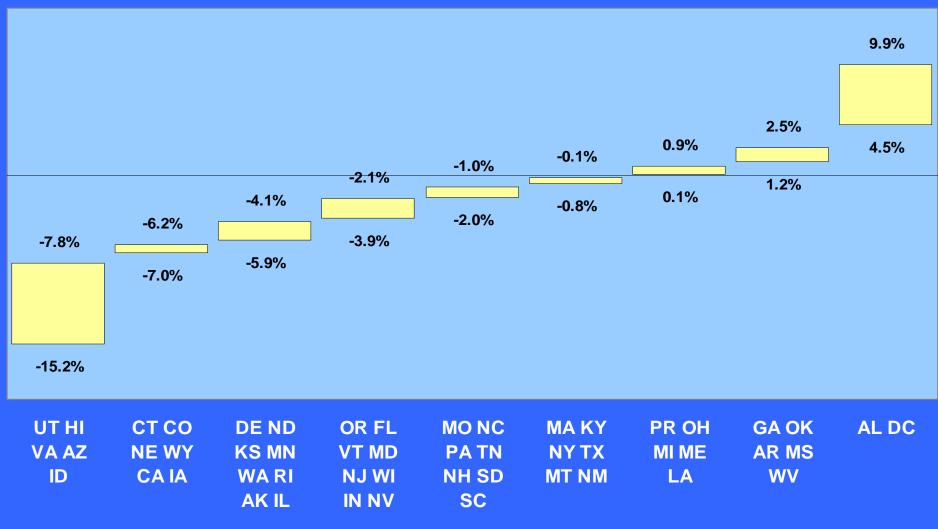
-2.8%

12

Percentage Deviation in Number Veterans by State VetPop 2001 vs Census 2000

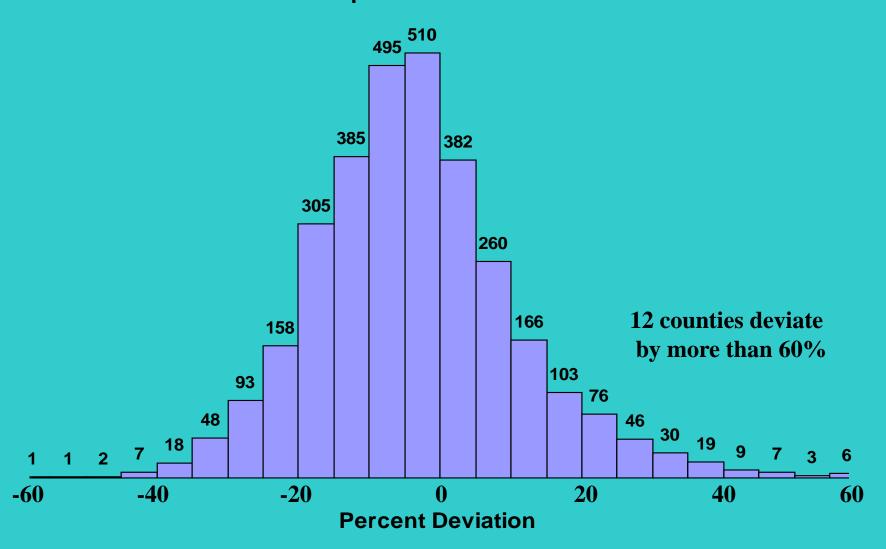


% Deviation in Number of Veterans by State VetPop2001 vs. Census 2000

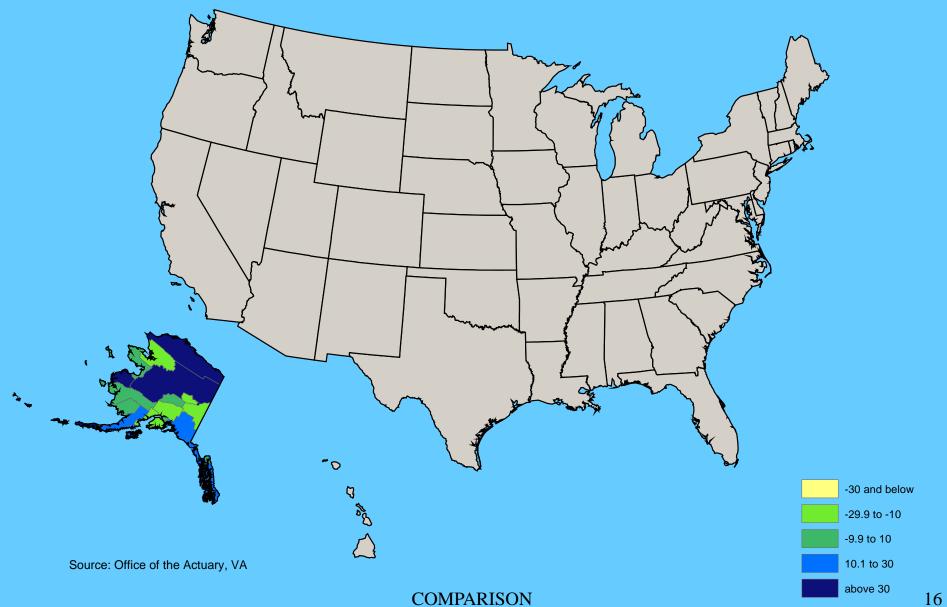


Source: Office of the Actuary, VA

Number of Counties by % Deviation in Number of Veterans VetPop2001 vs. Census 2000



Percentage Deviation in Number Veterans by County VetPop 2001 vs Census 2000



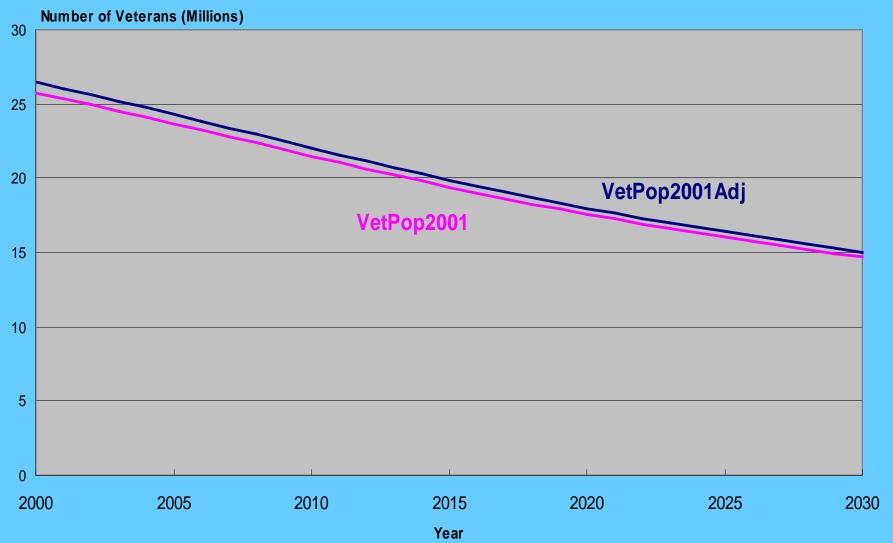
COUNTIES WITH LARGEST DEVIATIONS

	Census 2000	VetPop2001	Devia	ation
	OC11303 2000	VCII OPZOOT	DCVIC	111011
MIAMI-DADE	91,555	180,880	89,325	97.6%
LOS ANGELES, CA	510,712	580,152	69,440	13.6%
SAN DIEGO, CA	292,034	241,977	-50,057	-17.1%
HARRIS, TX	219,966	269,307	49,341	22.4%
ZAVALA, TX	363	665	302	83.2%
CHATTAHOOCHEE, GA	843	1,606	763	90.5%
ALEUTIAN ISL. W., AK	502	1,080	578	115.1%
LOVING. TX	5	18	13	260.0%

Average Absolute Percentage Deviation by Geography for 10 Year Projections

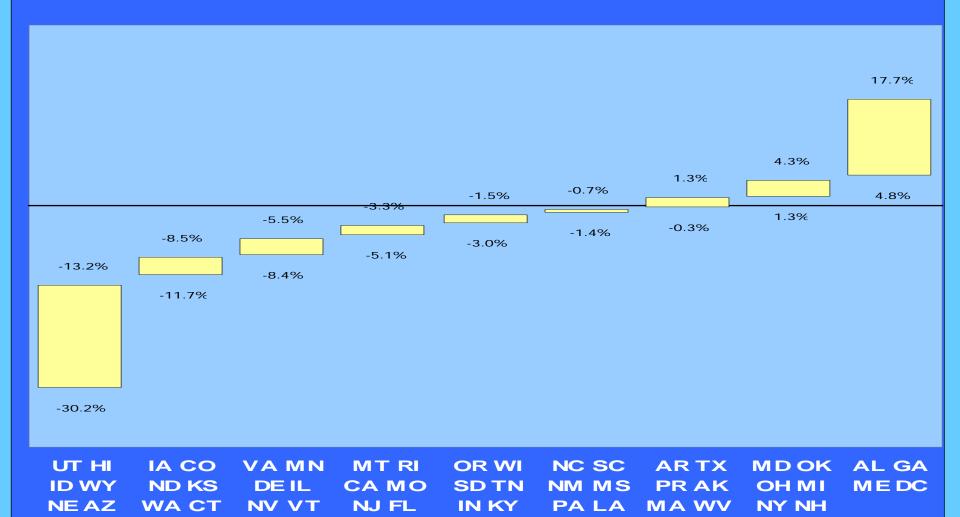
Geographic	Woods & Poole	VetPop2001
Level	& Past	& Census
	Censuses	2000
National	0.9%	2.8%
State	5.4%	3.8%
County	11.8%	11.9%

Comparison of Projected Veteran Population VetPop2001 vs. VetPop2001Adj: 2000 to 2030



Source: Office of the Actuary, VA

% Deviation in Number of Veterans by State VetPop2001 vs VetPop2001Adj @ 9/30/2012



Source: Office of the Actuary, VA

Adjustments to VetPop2001

- u Created a new baseline at 4/1/2000 equal to Census 2000
- Revised projected state migration based on changes from 1990 to 2000

Revised methodology used to split states into counties

Imputation needed to create new April 1, 2000 baseline

Census 2000	l Fem	ale	M:	ale	
ALABAMA			Under 65	_	TOTAL
	Officer 03	Over 04	Officer 03	Over 04	
GW Only		0		0	51,743
GW, VNE Only					8,484
VNE Only					126,847
VNE, KC Only					7,714
VNE, KC, WW II					4,016
KC Only					55,278
KC, WW II Only	0		0		7,315
WW II Only	0		0		73,515
Btwn GW & VNE					61,431
Btwn VNE & KC					46,221
Peace Pre-KC	0		0		4,833
TOTAL	23,345	4,344	268,064	151,644	447,397

Not Changed in VetPop2001Adj

- **u** Mortality
- u Projected Separations
- Within period of service, gender, and two age groups:
 - u Age distribution
 - u Disability distribution
 - u Branch distribution, etc.

Not included in VetPop2001Adj

- u Race/Ethnicity
- u Military Retiree Status
- **u** Marital Status
- **u** Minor Dependents

What impact would using Census 2000 for veterans have on the CARES Planning Initiative identification process?

Impact on CARES Demand Forecasts are mitigated by:

u Projections of only new enrollees rely on VetPop forecasts

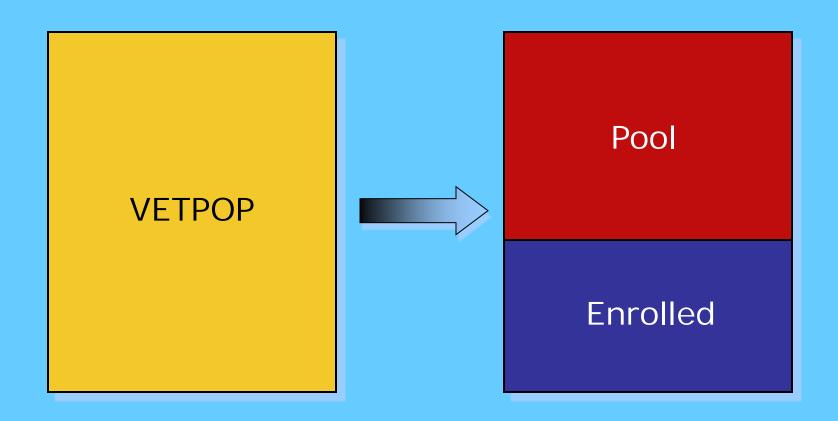
Impact on CARES Demand Forecasts are mitigated by:

- u Projections of new enrollees rely on VetPop forecasts
- u CARES unit of analysis is the Market Area (not counties)

Enrollment Projections

- **u** Enrollment Baseline (10/98 12/01)
- **u** VETPOP
 - u Priority, Age, Gender, County
 - u Mortality
- u Enrollment Pool (VETPOP less Enrollees)
- u Enrollment Rates Constant by Priority, Age Band, County and Enrollee Type

Enrollment Projections



Enrollment Projections

Pool

New Enrollees

Enrolled

Definition of Market Areas

A health care market area is an aggregated geographic area having a sufficient population and geographic size to both benefit from the coordination and planning of health care services and to support a full healthcare delivery system

Comparison of VetPop2001 to Census 2000 VISN 22 - California Market

	Census 2000*	VetPop 2001	Devia	tion
	Veterans	FY2000**		%
LOS ANGELES, CA	510,712	580,152	69,440	13.6
RIVERSIDE, CA	144,174	106,833	(37,341)	(25.9)
SAN DIEGO, CA	292,034	241,977	(50,057)	(17.1)
IMPERIAL, CA	8,544	6,932	(1,612)	(18.9)
INYO, CA	2,329	2,049	(280)	(12.0)
KERN, CA	54,403	45,666	(8,737)	(16.1)
ORANGE, CA	193,548	193,944	396	0.2
SAN BERNARDINO, CA	140,439	123,435	(17,004)	(12.1)
SAN LUIS OBISPO, CA	27,825	21,949	(5,876)	(21.1)
SANTA BARBARA, CA	35,950	32,255	(3,695)	(10.3)
VENTURA, CA	63,430	59,371	(4,059)	(6.4)
Market Area Total	1,473,388	1,414,563	(58,825)	(4.0)

^{*} Census 2000 is as of April 2000

^{**} VetPop2001 is as of Sep. 2000, based on 1990 Census

Comparison of VetPop2001 to VetPop Adjusted as of 9/30/2012 VISN 22 - California Market

LOS ANGELES, CA
RIVERSIDE, CA
SAN DIEGO, CA
IMPERIAL, CA
INYO, CA
KERN, CA
ORANGE, CA
SAN BERNARDINO, CA
SAN LUIS OBISPO, CA
SANTA BARBARA, CA
VENTURA, CA

VetPop	VetPop	Deviation	
2001Adj	2001		%
315,258	419,711	104,453	24.9
106,327	74,953	(31,374)	(41.9)
206,900	167,370	(39,531)	(23.6)
5,741	5,586	(155)	(2.8)
1,494	1,199	(295)	(24.6)
36,543	32,793	(3,750)	(11.4)
141,076	140,944	(132)	(0.1)
96,408	88,276	(8,132)	(9.2)
20,821	14,602	(6,219)	(42.6)
23,342	21,777	(1,564)	(7.2)
43,936	41,551	(2,385)	(5.7)

Market Area Total

997,846 1,008,761 10,915

CARES 33

1.1

Summary

- Census 2000 information permits a careful analysis of model deviations at National, State, County and Market Area levels.
- When final Census 2000 data for veterans is released additional analyses will be completed.
- u Deviations are consistent with private sector projections for the civilian population.
- VA is in the process of analyzing the level of change for CARES enrollment & utilization forecasts

CONCLUSION

Questions and References:

- More detail on veteran population estimates from Census 2000 can be found at: http://www.va.gov/vetdata
- u Further questions, contact:
 - u Dr. Allen Berkowitz, 202-273,5714, Allen.Berkowitz@mail.va.gov, or
 - u Dr. Stephen Meskin, 202-273-5062, Stephen.Meskin@mail.va.gov