Evaluation of the VA Burial Benefits Program

FINAL REPORT

August 2008

ICF International



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VA Office of Policy and Planning

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EXECUTIVE SUMMARY

A. Introduction

The mission of the VA Burial Benefits Program—administered by the National Cemetery Administration (NCA) and the Veterans Benefits Administration (VBA)—is to honor veterans and their families with burial benefits that commemorate their service to our nation. The VA Burial Benefits Program accomplishes this mission by:

- Interring eligible veterans and their family members in national cemeteries and maintaining the cemeteries as National Shrines
- Providing headstones and markers to veterans anywhere they are interred (e.g., national, state, public, and private cemeteries)
- Providing Presidential Memorial Certificates to families and friends of deceased, eligible veterans.
- Supporting the burial options of veterans through the State Cemetery Grants Program
- Offering burial and plot allowances to veterans that meet eligibility requirements.

NCA oversees the operations, improvement, and planning for 125 national cemeteries and 33 other cemetery properties across the country. NCA is committed to providing timely and compassionate services to veterans and their families by meeting their burial needs and by offering symbolic expressions of remembrance. Toward that end, NCA operates the Memorial Programs Service, which oversees both the administration and processing of government headstones/markers and Presidential Memorial Certificates (PMCs). VBA administers cash payments to families of eligible veterans for burial (burial and plot allowances), furnishes U.S. flags to next of kin, and disseminates information to the veteran community on burial benefits.

Currently, VA manages 2.8 million gravesites at its 158 properties. Veterans of every war and conflict in America's history, from the Revolutionary War to the Global War on Terror, are interred in VA's national cemeteries.

The current set of burial benefits includes a gravesite in one of 125 national veteran cemeteries, opening and closing of the grave, perpetual care, a Government headstone or marker, a U.S. flag, and a PMC. A Government headstone or marker is also provided to veterans that choose burial in a state or private cemetery or other appropriate burial location. These benefits are available at no cost to the family. In addition, VA funds the establishment, improvement, and expansion of state veteran cemeteries operated and maintained by states. VA also provides a burial allowance and the reimbursement of certain burial expenses for veterans who meet eligibility requirements.

Burial benefits are available for spouses and dependents buried in national and state veteran cemeteries. These include burial with the veteran, perpetual care, and the spouse or dependent's name and date of birth and death inscribed on the veteran's headstone, at no cost to the family.

B. Study Purpose

The purpose of the program evaluation study is to conduct an objective third-party evaluation of the VA Burial Benefits Program to provide empirically sound and statistically valid data to address two overarching goals:

- The first goal of the program evaluation is to determine whether the program is achieving its expected outcomes (e.g., meeting the burial needs of veterans and their family members; maintaining national cemeteries as national shrines).
- The second goal of the program evaluation is to identify the program's impact on veterans and their families (e.g., providing veterans with adequate information on burial benefits; providing meaningful symbolic expressions of remembrance).

VA's Office of Policy and Planning contracted with ICF International, the prime contractor for the study, with support from SAG Corporation as a subcontractor to: (1) Assess the adequacy and effectiveness of the current policies and procedures that comprise the VA Burial Benefits Program; (2) Estimate the type and extent of burial needs for the future; (3) Assess the need for or interest in new symbolic expressions of remembrance and/or modify the current symbolic expressions available; and (4) Assess the need for additional performance measures that can be used to measure results with targets put in place by VA.

The ten research questions are organized by report chapters as shown below in Exhibit i-1. The evaluation provides results and recommendations associated with each of these research questions.

Exhibit i-1.
Primary Research Questions
Research Questions
Chapter 3 – Ensuring Burial Needs Are Met
Adequacy and reasonableness of the 75-mile Service Area Standard
Cremation only as an acceptable burial option
Factors influencing burial choice
Methods by which veterans and their families access information on VA Burial Benefits
Chapter 4 – Memorialization of Veteran Service to Our Nation
Identify and evaluate challenges in meeting national shrine mandate
Adequacy and impact of symbolic expressions of remembrance
Examine impact of Presidential Memorial Certificate
Chapter 5 – Monetary Burial Benefits
Feasibility of cash payment
Impact of a financial means test on eligibility for burial allowance
Assessment of burial allowance

C. Study Methods

To address the study objectives, the evaluation used a multi-method approach to collect and analyze a wide array of data. This included conducting the 2008 Veterans Burial Benefits Survey, which yielded data from 16,717 veterans. In addition, focus groups and structured interviews with family members and funeral directors were conducted at five locations across the country. The evaluation used a variety of data analysis techniques such as geographic

information systems analysis (GIS), regression, and secondary data analysis to provide answers to each of the research questions.

D. Study Findings

I. Adequacy and Reasonableness of the 75-mile Service Area Standard

The current VA policy is to establish new national cemeteries in areas where the unserved veteran population is at least 170,000 within a 75-mile radius to ensure adequate veteran and family access. The current study examined the adequacy and reasonableness of the current 75 mile standard and evaluated several potential alternatives for how VA's ability to serve veterans' burial needs might be changed. Specifically, the evaluation examined the following alternatives:

- Changing the linear distance from 75 miles to another distance standard
- Replacing the linear distance standard with a drive time standard
- Changing the veteran population threshold needed to establish a new national cemetery from 170,000 to another threshold standard.

Considering all alternatives, the evaluation sought to recommend an "ideal" service area standard in terms of a time and/or distance criterion and a population threshold. The findings are summarized below by key area.

Measuring the percent served

- Based on current Geographic Information Systems (GIS) technology, the program evaluation concluded that VA's current methodology of measuring the percent served by a VA burial option needs to be enhanced in the following ways, which were employed for the program evaluation:
 - The first refinement is that Census tracts rather than counties are employed as the fundamental geographic identifier in the enhanced approach. Census tracts are "small, relatively permanent statistical subdivisions of a county" that average about 4,000 inhabitants. As a building block of Census geography, Census tracts allow more detailed analysis of population data than counties, but also have the advantage of precise aggregation to the county level. Unlike zip-codes, Census tracts never overlap county boundaries; the sum of the veterans estimated to live within in a county's nested Census tracts is equal to the county-level veteran population. The advantage of using Census tracts as the main geographic identifier is that this method allows for a much larger number of potential locations to be tested during the process of judging where to place a new cemetery so that it will serve the largest number of veterans.
 - A second refinement relates to the method used to avoid double counting veterans who live within the 75-mile service area of two or more cemeteries. The enhanced method adds additional clarity through the creation of Thiessen polygons around each of the cemeteries, allowing each service area to remain mutually exclusive for counting purposes. Thiessen polygons are generated from a set of sample points. Each Thiessen polygon defines an area of influence around its sample point, such that any location inside the polygon is closer to that point than any of the other sample points.

The third major refinement for estimating the percent served relates to the criteria used to determine how many veterans should be considered served who live in a Census tract that is only partially contained within the service area of an existing cemetery. The enhanced approach to estimating the percent served within each 75 mile service area—proportional overlay—replaces the current "rule of thumb" approach used by VA with a more systematic methodology for counting veterans. Proportional overlay capitalizes on modern GIS techniques that allow only veterans living inside the service area to be counted, while excluding those living beyond 75 miles of the cemetery.

The relationship of distance to veterans' choice of burial location

- The analyses conducted indicated that distance is a major factor in making burial choices. Most veterans are buried quite close to their surviving spouses; 92 percent of veterans buried in private cemeteries and 51 percent of veterans buried in national or state veteran cemeteries are buried within 20 miles of the spouse.
- The analyses conducted indicated that those buried in national or state veteran cemeteries are buried significantly further (19.2 miles) from the residence of their spouse than those buried in a private cemetery (3.8 miles).
- Regression analysis revealed that there is a strong propensity to take advantage of a VA burial option among those living close (i.e., within 20 miles) to a national or state veterans cemetery, and a low usage rate for those who live beyond the current service area standard (i.e., 75 miles). Among the sample, propensity declines steadily with every increase of about 5 miles, until about the 35 mile range, then drops more rapidly.
- Regression analysis indicated that veterans' distance to the nearest national or state veterans cemetery matters a great deal in all MSNs, but its impact on veteran's choice of burial location is strongest for those in the northeastern U.S. (MSN 1). Whereas an increase of about five miles from the nearest national or state veterans cemetery is associated with a 5 percent decline in propensity to select burial in a national or state veterans cemetery for all MSNs, in MSN 1 (Philadelphia region), the same increase in distance is associated with a decline of 7 percentage points.

Relationship of distance, drive time, and choice of burial location

- GIS analysis indicated that 95 percent of families choosing a private cemetery live within a 45-minute drive of the cemetery in comparison to only 67 percent of families choosing a VA burial option.
- Correlation analysis indicated that drive time is so closely related to linear distance that one could serve as a proxy for the other for nearly any measurement purpose (correlation, r =.92). While in theory drive time would seem to promise a fairer metric on which to base the service standard, in practice, this high correlation means that drive time provides VA very little information that is not already captured by linear distance.
- Analysis of next of kin drive times to the nearest national or state veterans cemetery in a sample of three different communities (urban, suburban, and rural) indicated that within two hours, next of kin from all three types of communities can travel to a national cemetery within 75 miles of their residence. Should VA consider a drive time standard, a two hour standard would be a good candidate because it is the closest approximation to the current 75-mile distance standard. However, there are several shortcomings with a drive time standard, which include:

- A drive time standard will naturally lead many veterans and next of kin to consider whether it has been calculated correctly by VA.
- No matter what data source is used, the personal experience of some veterans will differ from the calculated drive time. They are likely to question, with merit, that their personal experience of bad roads, traffic conditions, etc. has not been considered by VA.
- Currently there is no national data source that accurately captures the real-time, frequently changing driving conditions that impact an individual's actual drive time. Current data sources and methods provide only averages based on road speeds, and can become quickly outdated without frequent updates requiring substantial resources including personnel, technology, and time. A drive time standard does not meet the need for reliability, and would be highly resource intensive to continuously update and maintain.

Current service area: 75-mile service area standard

- The five largest concentrations of veterans in 2010 not served by a VA burial option under the current 75-mile standard are centered in and around Charleston, WV, Schuyler, NE, Tallahassee, FL, La Crosse, WA, and Houghton Lake, MI.
- None of the above locations currently meet the population threshold for the establishment of a new national cemetery because they do not meet the veteran population threshold of 170,000.
- No location in the U.S. will meet the criteria for the establishment of a new national cemetery under the current service area standard (i.e., 75 miles, 170,000 veterans) until 2015, at which time only one community, the St. Louis, MO metropolitan area, will reach the population threshold of 170,000, due to the closing of Jefferson Barracks National Cemetery (scheduled to close in or around 2017). Our GIS analysis revealed that the optimal Census tract to host a new cemetery for this region (if the current cemetery is not expanded) is at or near Crystal City, MO.

Alternative service area standards (65 and 55 miles)

- A 65- or 55-mile service area standard will reduce the percent of veterans served by a VA burial option nationally. A linear distance standard of 65 miles will reduce the percent served to 82.4 percent in 2010, and a 55-mile standard will reduce the percent served to 74.1 percent in 2010.
- The five largest concentrations of veterans in 2010 not served by a VA burial option under a 65-mile alternative standard are centered in and around Hamden, OH, Ventura, CA, Cocoa, FL, Jones, OK, and Scribner, NE. However, none of these communities meet the current 170,000 population threshold.
- The five largest concentrations of veterans in 2010 not served by a VA burial option under a 55-mile alternative standard are centered in and around Moorpark, CA (near Los Angeles), Logan, OH (outside Columbus and midway between Cincinnati and Cleveland), Attica, NY, Lake Huntington, NY, and Orlando, FL. Two of these areas would immediately meet the criteria for the establishment of a new national cemetery under a population threshold of 170,000: Moorpark, CA and Logan, OH.

Alternative population thresholds

- Very few areas will meet the criteria for a new national cemetery between 2010 and 2030 <u>regardless</u> of whether a 75-, 65-, or 55-mile standard is in effect, because they will not meet the 170,000 veteran population threshold.
- Several areas with relatively large numbers of veterans (i.e., more than 110,000) will remain unserved by a VA burial option if the veteran population threshold is not reduced.
- Lowering the population threshold to 110,000 would allow several areas to "qualify" for a new national cemetery under <u>any</u> of the three distance alternatives.
- Revising the population standard will not rollback progress VA has made over the last decade in gradually increasing the percent of veterans served. By contrast, reducing the linear distance standard would substantially reduce the percent served nationally, as would switching to a drive time standard any lower than 2.5 hours.
- Adjusting the population threshold downward from 170,000 would link VA policy to current and future demographic changes in the veteran community (e.g., migration, death rates, military discharges) more effectively than adjusting the area component of the service standard. That is, as the veteran population begins to decline, so should the threshold.

II. Whether Cremated Remains Only is an Acceptable Burial Option

VA's service area standard is currently measured and defined as the percentage of veterans living within a 75-mile radius of an open national or state veterans cemetery, including national cemeteries which accept only cremated remains. The proportion of cremation-only cemeteries may increase in future years as the inventory of casket gravesites at existing national cemeteries declines, and some cemeteries close to new casketed interments. This trend, however, is balanced by the likelihood that VA will continue to build new national cemeteries to maximize the percentage of veterans served, expand existing cemeteries by acquiring adjacent land, and introduce new burial options for veterans as appropriate. However, the service standard leaves open the issue of whether cremation-only cemeteries are "serving" the veteran community in cases where the veteran may not prefer cremation.

Based on this policy issue, the following research questions were addressed: 1) what percentage of veterans would consider themselves served and unserved if cremation was their only burial option at a national or state veterans cemetery?; 2) what are the demographic profiles of veterans who would consider themselves served and unserved by a cremation-only burial option?

The primary findings for the sub-group of interest (i.e., veterans preferring burial in a national/state veterans cemetery) were:

- Approximately 68 percent would accept cremation if it was the only burial option available at the nearest national/state veterans cemetery.
- The demographic and social factors most related to acceptance of a cremation-only burial included: religion, Memorial Service Network (region), and service period. More specifically, among veterans preferring burial in a national/state veterans cemetery, veterans with no declared religion are approximately 3 times as likely to accept burial in a national or state veterans cemetery that provides cremation as the only burial option than veterans with a declared religion. Among veterans preferring burial in a

national/state veterans cemetery, veterans in Memorial Service Network (MSN) 5 (Oakland) and veterans that served in the Navy are each approximately 1.5 times as likely to accept burial in a national or state veterans cemetery that provides only cremation, compared to other veterans.

III. Factors Influencing Burial Choice

VA provides both casket and cremation burial options for veterans. To plan for providing sufficient burial options, VA must stay current with the burial preferences of veterans, and the factors that influence them (e.g., region of the country).

Based on this policy issue, the program evaluation set out to answer the following questions: 1) what is the role of religion, culture, familial practices, generational differences, and geographic location on veterans' burial choices?; 2) what would be the impact on VA if new services were implemented to address veteran preferences not currently served?

The primary findings are:

- The nationally representative survey conducted for this evaluation found that VA meets the burial choices of almost all veterans, as approximately 85 percent of veterans plan to select casket or cremation at their time of need. Of the remaining veterans, 12 percent either do not know what they plan for burial or skipped answering the question on the survey, leaving only 3 percent of veterans indicating mausoleum.
- An analysis on the sub-group of veterans who prefer either casket or cremation indicated that veterans with no declared religion are approximately 4.3 times as likely to prefer cremation, veterans from MSN 5 (Oakland Memorial Service Network) are 1.9 times as likely to prefer cremation, and female veterans are 1.8 times as likely to prefer cremation, compared to their respective counterparts. In terms of attitudinal factors, veterans who indicated that cost was influential in their decision around burial choice were 2.5 times as likely to select cremation as compared to veterans who said cost was not influential.
- Approximately 43 percent of all veterans said they were likely to choose burial in a national/state veterans cemetery, with the largest demographic factors being service period, age, and career years. Specifically, younger veterans are more likely to prefer burial in a national/state veterans cemetery (52 percent of 20-39 year olds), as compared to older veterans (34 percent of veterans 80+ years in age).
- The regression analysis on survey respondent data indicated that non-demographic factors (e.g., cost, preferences of family) play a much larger role in the selection of burial location than do demographic factors. A significant finding from this analysis is that veterans with a strong connection to or affiliation with the military are 7 times as likely to prefer burial in a national or state veterans cemetery, compared to other veterans.

IV. Methods by which Veterans and their Families Access Information on VA Burial Benefits

The Improvement of Veterans Outreach Programs enacted December 27, 2001 (Public Law 107-103) sought to increase the type and level of outreach programs provided by VA. Additionally, the Veterans' Housing Opportunity and Benefits Improvement Act of 2006 mandates that VA conduct outreach efforts so that no veterans are denied awareness of the

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benefits for which they may be eligible. This situation presents a challenge to VA in both assessing and developing optimal communications for burial benefits. The program evaluation identified the primary sources veterans, families, and funeral directors use to get information on VA burial benefits, the demographic factors related to accessing sources of information, and most importantly, the ways to best reach various veteran subpopulations.

The research questions included: 1) what are the primary sources veterans, families, and funeral directors use to get information on VA burial benefits?; 2) what are the demographic factors related to accessing sources of information on VA burial benefits?; 3) what are the barriers and enablers of accessing sources of information on VA burial benefits by demographic variables and 4) what are the various outreach methods used by VA to provide information and increase awareness of the VA benefits for veterans and their families?

The primary findings are:

- Almost half of the veteran survey respondents indicated they would use VA's toll-free number and over two out five veteran survey respondents indicated they would try looking for burial benefits information on VA's Web site.
- Almost one of every ten veteran survey respondents indicated not knowing where to go for burial benefits information. Given the current veteran population, this suggests that about 2.5 million veterans do not know where to go for burial benefits information.
- While only one out of six World War II veterans selected VA's Web site as a preferred source of information about burial benefits, over three out of four Gulf War veterans selected the Web as a preferred choice.
- In focus groups, the majority of veteran family members indicated that much of the information they obtained, on items such as the burial allowance, burial flag, headstones, and the PMC, came from the funeral director or the funeral home.
- In focus groups, when asked to identify the most useful information that they received on burial benefits, veteran family members mentioned two: (1) the amount of money that VA would pay for the burial allowance, and (2) the importance of DoD form DD214 for processing requests for burial benefits.

V. Identify and Evaluate Challenges in Meeting the National Shrine Mandate

There is a legislative mandate that "all national and other veterans' cemeteries under control of the National Cemetery Administration be considered national shrines (Title 38, Part II, Chapter 24, Section 2403)." In accordance with the Government Performance Results Act (1993), NCA has established a set of performance measures for the National Shrine mandate to monitor and report its results for all of its national cemeteries.

Through the evaluation, there were two primary research questions that were addressed: 1) is the current set of performance measures adequate in terms of their validity (i.e., measure the concepts as intended), completeness (i.e., measure all areas of performance that relate to the mandate), and quality?; 2) what are the challenges inherent in meeting and maintaining the National Shrine mandate (e.g., increasing interments, aging infrastructure)?

The primary findings are:

- The six existing performance measures address the key components outlined in the national shrine definition, covering both the tangible and intangible aspects of the definition. These performance measures are supplemented by the national cemetery operational standards and measures that currently guide cemetery directors and staff on necessary maintenance and care.
- The number of interments in columbaria at national cemeteries is expected to quadruple by 2030. As a result, a separate performance measure for columbaria is needed.
- NCA's annual survey of next of kin and funeral directors has two limitations. The first is that data are collected from next of kin who interred a loved one in a national cemetery in the past year. Opinions of next of kin who return to the cemetery more than one year after the interment are not captured and their perceptions of the cemetery may be different. Data collected from next of kin at different time periods would provide better information on which to base policy changes. A second limitation is that data on the annual survey are not collected for cemeteries with low interment activity.
- Several factors will affect NCA's ability to meet the National Shrine mandate in the future. Increasing interments, gravesites, and an aging infrastructure will pose considerable challenges in maintaining the national cemeteries as national shrines.

VI. Adequacy and Impact of Symbolic Expressions of Remembrance

VA provides a number of symbolic expressions of remembrance for veterans and their families, including headstones, markers, and PMCs, as well as coordination with the Department of Defense (DoD) or local veteran volunteers to provide military funeral honors.

The research questions included: 1) what is the adequacy and impact of the current set of symbolic expressions of remembrance?; 2) what would be the impact of policy changes to provide additional symbolic expressions of remembrance?

The primary findings are:

- All four symbolic expressions of remembrance (i.e., U.S. Flag, headstone or marker, PMC, and military honors) were rated either important or very important by at least three out of four veterans on the survey. A greater percentage of veterans rated the U.S. flag and the headstone/marker benefit as important, compared to the PMC and military honors.
- When veteran survey respondents were asked for headstone or marker options that are desirable but are not currently available, veterans indicated it would be important to expand the option to place military symbols on the markers (54 percent of the respondents indicated it was important or very important) and to increase the area for personal inscription (47 percent of the respondents indicated it was important or very important).

VII. Impact of Presidential Memorial Certificates

A Presidential Memorial Certificate is an engraved paper certificate, bearing a likeness of the current President's signature, to honor the memory of honorably discharged deceased veterans. Eligible recipients include the deceased veteran's next of kin and loved ones. The PMC was

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started by President Kennedy in March of 1962. Since that time, 11.9 million PMCs have been distributed.

The research questions include: 1) what is the impact of the current PMC on the perceptions of veterans and their loved ones?; 2) what would be the impact of introducing new processes to increase the accuracy of information provided on PMCs?

The primary findings are:

- On the survey, 80 percent of veterans indicated that the concept of the PMC benefit makes them feel that the country appreciates the service of veterans to our nation.
- In focus groups, of the 37 next of kin participants, only one knew about the PMC benefit. In the focus groups with funeral directors, only 2 out of 29 knew about the PMC benefit.
- The error rate for PMCs is very low at only 100 for every 400,000 PMCs issued.

VIII. Feasibility of Cash Payment in Lieu of Burial in a National Cemetery

The National Cemetery Expansion Act of 2003 authorized VA to open six new national cemeteries within four years after enactment to serve veterans in areas of the U.S where the greatest number of veterans did not have access. The cost to construct the six new cemeteries is approximately \$156 million as well as an additional \$25 million per year in operating costs. As an alternative policy, VA could consider compensating veterans and their families by implementing a cash payment program made on behalf of veterans not residing within 75 miles of a national or state veterans cemetery at the time of their death. This policy, if supported by VA, would require legislative changes.

The research questions to explore findings of alternative policy include: 1) what burial services could VA provide if it opened no new national cemeteries and did not fund state cemeteries?; and, 2) what is the feasibility of offering a cash payment in lieu of burial in a national or state veterans cemetery where they are not available?

The primary findings are:

- High acceptance (72 percent) of cash payments among veterans whose perceptions were measured in the survey.
- Under the current standard VA would need to construct and maintain one new national cemetery in 2015 at a NPV cost of \$77,998,000. The fiscal cost for one cemetery was far exceeded by the cost of the cash payment program under three of four different cash payment benefit scenarios. It was determined that the point at which the cost of new cemetery construction and the cost of the cash payment program are equal assumes only 5 percent of those eligible for the program would participate. This level of participation is not realistic.

IX. Impact of a Financial Means Test on Eligibility for Burial Allowance

VA burial allowances are partial reimbursements of eligible veterans' burial and funeral costs. Currently, there is no financial means testing for burial allowance eligibility taking into consideration either the income or assets of veterans.

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The feasibility of instituting a financial means test was examined for eligibility of this benefit. Three income level thresholds were tested and information on two are presented below. The research questions included: 1) what would be the results of implementing a financial means test?; 2) what is the number of people affected at each of the three income level thresholds?

The primary findings are:

- Significantly lower administrative costs for conducting means tests for burial benefits than the pension program using a means test similar to pension (i.e., an explicit income level threshold and a "reasonableness" net worth test),
- Tests at different income levels revealed that, as expected, the greatest savings to the government would be realized if the level below which benefits were provided was set at the lowest proposed income, \$50,081 in 2008 dollars. At this income level, the government would save over 34.5 million dollars per year if the claims paid rate stayed constant. At the highest income level (\$81,382), the government would save almost 13.7 million dollars per year. However, the loss in benefits to veterans' families per year would be \$38.2 million and \$19.1 million, respectively, at these two income levels.

X. Assessment of Burial Allowance

VA burial allowances are partial reimbursements for an eligible veteran's burial and funeral costs. The amount of the allowance depends on whether the cause of death is due to a service-connected (SC) condition. For a service-connected death, VA will pay an allowance up to \$2,000 toward burial expenses. If the veteran is buried in a national cemetery, some or all of the cost of transporting the deceased may be reimbursed. For a non-service-connected (NSC) death, VA may pay up to \$300 toward burial and funeral expenses, and a \$300 plot-interment allowance. If the death occurred while the veteran was in a VA hospital or under VA-contracted nursing home care, some or all of the costs for transporting the deceased's remains may be reimbursed.

The main research questions include: 1) what is the comparison of the VA burial allowance to legislative intent?; 2) How does VA's current burial allowance compare to the average cost of burial in the private sector?; 3) Is the current policy adequate and reasonable for the future, and if not, what are the alternatives.

The primary findings are:

- Since 1990, funeral costs have increased at a rate higher than the average of all other prices. Adjustments to the burial and plot allowances have occurred infrequently since legislative enactment in 1973 and have not kept pace with inflation.
- In 1973, the SC burial allowance covered 72 percent of funeral costs, the NSC burial allowance covered 22 percent of funeral costs, and the plot allowance covered 54 percent of burial plot costs.
- By 2007, the value of these allowances has decreased significantly and now represents only 23 percent of funeral costs for the SC burial allowance, 4 percent of funeral costs for the NSC burial allowance, and 14 percent of burial plot costs for the burial allowance.
- Significant increases in the allowances are necessary to restore the value of these important benefits to original levels. H.R. 3249 in 2007 proposed to address the erosion of these benefits. Nevertheless, a policy that establishes a basis for assessing the value

of allowances and a schedule for the periodic assessment of the allowances is necessary to prevent further erosion of these benefits.

E. Recommendations

The following recommendations are based on the data collected and analyzed for this program evaluation, are consistent with the legislative purpose of the program, and are designed to improve program outcomes in service to America's veterans and their families.

I. Adequacy and reasonableness of the 75-mile Service Area Standard

<u>Key Finding</u>: Very few areas will meet the criteria for a new national cemetery between 2010 and 2030 <u>regardless</u> of whether a 75-, 65-, or 55-mile standard is in effect, because areas will not meet the 170,000 veteran population threshold.

<u>Key Finding</u>: Several areas with relatively large numbers of veterans (i.e., more than 110,000) will remain unserved by a VA burial option if the veteran population threshold is not reduced.

<u>Key Finding</u>: Lowering the population threshold to 110,000 would allow several areas to "qualify" for a new national cemetery under <u>any</u> of the three distance alternatives.

 Recommendation #1: Retain the 75-mile service area standard for the construction of new national cemeteries, but reduce the population threshold to 110,000 to allow more unserved communities to qualify.

<u>Key Finding</u>: The five largest concentrations of veterans in 2010 not served by a VA burial option under the current 75-mile standard are centered in and around Charleston, WV, Schuyler, NE, Tallahassee, FL, La Crosse, WA, and Houghton Lake, MI.

Recommendation #2: Between 2010 and 2015, construct new national cemeteries, or assist states in constructing their own state veteran cemeteries at or near the following locations, all of which meet a criterion of 110,000 unserved veterans within a 75-mile radius: Charleston, West Virginia and Schuyler, Nebraska.

<u>Key Finding</u>: No location in the U.S. will meet the criteria for the establishment of a new national cemetery under the current service area standard (i.e., 75 miles, 170,000 veterans) until 2015, at which time only one community, the St. Louis, MO metropolitan area, will reach the population threshold of 170,000, due to the closing of Jefferson Barracks National Cemetery (scheduled to close in or around 2017). GIS analysis revealed that the optimal Census tract to host a new cemetery for this region (if the current cemetery is not expanded) is at or near Crystal City, MO.

 Recommendation #3: Between 2015 and 2020, construct a new national cemetery, or assist the state with construction of a state veterans cemetery at or near Crystal City, Missouri to replace Jefferson Barracks National Cemetery scheduled to close in or about 2017.

<u>Key Finding</u>: Based on current Geographic Information Systems (GIS) technology, the program evaluation concluded that VA's current methodology of measuring the percent served by a VA burial option needs to be enhanced in several ways.

- Recommendation #4: Revise the method used by NCA to calculate the annual performance measure of percent of veterans served by a VA burial option to a method similar to that used for this evaluation. The revised methodology will integrate new capabilities offered by 21st century GIS technology to provide needed improvements in measurement precision. Specifically:
 - Use Census tracts, rather than counties, as the primary geographic unit to test and identify potential locations for new national cemeteries and to count the percent served.
 - Use the Thessien polygon approach to deal with the issue of overlapping service areas, ensuring veterans are never double-counted when calculating NCA's performance measure.
 - Replace 'decision rules' for counting/not counting veterans in counties bisected by a service area with a proportional overlay method.

II. Cremation only as an acceptable burial option

<u>Key Finding</u>: For those preferring burial in a national/state veterans cemetery, about 68 percent would accept cremation if it was the only burial option available at the nearest national/state veterans cemetery.

- Recommendation #5A (option 1): Adjust the formula for calculating percent served by a VA burial option by classifying two-thirds of veterans living exclusively within 75 miles of a cremation-only national/state veterans cemetery as served and one-third as unserved.
- Recommendation #5B (option 2): Track and set targets for two performance measures related to percent of veterans served by a VA burial option: 1) percent of veterans within 75 miles of a national or state veterans cemetery offering both a casketed and cremation burial option and, 2) percent of veterans within 75 miles of a national or state veterans cemetery offering only a cremation burial option.

III. Factors influencing burial choice

<u>Key Finding</u>: The nationally representative survey conducted for the current evaluation found that VA meets the burial choices of almost all veterans, as approximately 85 percent of veterans plan to select casket or cremation at their time of need. Of the remaining veterans, 12 percent either do not know their burial plans or skipped answering the question on the survey, leaving only 3 percent of veterans indicating mausoleum as a burial choice.

 Recommendation #6: Maintain current information on veteran burial preferences by conducting recurrent surveys of a representative sample of the veteran population at the MSN and national level every three to five years.

IV. Methods by which veterans and their families access information on VA Burial Benefits

<u>Key Finding</u>: While only one out of six World War II veterans selected VA's Web site as a preferred source of information about burial benefits, over three out of four Gulf War veterans selected the Web as a preferred choice.

 Recommendation #7: Develop an interactive web-based tool targeting outreach to younger veterans and their family members, so that potential beneficiaries could enter information, and then get an explanation of the burial benefits to which they are eligible, including ones currently unknown to many.

V. Identify and evaluate challenges in meeting the National Shrine mandate

<u>Key Finding</u>: The number of interments in columbaria at national cemeteries is expected to quadruple by 2030. As a result, a separate performance measure for columbaria is needed.

<u>Key Finding</u>: The six existing performance measures address the key components outlined in the national shrine definition, covering both the tangible and intangible aspects. These performance measures are supplemented by the national cemetery operational standards and measures that currently guide cemetery directors and staff on necessary maintenance and care.

<u>Key Finding</u>: NCA's annual survey of next of kin and funeral directors has two limitations. The first is that data are collected from next of kin who interred a loved one in a national cemetery in the past year. Opinions of next of kin who return to the cemetery more than one year after the interment are not captured and their perceptions of the cemetery may be different. Data collected from next of kin at different time periods would provide better information on which to base policy changes. A second limitation of the annual survey is that data are not collected for closed cemeteries with low interment activity.

- Recommendation #8: Develop a new performance measure to assess satisfaction with columbaria and measure it on the National Cemetery Satisfaction Survey. The specific measure is: "Increase the percent of respondents rating the quality of the columbaria as excellent."
- **Recommendation #9:** Review strategic targets of 100% to reset these targets as these performance levels are not achievable.
- Recommendation #10: Expand the annual Survey of Satisfaction with National Cemeteries as described in Recommendations 10A and 10B below.
 - Recommendation #10A: Expand the sample of the Survey to include next of kin who interred a veteran or family member in a national cemetery within the past 5 years.
 - Recommendation #10B: Conduct annual intercept surveys of visitors at closed cemeteries to collect data from these visitors. Enumerators would administer a short survey (approximately 10 questions) to a random sample of visitors. Depending on the expected number of visitors, the data collection period could range from one day to one week.

VI. Adequacy and Impact of symbolic expressions of remembrance

<u>Key Finding</u>: All four symbolic expressions of remembrance (i.e., U.S. Flag, headstone or marker, PMC, and military honors) were rated either important or very important by at least three out of four veterans on the survey. A greater percentage of veterans rated the U.S. flag and the headstone/marker benefit as important, compared to the PMC and military honors.

<u>Key Finding</u>: When veteran survey respondents were asked for aspects of the headstone or marker that are desirable but are not currently available, veterans indicated it would be important to expand the option to place military symbols on the markers (54 percent of the respondents indicated it was important or very important) and to increase the area for personal inscription (47 percent of the respondents indicated it was important or very important).

<u>Key Finding</u>: Focus group participants including both funeral directors and next of kin mentioned the high symbolic value that empty shell casings have for the families of veterans.

- Recommendation #11: Provide two additional memorialization benefits that
 veterans asked for in the survey, that include: 1) room for military insignia on the
 headstone or marker, and 2) additional room for appropriate personal inscriptions on
 the headstone or marker.
- Recommendation #12: Officially request that DoD offer empty shell casings following the military honors ceremony to next of kin as a standard protocol.
- Recommendation #13: Conduct a conjoint analysis study (i.e., decision-making task) with a large sample on the value of new symbolic expressions that may be offered, to further build on the pilot data gathered via conjoint analysis for this study¹.

VII. Examine impact of Presidential Memorial Certificate

<u>Key Finding</u>: On the survey, 80 percent of veterans indicated that the concept of the PMC benefit makes them feel that the country appreciates the service of veterans to our nation.

<u>Key Finding</u>: In focus groups, only one next of kin out of the 37 participants knew about the PMC benefit. In the focus groups with funeral directors, only 2 out of 29 knew about the PMC benefit.

- Recommendation #14: Conduct an outreach campaign to better promote the PMC among veterans, veteran family members, and funeral directors.
- Recommendation #15: Develop an Internet Web-based tool so that next of kin and friends can apply on-line for a PMC, which would raise the visibility and value of the PMC.

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¹ See appendix for the pilot data gathered via conjoint analysis.

VIII. Feasibility of Cash Payment in Lieu of Burial in National Cemetery

<u>Key Finding</u>: Data show that under the current standard VA would need to construct and maintain one new national cemetery in 2015 at a NPV cost of \$77,998,000. The fiscal cost for one cemetery was far exceeded by the total cost of the cash payment program under three of four different cash payment benefit scenarios. It was determined that the point at which the cost of new cemetery construction and the cost of the cash payment program are equal assumes only 5 percent of those eligible for the program would participate. This level of participation is not realistic. In conclusion, after examining cash payment alternatives, the economic analysis shows that VA should continue to build and maintain national cemeteries as well as fund state veteran cemeteries.

 Recommendation #16: Continue to build and maintain national cemeteries and fund state veteran cemeteries rather than adopt an alternative benefit using cash payments.

IX. Impact of a Financial Means Test on Eligibility for Burial Allowance

<u>Key Finding</u>: Tests at different income thresholds revealed that, as expected, the greatest savings to the government would be realized if the threshold (below which benefits would be provided) was set at the lowest proposed income level, \$50,081 in 2008 dollars. At this income level, the government would save over 34.5 million dollars per year if the claims paid rate stayed constant. At the highest threshold income level (\$81,382), the government would save almost 13.7 million dollars per year. However, the loss in benefits to veterans' families per year would be \$38.2 million and \$19.1 million, respectively, at these two income levels.

 Recommendation #17: Do not implement a financial means test at the current time, since existing data do not support VA moving forward with implementation.

X. Assessment of Burial Allowance

<u>Key Finding</u>: Since 1990, funeral costs have increased at a rate higher than the average of all other prices. Adjustments to the burial and plot allowances have occurred infrequently since legislative enactment in 1973 and have not kept pace with inflation.

<u>Key Finding</u>: In 1973, the SC burial allowance, NSC burial allowance and plot allowance paid for on average 72 percent of funeral costs, 22 percent of funeral costs and 54 percent of burial plot costs, respectively.

<u>Key Finding</u> By 2007, the value of these allowances has decreased significantly and now represent 23 percent of funeral costs for the SC burial allowance, 4 percent of funeral costs for the NSC burial allowance, and 14 percent for burial plot cost.

- Recommendation #18: Establish a basis for each allowance, which should be a percentage of the average cost of a funeral, burial, and burial plot. As outlined above, these percentages were estimated to be the following in 1973:
 - SC allowance 72 percent of funeral costs
 - NSC allowance 22 percent of funeral costs
 - Plot allowance 54 percent of burial plot costs.

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The adjusted allowances proposed H.R. 3249 provide another set of percentages:

- SC allowance 48 percent of funeral costs
- NSC allowance 15 percent of funeral costs
- Plot allowance 35 percent of burial plot costs.
- Recommendation #19: Develop an annual schedule for review and adjustment of the allowances for funeral, burial, and burial plot costs using the Consumer Price Index for funeral expenses maintained by the Bureau of Labor Statistics.

CHAPTER 1. INTRODUCTION

This report presents the findings from a formal program evaluation of the Veterans Affairs Burial Benefits Program (VABBP), sponsored by the Department of Veteran Affairs' (VA) Program Evaluation Service within the Office of Policy and Planning (OPP), and conducted by ICF International. The program evaluation employed state-of-the-art methodologies to provide empirically sound and statistically valid data to address two overarching goals:

- Determine whether the program is achieving its expected outcomes (e.g., meeting the burial needs of veterans and their family members; maintaining national cemeteries as national shrines).
- Identify the program's impact on veterans and their families (e.g., providing veterans with adequate information on burial benefits; providing meaningful symbolic expressions of remembrance).

To address the study objectives, the evaluation used a multi-method approach to collect and analyze a wide array of data. This included conducting the 2008 Veterans Burial Benefits Survey, which yielded data from 16,717 veterans. In addition, focus groups and structured interviews with family members and funeral directors were conducted at five locations across the country. The evaluation used a variety of data analysis techniques such as geographic information systems analysis (GIS), regression, conjoint analysis, and secondary data analysis to provide information to answer each of the research questions.

This chapter provides an overview of the VA Burial Benefits Program, presents the objectives and primary research questions of the evaluation, and specifies the approach, design, and methodologies implemented to conduct the evaluation.

A. The VA Burial Benefits Program

The mission of the VA Burial Benefits Program—administered by the National Cemetery Administration (NCA) and the Veterans Benefits Administration (VBA)—is to honor veterans and their families with burial benefits that commemorate their service to our nation. The VA Burial Benefits Program accomplishes this mission by:

- Interring eligible veterans and their family members in national cemeteries and maintaining the cemeteries as National Shrines
- Providing headstones and markers to veterans anywhere they are interred (e.g., national, state, public, and private cemeteries)
- Providing Presidential Memorial Certificates to families and friends of deceased, eligible veterans
- Supporting the burial options of veterans through the State Cemetery Grants Program
- Offering burial and plot allowances to veterans that meet eligibility requirements.

NCA oversees the operations, improvement, and planning for 125 national cemeteries and 33 other cemetery properties across the country. NCA is committed to providing timely and compassionate services to veterans and their families by meeting their burial needs and by offering symbolic expressions of remembrance. Toward that end, NCA operates the Memorial

Programs Service, which oversees both the administration and processing of government headstones/markers and Presidential Memorial Certificates (PMC). VBA administers cash payments to families of eligible veterans for burial (burial and plot allowances), furnishes U.S. flags to next of kin, and disseminates information to the veteran community on burial benefits.

Currently, VA manages 2.8 million gravesites at 158 properties, including 125 national cemeteries and 33 other cemetery properties. Veterans of every war and conflict in America's history, from the Revolutionary War to the Global War on Terror, are interred in VA's national cemeteries.

A Brief History of National Cemeteries and Burial Benefits

On July 17, 1862, President Abraham Lincoln signed legislation that authorized the creation of national cemeteries "...for the soldiers who shall die in the service of the country." In that year, fourteen national cemeteries were established. About 80 years later, Public Law 80-526, enacted May 14, 1948, accorded the privilege of burial in a national cemetery to: (1) those who died while honorably serving on active duty in the Armed Forces; (2) all veterans who were discharged honorably; (3) citizens of the United States who served honorably in the Armed Forces of an allied nation during war; and (4) the spouse, widow/widower, and dependent children of those eligible. In September 14, 1959, Public Law 80-260 amended the legislation of 1948 to permit national cemetery burial for any member of a reserve component (including service in the Reserve Officers Training Corps/ROTC) whose death occurred under honorable conditions while serving on active or authorized duty.

The National Cemeteries Act of 1973 (Public Law 93-43) transferred responsibility for 82 national cemeteries from the Department of the Army to the Department of Veterans Affairs. Further, the law directed VA to establish uniform eligibility criteria and develop plans for meeting the burial needs of veterans.

Overview of Current Set of Veteran Burial Benefits

The current set of burial benefits ¹ includes a gravesite in one of 125 national veteran cemeteries, opening and closing of the grave, perpetual care, a headstone or marker, a U.S. flag, and a PMC. A headstone or marker is also provided to veterans that choose burial in a state or private cemetery or other appropriate burial location. These benefits are available at no cost to the family. VA funds the establishment, improvement, and expansion of state veteran cemeteries operated and maintained by states. VA also provides a burial allowance and the reimbursement of certain burial expenses for veterans who meet eligibility requirements. The amount of the allowance depends on whether the cause of death is due to a service-connected condition for which a veteran receives disability compensation benefits. For a service-connected death, VA will pay an allowance up to \$2,000 toward burial expenses. If the veteran is buried in a national cemetery, some or all of the cost of transporting the deceased may be reimbursed. For a non-service-connected death, VA will pay up to \$300 toward burial and funeral expenses, and a \$300 plot-interment allowance. If the death occurred while the veteran was in a VA hospital or under VA-contracted nursing home care, some or all of the costs for transporting the deceased's remains may be reimbursed.

tle 38 Part 38 of the Code of Federal Regulations (38 CFR 38, all sections) descri

¹ Title 38, Part 38 of the Code of Federal Regulations (38 CFR 38, all sections) describes the burial benefits for which veterans may be eligible.

Burial benefits available for spouses and dependents buried in national and state veteran cemeteries include burial with the veteran, perpetual care, and the spouse or dependent's name and date of birth and death inscribed on the veteran's headstone, at no cost to the family.

B. The Objectives of the Evaluation

The Department of Veterans Affairs (VA) conducts formal program evaluations to systematically assess the performance of its programs and services to veterans and their families (Title 38 of the Code of Federal Regulations, Part 1, section 15 (38 CFR 1.15). VA also collects performance measurement data on each of its programs on an annual basis, including the VA Burial Benefits Program. As part of its focus on performance measurement, VA also participates in the Program Assessment Rating Tool (PART) assessment conducted by the Office of Management and Budget (OMB). In 2002, OMB determined that the Burial Benefits program was "moderately effective." The review indicated that the program provides a valuable service to veterans and eligible family members, meets its performance goals, and continues to improve service. The review, however, indicated that the program lacks a way to define and measure national shrine commitment needs and performance. As a result, VA has indicated it will be "adopting more performance measures to address all burial benefits and the national shrine commitment; and, identifying methods to strengthen and link performance, budget, and accountability." ²

It is within this context of building on VA's performance measurement program, proactively responding to the latest PART scores, and fulfilling the requirements of the Government Program Results Act (GPRA) of 1993 as well as other regulations and law that the Office of Policy and Planning initiated the present evaluation of the VA Burial Benefits Program. Specifically, the program evaluation supports VA's fulfillment of the requirements of P.L. 103-62, the Government Performance and Results Act of 1993, and Title 38 USC, §527, Evaluation and Data Collection.

The first goal of the evaluation assessed whether the VA Burial Benefits Program is meeting its stated objectives to:

- Ensure that the burial needs of veterans and eligible family members are met
- Provide veterans and their families with timely and accurate symbolic expressions of remembrance
- Ensure that national cemeteries are maintained as shrines dedicated to preserving our Nation's history, nurturing patriotism, and honoring the service and sacrifice of veterans.

The second goal of the evaluation measured the impact of the program on veterans and their family members.

VA's Office of Policy and Planning, the National Cemetery Administration, and the Veterans Benefits Administration will use the information to: (1) Assess the adequacy and effectiveness of the current policies and procedures that comprise the VA Burial Benefits Program; (2) Estimate the type and extent of burial needs for the future; (3) Assess the need for or interest in new

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² http://www.whitehouse.gov/omb/expectmore/detail/10000462.2002.html.

symbolic expressions of remembrance and/or modify the current symbolic expressions available; and (4) Assess the need for additional performance measures.

C. Overview of the Evaluation Design

The evaluation used primary and secondary data sources such as stakeholder interviews, a survey of veterans, economic and cost analyses, focus groups, geographic information system analyses, strategic performance measures, VA policies, extant data, and legislative reports. The largest source of primary data resulted from the 2008 Veterans Burial Benefits Survey (VBBS), which collected data from over 16,717 veteran respondents. Throughout the evaluation, geographic region, defined by NCA's five Memorial Service Networks (MSNs), was used in analyses to determine the program's outcomes on different geographic regions of the veteran community. Appendix I details the methodology used for sampling, survey administration, survey analyses, non-response analysis, and reporting for the 2008 Veterans Burial Benefits Survey.

Primary Research Questions

Ten primary research goals and associated questions were addressed by this program evaluation and are summarized below. The research questions are organized by thematic headers, which correspond to the chapter titles used in the report to present the evaluation findings.

Ensuring Burial Needs Are Met

1. Adequacy and reasonableness of the 75-mile Service Area Standard

<u>Current Standard</u>: The current VA policy is to establish new national cemeteries in areas where the unserved veteran population is at least 170,000 within a 75-mile radius.

<u>Research Questions</u>: The evaluation examined the adequacy and reasonableness of the current access standard that considers the veteran population served in a specific geographic area where there is a national cemetery within a 75-mile radius. The research questions include:

- Is this policy adequate and reasonable for the future?
- What would be the budget impact and VA policy implications of an alternative access policy and different access scenarios?
- What is the ideal standard?

2. Cremation only as an acceptable burial option

<u>Current Situation</u>: VA's service area standard is currently measured and defined as the percentage of veterans living within a 75-mile radius of an open national or state veterans cemetery, including national cemeteries which accept only cremated remains. The proportion of cremation-only cemeteries may increase in future years as the inventory of casket gravesites at existing national cemeteries declines, and some cemeteries close to new casketed interments. This trend, however, is balanced by the likelihood that VA will continue to build new national cemeteries to maximize the

percentage of veterans served, expand existing cemeteries by acquiring adjacent land, and introduce new burial options for veterans as appropriate. However, the service standard leaves open the issue of whether cremation-only cemeteries are "serving" the veteran community in cases where the veteran may not prefer cremation.

<u>Research Questions</u>: The evaluation set out to determine whether internment of cremated remains only, either in ground or in columbaria, is an acceptable burial option for veterans when cremation is the only burial option available at a nearby national/state veterans cemetery. The research questions include:

- What percentage of veterans would consider themselves served and unserved if cremation was their only burial option at a national or state veterans cemetery? Are the two burial options of casket and cremation comparable?
- What are the demographic and social profiles of veterans who would consider themselves served and unserved by a cremation-only burial option?
- What are the implications of the answers to these questions for future VA burial program costs and activities?

3. Factors Influencing Burial Choice

<u>Current Situation</u>: VA provides burial options for veterans who select casket and cremation. To plan for providing sufficient burial options for veterans, VA must stay current with the burial preferences of veterans, and the factors that influence them (e.g., region of the country, etc.).

Research Questions: The research questions include:

- What is the role of religion, culture, familial practices, generational differences, and geographic location on veterans' burial choices?
- What would be the impact on VA if new services were implemented to address veteran preferences not currently served?

4. Methods by which veterans and their families access information on VA Burial Benefits

<u>Current Situation</u>: The Improvement of Veterans Outreach Programs, enacted on December 27, 2001 (Public Law 107-103), sought to increase the type and level of outreach programs provided by VA. Additionally, the Veterans' Housing Opportunity and Benefits Improvement Act of 2006 mandates that VA conduct outreach efforts so that no veterans are denied awareness of the benefits for which they may be eligible. This situation presents a challenge as well as an opportunity for VA: how to communicate information about burial benefits in a way that is best for a particular audience. The program evaluation set out to identify the primary sources veterans, families, and funeral directors use to get information on VA burial benefits, the demographic factors related to accessing sources of information on VA burial benefits, and most importantly, the ways to best reach various veteran subpopulations.

Research Questions: The research questions include:

- What are the primary sources veterans, families, and funeral directors use to get information on VA burial benefits?
- What are the demographic factors related to accessing sources of information on VA burial benefits?
- What are the barriers and enablers in accessing sources of information on VA burial benefits by demographic variables?
- What is the effectiveness of current VA outreach strategies?
- What are the opportunities for increasing outreach effectiveness and penetration?
- What are the specific recommendations?
- What policy changes would be needed?
- What are the cost-effectiveness considerations and costs based on analysis for implementing the selected recommendations?

Memorialization of Veteran Service to Our Nation

5. Identify and evaluate challenges in meeting National Shrine mandate

<u>Current Situation</u>: A legislative mandate is that "all national and other veterans' cemeteries under control of the National Cemetery Administration (NCA) be considered national shrines (Title 38, Veterans Benefits, Part II General Benefits, Chapter 24 National Cemeteries and Memorials)." In accordance with the Government Performance Results Act (GPRA), NCA has established a set of performance measures for the National Shrine mandate to monitor and report its results in meeting the mandate for all of its national cemeteries.

Research Questions: The research questions include:

- Are the current set of performance measures adequate in terms of their validity (i.e., measure the concepts as intended), completeness (i.e., measure all areas of performance that relate to the mandate), and quality?
- What are the challenges inherent in meeting and maintaining the National Shrine mandate (e.g., increasing interments, aging infrastructure, etc.)?

6. Adequacy and impact of symbolic expressions of remembrance

<u>Current Situation</u>: VA provides a number of symbolic expressions of remembrance for veterans and their families, including headstones, markers, and PMCs, as well as coordination with the Department of Defense (DoD) or local veteran volunteers to provide military funeral honors.

Research Questions: The research questions include:

- What is the adequacy and impact of the current set of symbolic expressions of remembrance?
- What additional symbolic expressions can VA provide?
- What is the impact of policy changes to provide additional symbolic expressions of remembrance?

7. Examine impact of Presidential Memorial Certificate

<u>Current Situation</u>: A PMC is an engraved paper certificate, bearing the current President's signature, to honor the memory of honorably discharged deceased veterans. Eligible recipients include the deceased veteran's next of kin and loved ones. The PMC was started by President Kennedy in March of 1962. Since that time, 11.9 million PMCs have been distributed.

Research Questions: The research questions include:

- What is the adequacy and impact of the current PMC on perceptions of veterans and their loved ones?
- What is the current system of generating PMCs?
- Regarding the new system of generating PMCs: Is it necessary?
- What would be the impact of introducing new processes to increase the accuracy of information provided on PMCs?

Monetary Burial Benefits

8. Feasibility of cash payment

<u>Current Situation</u>: The National Cemetery Expansion Act of 2003 authorized VA to open six new national cemeteries within four years after the enactment to serve veterans in areas of the U.S where the greatest number of veterans did not have access. The cost to construct the six new cemeteries is approximately \$156 million as well as an additional \$25 million per year in operating costs. As an alternative policy, VA could consider compensating veterans and their families by implementing a cash payment program made on behalf of veterans not residing within 75 miles of a national or state veterans cemetery at the time of their death. This policy, if supported by VA, would need to be enacted by legislation.

Research Questions: The research questions include:

- What burial services could VA provide if it opened no new national cemeteries or funded state cemeteries?
- For those who live beyond a 75-mile service standard, would they accept cash payments in lieu of burial?

- What is the feasibility of offering a cash payment in lieu of burial in a national or state veterans cemetery where they are not available?
- What would be the intent, eligibility criteria, and timing of a cash payment?
- What does the cost-benefit analysis reveal?
- What is the comparison of the cost of new cemeteries vs. cash payment?

9. Impact of a financial means test on eligibility for burial allowance

<u>Current Situation</u>: VA burial allowances are partial reimbursements of eligible veterans' burial and funeral costs. Currently, there is no financial means testing for burial allowance eligibility; that is, the income and assets of veterans are not taken into account.

Research Questions: The research questions include:

- What does a review of other government means tests find?
- What testing of financial means thresholds shows for the VA Burial Benefits program?
- What is the number of people affected at each of the three thresholds?
- What is the estimated cost savings?
- What are the estimated administrative costs to VA?
- What is the estimated decrease in the number of people applying due to amount of paperwork or nature of information being requested?

10. Assessment of burial allowance

<u>Current Situation</u>: VA burial allowances are partial reimbursements for an eligible veteran's burial and funeral costs. The amount of the allowance depends on whether the cause of death is due to a service-connected condition for which a veteran receives disability compensation benefits. For a service-connected death, VA will pay an allowance up to \$2,000 toward burial expenses. If the veteran is buried in a national cemetery, some or all of the cost of transporting the deceased may be reimbursed. For a non-service-connected death, VA will pay up to \$300 toward burial and funeral expenses, and a \$300 plot-interment allowance. If the death occurred while the veteran was in a VA hospital or under VA-contracted nursing home care, some or all of the costs for transporting the deceased's remains may be reimbursed.

Research Questions: The research questions include:

What is the comparison of the VA burial allowance to legislative intent? What was the original legislative intent of the burial allowance? What is the comparison of the legislative intent with the current burial allowance?

- What is the comparison of the VA burial allowance to the average cost of burial in the private sector? What are the average burial costs in the private sector? How do the current burial costs compare to the VA burial allowance?
- How do other government burial benefits affect the VA burial allowance? What other government burial benefits are available to veterans and their families? What is the impact of government benefits on the adequacy of VA's burial allowance?
- Is the current policy adequate and reasonable for the future, and if not, what is the best policy?

Exhibit 1-1 provides a "locator" of the ten research questions associated with each chapter in this report.

Exhibit 1-1.		
Primary Research Questions		
Research Questions		
Chapter 3 – Ensuring Burial Needs Are Met		
Adequacy and reasonableness of the 75-mile Service Area Standard		
Cremation only as an acceptable burial option		
Factors influencing burial choice		
Methods by which veterans and their families access information on VA Burial Benefits		
Chapter 4 – Memorialization of Veteran Service to Our Nation		
Identify and evaluate challenges in meeting National Shrine mandate		
Adequacy and impact of symbolic expressions of remembrance		
Examine impact of Presidential Memorial Certificate (PMC)		
Chapter 5 – Monetary Burial Benefits		
Feasibility of cash payment		
Impact of a financial means test on eligibility for burial allowance		
Assessment of burial allowance		

D. Overview of Data Sources, Methods, and Analytical Techniques

The main methods used in the evaluation included the following data collection activities:

- Stakeholder interviews: Discussions with program officials in the Department of Veterans Affairs Central Office (VACO), NCA, and VBA; discussions with Veteran Service Organizations; and discussions with State Director of Veterans Affairs and Director of State Veterans Cemeteries, VA Advisory Committee on Cemeteries and Memorials as well as the International Cemetery, Cremation and Funeral Association (ICCFA).
- Geographic information systems (GIS): Data analysis of distance and drive time standards to national cemeteries for veterans.
- Survey: Mailed questionnaire to 38,734 veterans born between 1918 and 1987 of all service branches and all service/peacetime periods from World War II to the Global War on Terror.

- Focus groups (and/or structured interviews): Small group discussions or structured interviews with 37 next of kin and 29 funeral directors across the country having experience with interment of veterans in national, state, and private cemeteries.
- Conjoint analysis: Decision analysis procedure with 8 volunteers from next of kin focus groups.
- Secondary analysis: Analysis of various public use data files (e.g., 2001 National Survey of Veterans).

Each of these is discussed below.

Stakeholder Interviews

The Office of Policy and Planning organized a series of meetings with various stakeholders and with various potential data source providers. The points discussed included:

- Sources of data: Stakeholder interviews and discussions were held over the types of data (e.g., secondary data sets, primary data collection, quantitative or qualitative measures) needed for the evaluation, the availability of data sources, the approximate proportion of veterans represented in various data sources, the representativeness of veterans among the data sources, and costs associated with obtaining veteran contact data.
- Scope of the evaluation and policy: Stakeholder interviews and discussions were held with senior representatives from NCA and VBA, with state veteran cemetery directors, and with representatives from outside organizations, that included four Veteran Service Organizations (VSOs), VA's Advisory Committee on Cemeteries and Memorials and the International Cemetery, Cremation, and Funeral Association.

2008 Veterans Burial Benefits Survey

A total of 38,734 veterans were mailed an invitation letter signed by the Assistant Secretary for Policy and Planning of the Department of Veterans Affairs informing them of their selection to participate in a national survey concerning burial benefits. One week later, a mail survey was sent to the sample of veterans requesting that they complete the survey by mail or by using the Web option and password provided to them. A pre-paid postage Business Reply Envelope (BRE) was included in the mailing packet for survey replies. An instruction sheet was provided to respondents containing information for completing the survey using mail and Web modes. The survey contained 43 items (see Appendix III). The survey was fielded during the 8 week period from January 2, 2008 to February 29, 2008.

The mailed survey was conducted using the Total Design Survey method (Dillman, 1981, see Appendix I) to maximize the response rate. The survey operational schedule was conducted as follows:

- Mailing #1 A prenotification letter to 38,734 veterans notified participants about the burial benefits survey.
- Mailing #2 A survey package (i.e., cover letter, survey, business reply envelope, and Web survey instructions) comprised the initial survey mailing, one week after Mailing #1...

- Mailing #3 A reminder postcard was mailed two weeks after the survey package.
- Mailing #4 A second wave survey package (i.e., second wave cover letter, survey, business reply envelope, and Web survey instructions) was mailed to non-respondents two weeks following the reminder postcard.
- Mailing #5 A final reminder postcard was mailed about two weeks after the second wave survey package.

Focus Groups (and/or Interviews)

The program evaluation gathered focus group and/or interview data from next of kin and funeral directors having experience with interments of veterans. The focus groups were used to gather in-depth information about the choices, decisions, and experiences of veterans and their families concerning burial in national, state, public, and private cemeteries. Ten focus groups were conducted (five with next of kin and five with funeral directors) with a total of 66 participants, including 37 next of kin and 29 funeral directors across the United States.

Focus groups with next of kin and funeral directors were conducted at five sites that included: Springfield VA, Tampa FL, Minneapolis MN, Denver CO, and Los Angeles CA from January 30-March 29, 2008. Sites were selected based on their relative proximity to both national and state veteran cemeteries and location within their NCA MSN region.

Each session transcript was analyzed to identify salient themes and "sub-theme findings", which were anecdotal responses that appeared to be potentially meaningful. The transcript contained notable quotations that supported the findings and the associated themes (See Appendix V for details on the focus group methodology and findings).

Conjoint Analysis

Conjoint analysis was used to examine the additional types of symbolic expressions of remembrance veterans and their families would like to see offered. This type of analysis is widely used in marketing research to assess consumer preferences when presented with a large number of different characteristics. For example, conjoint analysis was used to determine veterans and veteran family member preferences for (1) PMCs available in three different design formats; (2) medals commemorating the veterans' period of service available in 5 different designs; and (3) headstones/markers available in one of 4 different materials. The number of possible combinations of these items is: $3 \times 5 \times 4 = 60$. The total number of comparisons that would have to be made by the veterans taking two items at a time is over 3,500. Conjoint analysis allows participants to make all possible comparisons (in the aggregate) with a minimum number of choices in order to provide data on preferences.

Eight next of kin respondents were selected to participate in the conjoint analysis task, which took approximately 5 to 10 minutes of each respondent's time. Results from this pilot analysis are reported in the Appendix.

Secondary Data

Several secondary data sources were used in the program evaluation. These included:

Current NCA budget levels for cemetery operations

CHAPTER 1. INTRODUCTION

- Current NCA capital budget
- VBA operational cost data
- High-level cost data for initial development of recent and planned national cemeteries
- Relevant legislation, regulations, operating procedures, strategic plans, and reports
- Burial, funeral, and related costs in the private sector
- VBA Net-Worth, VBA Claims Records (2000-2007), Service-Connected Death Burial Allowance Records.

Other data sources included secondary data and analyses from the 2001 National Survey of Veterans (NSV) and a mapping analysis of distances from addresses of current veterans to national and state veteran cemeteries using geographic information systems (GIS) technology.

The procedures for data collection, included instruments, mailing materials, and instructions, were submitted to the Office of Management and Budget (OMB) for review in July 2007. The pre-notification letter, survey cover letters, and introduction to the survey (see Appendix III) reiterated to participants that their responses were voluntary, that their individual responses would be kept confidential, and that participating in the survey would not affect their eligibility for any benefits. The research plan and data collection instruments were approved by OMB in October 2007.

E. Report Overview

The remaining chapters of the report include:

Chapter 2: Program Measurement

Chapter 3: Ensuring Burial Needs Are Met

- Adequacy and reasonableness of 75-mile service area standard
- Cremation only as an acceptable burial option
- Factors influencing burial choice
- Methods by which veterans and their families access information on VA Burial Benefits

Chapter 4: Memorialization of Veteran Service to Our Nation

- Identify and evaluate challenges in meeting National Shrine mandate
- Adequacy and impact of symbolic expressions of remembrance
- Impact of Presidential Memorial Certificates

Chapter 5: Monetary Burial Benefits

Feasibility of cash payment

CHAPTER 1. INTRODUCTION

- Impact of a financial means test on eligibility for burial allowance
- Assessment of burial allowance

Chapter 6: Findings and Recommendations

Appendix (accompanying volume)

- I Sampling and non-response analysis
- II Technical appendices to chapters 3-5
- III 2008 Veterans Burial Benefits Survey
- IV Survey tabulation
- V Focus group materials
- VI Additional study data
- VII Abbreviations
- VIII Glossary
- IX Bibliography

The next chapter, Chapter 2, presents the statutory intent of the VA Burial Benefits Program (VABBP) and its evolution from the founding of the United States to the present and discusses the intended program outcomes and measures used to determine whether the program outcomes are being achieved.

As of September 30 of 2007, VA managed 2.8 million gravesites at 158 properties, including 125 national cemeteries and 33 other cemetery properties. Benefits provided by VA to eligible veterans in addition to interment at those sites include financial support to offset funeral, burial and plot costs through burial and plot allowances. This chapter explains the statutory intent of the VA Burial Benefits Program (VABBP) and its evolution from the founding of the United States to the present and discusses the intended program outcomes and measures used to determine whether the program outcomes are being achieved.

The three sections of this chapter are:

- Statutory intent Goals
- Program outcomes and measures
- Measurement of outcomes.

Each of these is discussed below.

A. Statutory Intent – Goals

Throughout their history, the American people and their representatives in Congress have sought to formally honor and memorialize the men and women who served in the military and sacrificed much for their country. With the growth of a national self-consciousness and identity, the importance of such tribute and honor has increased along with the legislation codifying it. To describe the current statutory intent of the VABBP, the evolution of that intent since the beginning needs to be explored.

The legislative history of the federal government dealing with veterans can be traced back to a few years before the U.S. Constitution was ratified, when the Continental Congress asked the states to develop criteria on how to provide for those injured and disabled during wartime. The states began discussions but took no immediate action, and Congress began funding pensions on a case by case basis in 1790. The origins of legislated burial benefits have their roots in the early veterans' pension and health care benefits that were gradually expanded to also cover burial needs. Major VA Congressional Acts, Public Laws and Executive Orders are presented in the table below so that the full context of the development of burial benefits can be appreciated.

Exhibit 2-1 below provides a chronology of the legislative history of the VA Burial Benefits Program.

Exhibit 2-1. Congressional Acts, Public Laws, and Executive Orders Affecting Veterans			
Date	Law/Rule/Order	Source	Intent
			Enacted general appropriation for
1790	An Act	Congress	pensions of \$96,979.72.

Exhibit 2-1. Congressional Acts, Public Laws, and Executive Orders Affecting Veterans				
Date	Law/Rule/Order	Source	Intent	
Date	Law/Kule/Oldel	Jource	Enacted first pension law covering	
			anyone wounded or disabled during	
			military service, stating that they shall be	
1792	An Act	Congress	taken care of at public expense.	
			Established domiciliaries and hospitals for	
			veterans. Took care of combat and non-	
1811	An Act	Congress	combat related health problems.	
		_	Granted service pension to veterans of	
1818	An Act	Congress	the Revolutionary War.	
		War	Made quartermaster responsible for burial	
		Department to	of (Union) Officers and Soldiers and for	
	General Orders No.	Army Quartermaster	keeping a register of all burials. Headboard to be placed at head of each	
1861	75	General	grave.	
1001	An Act to Define the	Ochiciai	grave.	
	Pay and Emoluments			
	of Certain Officers of			
	the Army, and for			
	Other Purposes			
	(Chapter 200,		Gave the President, through Section 18,	
1862	Statutes at Large)	Congress	the authority to buy national cemeteries.	
	Military Asylum for		Created asylums for Disabled Volunteer	
	the Permanently		Soldiers; the name was later changed to	
1865	Disabled (Chapter 91, Statutes at Large)	Congress	National Homes for Disabled Volunteer Soldiers (NHDVS).	
1005	91, Statutes at Large)	Congress	Designated funds and specific guidance	
	National Cemetery		for cemeteries (national cemetery sites	
	Act (Chapter 296,		were typically selected within regional	
1867	Statutes at Large)	Congress	departments by the Army Quartermaster).	
			Gave authority to Secretary of War to	
	Superintendents of		appoint as national cemetery	
	National Cemeteries		superintendents soldiers (officers or	
4070	(Chapter 173,		enlisted) who are discharged and who	
1872	Statutes at Large)	Congress	may be disabled.	
	Amendment to		Amended act to enable all honorably	
	National Cemetery Act (Chapter 257,		discharged soldiers and sailors who are destitute to be buried in national	
1872	Statutes at Large)	Congress	cemeteries.	
1072	Amendment to			
	National Cemetery		Amended act to enable all honorably	
	Act (Chapter 276,		discharged soldiers, sailors, and marines	
1873	Statutes at Large)	Congress	to be buried in national cemeteries.	
			Permitted the location and marking of	
		_	Confederate soldiers and their re-	
1906	"Foraker Bill"	Congress	interment into national cemeteries.	

	Exhibit 2-1. Congressional Acts, Public Laws, and Executive Orders Affecting Veterans			
Date	Law/Rule/Order	Source	Intent	
Date	Law/Kule/Oldel	Source	Provided payment of \$100 for funeral and	
			burial expenses for certain persons still in	
	Amendments to the		the military. Original intent was to avoid	
	War Risk Insurance		burying indigent soldiers in "potters'	
1917	Act	Congress	fields".	
1317	Act	Ourigicas	Expanded veteran benefits to include	
			disability compensation, insurance for	
			service persons and veterans, and	
1917	Veterans Benefits	Congress	vocational rehabilitation for the disabled.	
1017	Votorario Borionto	Congress	Began to administer benefits by three	
			federal agencies: the Veterans Bureau,	
			the Bureau of Pension of the Interior, and	
	Benefits		the National Home for Disabled Volunteer	
1920s	Administration		Soldiers.	
			Expanded the eligibility of those who can	
1920	Federal Statute 8913	Congress	be buried in national cemeteries.	
	American Battlefield			
	Monuments			
	Commission			
	42 Statute 1509		Administered cemeteries overseas and	
			for those Americans who died overseas in	
1923	Statutes at Large	Congress	World War I.	
	Set Service-			
	Connected (SC) and			
	Non Service-			
	Connected Burial		Set both Service-Connected (SC) and	
	Allowances Public		Non Service-Connected (NSC) burial	
1924	Law 68-242	Congress	allowances to \$100.	
	An Act Authorizing			
	the President to			
	Consolidate and			
	Coordinate any			
	Administrative			
	Agencies Dealing		Established Votorona Administration The	
	with Veterans	Congress	Established Veterans Administration. The	
1930	followed by Executive Order 5398	Congress President	three agencies administering benefits became "bureaus".	
1930	Adjusted Burial	FIGSIUGIII	Set both Service-Connected (SC) and	
	Allowances Public		Non Service-Connected (NSC) burial	
1933	Law 73-2	Congress	allowances to \$75.	
		209.000	Transferred eleven national cemeteries	
			associated with the Civil War dead from	
			the Department of the Army and the War	
			Department to the National Park Service	
	Executive Order		(Department of the Interior).	
1933	6166	President	NPS was given other cemeteries later.	

	Exhibit 2-1. Congressional Acts, Public Laws, and Executive Orders Affecting Veterans				
Date	Law/Rule/Order	Source	Intent		
Date	Law/Kule/Oldel	Source	Transferred overseas cemeteries over to		
			the American Battle Monuments		
1934	An Act	Congress	Commission (ABMC).		
1334	G.I. Bill	Congress	Commission (ADIVIC).		
	(Servicemen's				
	Readjustment Act of		Expanded benefits to include education,		
	1944, Public Law 78-		mortgage loans, and unemployment		
1944	345)	Congress	payments.		
1344	040)	Oorigicaa	Redefined who is eligible for burial in a		
1948	Public Law 80-526	Congress	national cemetery.		
1340	Servicemen's	Oorigicaa	national cemetery.		
	Readjustment Act of				
1952	1952	Congress	Enacted servicemen's readjustment act.		
1002	. 302	20.19.000	Allowed burial for Army or Air National		
			Guard and Reserves. Also extended		
			burial to ROTC members if ROTC		
			members were doing exercises or were		
1959	P.L. 80-526 amended	Congress	on active duty.		
			Implemented one family per interment site		
1961	One family per site	Army	at Arlington Cemetery.		
			Extended to all national cemeteries run by		
1962	One family per site	Army	Army (about 85 cemeteries).		
	Veterans	•	Extended benefits to all veterans		
	Readjustment		regardless of whether they served during		
1966	Benefits Act of 1966	Congress	wartime or peacetime.		
	VA Administrator and				
	the Veterans		Provided numerous recommendations,		
	Advisory Committee		including: (1) that the Army transfer its		
	Hand in Report on		national cemeteries to VA; (2) VA study		
	Survey of All		methods for convenient burial; and (3) the		
	Veterans Programs		VA administrator identify uniform		
1968	and Benefits	VA	standards for eligibility and burial.		
	Readjustment				
1972	Assistance Act	Congress	Raised the level of benefits.		
			Transferred national cemeteries from		
			Army to VA National Cemetery		
			Administration. VA elevated its own		
			veteran cemeteries to national cemetery		
			status. Army kept Arlington National		
			Cemetery and Soldiers Home in DC. VA		
			also made responsible for headstones		
			and markers. Distinguished between		
			Service-Connected and Non Service-		
40=0	National Cemetery		Connected deaths. Added transportation		
1973	Act Public Law 93-43	Congress	of remains benefit.		
40==	Veterans Educational		Enacted Veterans Educational Assistance		
1977	Assistance Program	Congress	Program (VEAP).		

Exhibit 2-1. Congressional Acts, Public Laws, and Executive Orders Affecting Veterans			
Date	Law/Rule/Order	Source	Intent
Date	Law/itale/Oraci	Course	Extended transportation of remains
1977	An act	Congress	benefit eligibility.
1011	7.1.7 0.01		Raised the Service-Connected (SC) and
			Non Service-Connected (NSC) burial
	Raise in Burial		allowances to \$1100 and \$300,
1978	Allowance	Congress	respectively.
			Established state cemetery grant program
	State Cemetery		whereby VA pays 50% of the cost of
1978	Grant Program	Congress	developing a state veterans cemetery.
		<u> </u>	Provided appropriations for state
1980	An Act	Congress	cemetery grant program.
		J	Offered educational benefits through
1985	Montgomery GI Bill	Congress	Montgomery GI Bill.
	Veterans' Benefits		
	Improvement and		
	Health Care		Conducted a study and identified
	Authorization Act of		geographic areas within the United States
	1986 (Public Law 99-		where the greatest burial needs for
1986	576)	Congress	veterans existed.
			Raised the Service-Connected (SC) burial
	Service-Connected		allowance to \$1,500 but kept Non
	Burial Allowance		Service-Connected (NSC) allowance at
1988	Public Law 100-322	Congress	\$300.
			Became a cabinet-level organization and
			is renamed the Department of Veterans
1989	Executive Order	President	Affairs (VA).
			Implemented a new methodology that
			ranked the areas of burial need based on
			veteran population. It was clear that
			demand would be greatest in the coming
			decades with an aging World War II,
4004) / A	Korean and Vietnam War veteran
1994	Needs Assessment	VA	population.
			Re-designated the National Cemetery
			System (NCS) and changed its name to
			the National Cemetery Administration
			(NCA). It elevated the National Cemetery
	Veterans Programs		System's directors' position to that of Under Secretary of Veterans Affairs for
	Enhancement Act		Memorial Affairs. The law also extended
	of 1998 (Public Law		the right of burial in a national cemetery to
1998	105-368)	Congress	qualified Merchant Marine veterans.
1000	1.00.000)	Congress	Ordered that VA undertake additional
	Veterans Millennium		studies to assess future burial needs for
	Health Care and		veterans and mandated that six new
	Benefits Act, Public		national cemeteries be built within the
1999	Law 106-117	Congress	most needed areas.

Exhibit 2-1. Congressional Acts, Public Laws, and Executive Orders Affecting Veterans			
Date	Law/Rule/Order	Source	Intent
2001	Service-Connected Burial Allowance Public Law 107-103	Congress	Raised Service-Connected burial allowance to \$2,000.
2001	Plot Allowance Public Law 107-103	Congress	Raised plot allowance from \$150 to \$300. Ordered VA to conduct effective outreach to veterans to make them aware of all the benefits to which they are entitled.
2003	National Cemetery Expansion Act of 2003, Public Law 108-109	Congress	Authorized the establishment of six additional new national cemeteries.
2003	Veterans Benefits Act of 2003	Congress	Authorized a burial plot allowance for each veteran interred in a state veterans cemetery at no cost to the veteran's estate or survivors; allowed surviving spouses who later remarried nonveterans the right to burial in a national cemetery based on their marriage to a former, eligible veteran; and provided permanent authority for the National Cemetery Administration's State Cemetery Grants Program.
2004	Veterans Benefits Improvement Act of 2004	Congress	Removed the effective date restriction in applications for death pension; amended the dependency and indemnity compensation to a surviving spouse by providing a \$250 increase in the monthly rate for payments beginning January 1, 2005.

Source: VA Web site (http://www.va.gov) downloaded 2 April through 2 May, 2008; U.S. Code; Congressional Statutes at Large.

The War of 1812 and the Mexican American War (1846-1848) followed the funding of pensions by Congress, but it was not until the Civil War that the federal government took on the task of memorializing and honoring the soldiers who died in battle. At the beginning of the Civil War, the Army ordered the Army Quartermaster General to take on the responsibility of burying Union soldiers who died, recording the soldiers' names and burial location, and supplying a wooden headboard for the gravesite.

On July 17, 1862, in the midst of the Civil War, Congress enacted legislation that authorized the creation of national cemeteries. This was in response to the fact that the Army's established system for dealing with veterans' burials proved to be inadequate for coping with the number of dead soldiers and the rate at which soldiers were dying. The new presidential power to purchase and develop cemetery grounds was given in "an act to define the pay and emolument of certain officers of the Army, and for other purposes." The first national cemeteries were created for Union soldiers who had died during the Civil War. During the course of the first full

year after the legislation was passed, 14 national cemeteries were established, shown in Exhibit 2-2 below.

Exhibit 2-2.		
First National Veteran Cemeteries		
Name of Cemetery	Location	
Alexandria National Cemetery	Alexandria, Virginia	
Annapolis National Cemetery	Annapolis, Maryland	
Antietam National Cemetery	Sharpsburg, Maryland	
Camp Butler National Cemetery	Springfield, Illinois	
Cypress Hills National Cemetery	Brooklyn, New York	
Danville National Cemetery	Danville, Kentucky	
Fort Leavenworth National	Ft. Leavenworth	
Cemetery	Kansas	
Fort Scott National Cemetery	Fort Scott, Kansas	
Keokuk National Cemetery	Keokuk, Iowa	
Loudon Park National Cemetery	Baltimore, Maryland	
Mill Springs National Cemetery	Nancy, Kentucky	
New Albany National Cemetery	New Albany, Indiana	
Philadelphia National Cemetery	Philadelphia, Pa.	
Soldier's Home National Cemetery	Washington, D.C	

Source: VA Web site (http://www.va.gov)

After the Civil War, the Quartermaster General of the Army undertook a project that eventually became known as the "Reburial Program", whereby the Government tasked itself with finding every Union soldier buried hastily during or immediately after battle and giving each an honorable burial in a national cemetery. With the coming of World War I, the United States expanded and extended benefits to veterans, including burial benefits. For example, in 1917 Congress passed legislation that authorized the payment of \$100 to offset the cost of a funeral and burial. The American Battle Monuments Commission (ABMC) was created in 1923 to take responsibility for World War I U.S. veterans buried overseas.

By the 1920s, three government agencies were involved in the payment of various pensions and/or benefits to veterans and their families. Congress gave the President the authority to organize and consolidate the various government agencies dealing with veterans, which President Hoover used in 1930 to create the Veterans Administration.

It was as a result of World War II that Congress, in appreciation for the valor and sacrifice shown by the men and women in the armed forces, passed legislation providing a number of new benefits to veterans, among them the G.I. Bill (officially Servicemen's Readjustment Act of 1944, Public Law 78-345)¹. The new benefits and the extent to which they were used by World War II veterans profoundly changed American life, geography, and culture: university enrollments grew to record numbers, and more families could afford their own homes, live in the suburbs, and call themselves "middle class".

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¹ The armed conflicts in Korea and Vietnam saw similar legislation for the veterans of those conflicts.

Public Law 80-526, enacted May 14, 1948, embodied all precedent customs and statutes affecting eligibility for burial in national cemeteries. Pursuant to this law, four general classifications of persons were accorded the privilege of burial in a national cemetery:

- Those who died while honorably serving on active duty in the Armed Forces
- All veterans who were discharged honorably
- Citizens of the United States who served honorably in the Armed Forces of an allied nation during war
- The spouse, widow, widower, and minor or dependent children of those eligible.

Public Law 80-260, enacted on September 14, 1959, amended the legislation of 1948 to permit national cemetery burial for any member of a reserve component, including service in the Reserve Officers Training Corps (ROTC), whose death occurred under honorable conditions while serving on active or authorized duty.

During the 1960s, it became evident that burial space was severely limited and that most national cemeteries, then under the Department of the Army, would exhaust available space in the near future. Several operational changes were made by the Army to conserve space, including the implementation of a policy allowing one gravesite per family rather than multiple, adjacent sites for eligible family members².

Public Law 93-43, also known as The National Cemeteries Act of 1973, transferred responsibility for 82 national cemeteries from the Department of the Army to the Veterans Administration (now the Department of Veterans Affairs). Pursuant to this legislation, 21 soldiers' lots, seven Confederate cemeteries, three monument sites, and one special installation were also transferred to VA from the Department of the Army. The law directed VA to establish uniform eligibility criteria. Subsequent legislation directed VA to develop plans for meeting the burial needs of veterans. This law also directed VA to incorporate 21 VA national cemeteries, established and operated in conjunction with VA hospitals and domiciliaries, into the system. In 1973, the VA National Cemetery System (NCS) contained 103 national cemeteries – a total of 4,136 acres and 1,293,481 interments.

In 1978, Congress authorized the State Cemetery Grant Program, in which VA assisted states in the development of State Veteran Cemeteries. In addition to financial support (up to 50% of the costs of such development), VA also approved the specific plans, architectural and otherwise, and required the state cemeteries to be maintained using the same standards as those with which the national cemeteries complied. Congress provided appropriations for this program in 1980. Public Law 105-368, The Veterans Programs Enhancement Act of 1998, authorized VA to provide up to 100 percent of the development cost and operating equipment for new state veteran cemeteries.

Since 1973, VA has added 22 new cemeteries and transferred one monument site ("Perryville National Cemetery") to the state of Kentucky. Today, NCA comprises 125 national cemeteries with more than 17,000 acres of land and over 2.8 million gravesites. These cemeteries are located in 39 states and Puerto Rico.

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² Title 32 U. S. Chapter V, Part 553.18

As the result of Public Law 93-43, Congress authorized a plot allowance (\$150) in 1973 to benefit veterans and their families who chose interment in non-government cemeteries. Public Law 97-35 in 1981 amended the requirements for receiving a burial allowance (\$300) for wartime veterans.

Congress directed VA to fund an independent study in 1987 on the future burial needs of veterans. The study identified 10 geographic areas within the United States where the greatest unserved burial needs for veterans existed. Although the numbers of World War II and Korean veterans were getting smaller, conscription during peacetime and the Vietnam War added to the veteran population and, eventually, to the number who wished to be interred in veteran cemeteries.

President Ronald Reagan made the Veterans Administration a cabinet level department by executive order in 1988, establishing the Department of Veterans Affairs in March of 1989. This raised the visibility of veterans within the executive branch of the Federal Government, putting its secretary at the same organizational level as the Department of Defense. In the following year, eligibility for a plot allowance was amended to include veterans receiving VA compensation, pension benefits, or died of service-connected injuries.

In a needs assessment conducted by VA in 1994, it became clear that the coming decades would increase the need for national cemeteries and for the use of burial benefits with the aging population of World War II, Korea, and Vietnam veterans. The needs assessment also employed a new methodology that prioritized the geographic areas needing cemeteries according to the concentration of nearby veteran populations.

The Veterans Program Enhancement Act of 1998 not only changed the name of the National Cemetery System to the National Cemetery Administration, but also elevated the NCS's director position to that of Under Secretary of Veterans Affairs for Memorial Affairs. Over the years, additional benefits (including more burial benefits) were legislated in recognition of the service given by veterans to their country. Currently, H.R. 1273 would amend title 38, United States Code, to restore plot allowance eligibility for veterans of any war and to restore the headstone or marker allowance for eligible persons.

Title 38, Chapter 23 describes the specific amounts that may be payable as benefits by VBA as contained in Sections 2302, 2303 and 2307. Chapter 24 outlines administrative responsibilities for the development and administration of the national cemetery system including definitions of eligibility for burial, the acquisition of land, the acceptance of memorials and the grant aid to states that is available for the establishment or expansion of state veteran cemeteries. Title 38 of the Code of Federal Regulations, Part 1, section 15 (38 CFR 1.15) states that the Department of Veterans Affairs (VA) shall conduct evaluations of all of its programs and provides several guidelines for the characteristics of those evaluations. Recent legislation (Public Law 107-103, the Veterans Education and Benefits Expansion Act of 2001) mandated that VA conduct effective outreach to veterans to make them aware of all benefits, including those associated with burial. The most recent full evaluation of burial benefits was completed in 1978 (when the State Cemetery Grant Program was authorized), and the number, type, and extent of these benefits have changed significantly in the last 30 years.

It is within this context that the Office of Policy and Planning initiated an evaluation of the VABBP.

B. Program Outcomes and Measures

During the past five years, VA has participated in Program Assessment Rating Tool (PART) reviews to increase attention to evidence-based program performance. As part of the process, VA has identified a set of four strategic goals and one enabling goal³:

- Strategic Goal 1: Restoration and Improved Quality of Life for Disabled Veterans. This goal aims to restore the capability of veterans with disabilities to the greatest extent possible, and improve the quality of their lives and that of their families. It has four objectives and five performance measures.
- Strategic Goal 2: Smooth Transition to Civilian Life. With this goal, VA wishes to
 ensure that veterans experience a smooth transition from active military service to
 civilian life. The goal has two objectives and three performance measures.
- Strategic Goal 3: Honoring, Serving, and Memorializing Veterans. This goal is aimed at honoring and serving veterans in life and memorializing them in death for their sacrifices on behalf of the country. It has six objectives and 13 performance measures.
- Strategic Goal 4: Contributing to the Nation's Well-Being. This goal targets VA
 contributing to the public health, emergency management, socioeconomic well-being,
 and history of the Nation. The goal has five objectives and two performance measures.
- Enabling Goal: Applying Sound Business Principles. VA desires to deliver world-class service to veterans and their families through effective communication and management of people, technology, business processes, and financial resources. The enabling goal and its corresponding objectives represent crosscutting support activities such as information technology management, supply management, human capital planning, and budgeting. These activities enable all organizational units of VA to carry out the Department's mission. This goal has four objectives.

The focus of the evaluation effort described in these pages is on two of the five objectives for Strategic Goal 3: Honoring, serving, and memorializing veterans. Exhibit 2-3 lists the specific objectives for Strategic Goal 3.

Delivering Health Care: Provide high-quality, reliable, accessible, timely, and efficient health care that maximizes the health and functional status of enrolled veterans, with special focus on veterans with Service-Connected conditions, those unable to defray the costs, and those statutorily eligible for care. Objective 2: Decisions on Pension Claims: Provide eligible veterans and their survivors a level of income that raises their standard of living and sense of dignity by processing pension claims in a timely and accurate manner. Objective 3: Providing Insurance Service: Maintain a high level of service to insurance policyholders and their beneficiaries to enhance the financial security of veterans' families.

³ For more detail on these goals, see: Department of Veterans Affairs (VA), 2007, FY 2007 Performance and Accountability Report, Washington, DC.

Exhibit 2-3.		
Objectives for Strategic Goal 3: Honoring, Serving, and Memorializing Veterans		
Objective 4: Meeting Burial Needs: Ensure that the burial needs of veterans and eligible family		
members are met.		
Objective 5: Symbolic Expressions of Remembrance: Provide veterans and their families		
with timely and accurate symbolic expressions of remembrance.		
Objective 6: Home Purchase and Retention: Improve the ability of veterans to purchase and		
retain a home by meeting or exceeding lending industry standards for quality,		
timeliness, and foreclosure avoidance.		

Source: Department of Veterans Affairs FY 2007 Performance and Accountability Report; VA; Washington, D.C.

The evaluation also focuses on objective 5 for Strategic Goal 4. Exhibit 2-4 below lists the objectives for Strategic Goal 4.

Exhibit 2-4.		
Objectives for Strategic Goal 4: Contributing to the Nation's Well-Being		
Objective 1: Emergency Preparedness : Improve the nation's preparedness for response to		
war, terrorism, national emergencies, and natural disasters by developing plans		
and taking actions to ensure continued service to veterans, as well as to support		
national, state, and local emergency management and homeland security efforts.		
· · · · · · · · · · · · · · · · · · ·		
Objective 2: Medical Research and Development: Advance VA medical research and develop		
programs that address veterans' needs – with an emphasis on service-connected		
injuries and illnesses – and contribute to the nation's knowledge of disease and		
disability.		
Objective 3: Academic Partnerships: Enhance the quality of care to veterans and provide		
high-quality educational experiences for health profession trainees, created		
internally in VA and via partnerships with the academic community.		
Objective 4: Socioeconomic Well-Being of Veterans: Enhance the socioeconomic well-being		
of veterans, and thereby the nation and local communities, through veterans		
benefits; assistance programs for small, disadvantaged, and veteran-owned		
businesses; and other community initiatives.		
Objective 5: Maintaining National Cemeteries as Shrines: Ensure that national cemeteries		
are maintained as shrines dedicated to preserving our nation's history, nurturing		
patriotism, and honoring the service and sacrifice veterans have made.		
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Source: Department of Veterans Affairs FY 2007 Performance and Accountability Report; VA; Washington, D.C.

The VA's Strategic Plan metrics for these objectives are provided in Exhibit 2-5 below.

Exhibit 2-5. VA Strategic Plan Performance Measures		
Objective	Performance Measures	
Goal 3:Objective 4: Meeting Burial Needs	 Percent of veterans served by a burial option within a reasonable distance (75 miles) of their residence Percent of respondents who rate the quality of service provided by the national cemeteries as excellent 	

Exhibit 2-5. VA Strategic Plan Performance Measures			
Objective	Performance Measures		
Goal 3:Objective 5: Symbolic Expressions of Remembrance	 Percent of graves in national cemeteries marked within 60 days of interment Process 90% of applications for headstones and markers within 20 business days of receipt Accuracy of inscriptions on headstones and markers Accuracy of inscription of Presidential Memorial Certificate 		
Goal 4:Objective 5: Maintaining National Cemeteries as Shrines	 Percent of respondents who rate national cemetery appearance as excellent Percent of respondents who are willing to recommend a national cemetery to veteran families in their time of need Proportion of headstones and markers that are correctly positioned an aligned Proportion of headstones and markers that are clear and free of debris. Proportion of gravesites that have a level grade and blended with adjacent grade levels 		

Source: Department of Veterans Affairs FY 2007 Performance and Accountability Report; VA; Washington, D.C.

This evaluation expands on the two objectives above and considers additional performance measures. These are described in the next section.

C. Measurement of Outcomes

Exhibit 2-6 below presents each objective of the VABBP with evaluation questions and outcomes that expand the number of measures in VA's strategic plan. The left-most column references the objective. The second column states the evaluation questions that include not only the extent to which the objective is being met, but also questions with implications for VA policy recommendations. The final outcome column describes the projected outcome from the data collection efforts.

Exhibit 2-6. Study Results to Improve Outcomes							
Objective	Evaluation Question	Outcome					
Goal 3:Objective 4: Meeting Burial Needs	 Is the 75 mile, 170,000 veterans cemetery standard adequate? Should the population threshold be changed? What is the ideal service standard area in time or distance, population threshold, and capacity? 	Recommendations on the new or modified standard based on Geographic Information System (GIS) analysis of Census data and geography projected over time.					
	Is a national cemetery offering burial of cremated remains only, providing an acceptable burial option?	Recommendations based on opinions expressed by veterans in survey.					

Exhibit 2-6.							
Objective	Study Results to Improve Outcomes Evaluation Question Outcome						
Objective	 What burial benefits could VA continue to provide if it stopped the development of new cemeteries? What are the implications for offering a cash payment as an option in those instances where burial in a state or national cemetery is not available? 	Analysis of financial implications of these alternatives compared to costs of developing and maintaining additional cemeteries.					
	 Is VA's current burial and plot allowance adequate? What other agency benefits are available to assist veterans and their families at the time of their death? 	Recommendations based on analysis of legislative intent, cost-of-living changes, other benefits, and implications of raising the benefit.					
	How do various demographic factors affect burial choice?	Recommendations based on veterans responses for planning the makeup of future cemeteries (e.g., how much space allocated for cremation in ground, or in columbaria).					
	 What would be the impact of employing a financial means test for obtaining a burial allowance? 	Recommendations with regard to implementing a means test in order to collect \$300 as a one-time benefit.					
	 What sources of information do veterans and their families use to obtain information about burial benefits? How could outreach efforts be 	Recommendations based on responses of veterans and their family members.					
Goal 3:Objective 5: Symbolic Expressions of Remembrance	 made more effective? What is the impact of the current headstone/marker benefit? What additional forms of symbolic expression could VA offer that veterans' families would value? 	Recommendations based on responses of veterans and their families.					
	What is the impact of the Presidential Memorial Certificate Program?	Recommendations based on responses of veterans and their families.					
Goal 4:Objective 5: Maintaining National Cemeteries as Shrines	What are the challenges in meeting the mandate to treat each national cemetery as a national shrine?	Recommendations based on measures of appearance and maintenance including those of customer satisfaction,					

Source: Final Analysis Plan; ICF

The following chapters of this document provide an in-depth discussion of the findings from this evaluation, integrating information where possible across the various data collection methods employed, including stakeholder interviews, focus groups, and questionnaire mailed to 38,734 veterans. Each of the questions in the preceding table is addressed in the context of the data collected in this evaluation and key findings are formulated in the form of recommendations to the Department of Veterans Affairs. Where necessary, the costs and/or cost-benefit calculations of the recommendations are provided as well.

The next chapter, Chapter 3, presents findings from the research questions associated with ensuring the burial needs of veterans (e.g., adequacy and reasonableness of the service area standard, cremation-only as an acceptable burial option).

This chapter presents findings on four primary policy issues:

- Adequacy and reasonableness of the 75-mile service area standard
- Cremation only as an acceptable burial option
- Factors influencing burial choice
- Methods veterans and their family members use to access information on VA burial benefits.

To address these research questions, the evaluation used a multi-method approach to collect and analyze a wide array of data, including data from 2008 Veterans Burial Benefits Survey, which yielded data from 16,717 veterans, and focus groups and structured interviews with family members and funeral directors at five locations across the country. For the research question on the adequacy of the current 75-mile service area standard, the research team used state-of-the-art techniques and the latest technology in geographic information systems (GIS) analysis.

The program evaluation findings associated with each of these policy issues is presented below.

A. Adequacy and Reasonableness of the 75-Mile Service Area Standard

a. Background

The current VA policy is to establish new national cemeteries in areas where the unserved veteran population is at least 170,000 within a 75-mile radius. VA directed the program evaluation to examine the adequacy and reasonableness of the current 75-mile service standard, evaluate several potential alternatives, and document if and how VA's ability to serve veterans' burial needs would be changed. Specifically, the program evaluation was designed to examine the following alternatives:

- Changing the linear distance from 75 miles to another distance standard
- Replacing the linear distance standard with a drive time standard
- Changing the veteran population threshold needed to establish a new national cemetery from 170,000 to another threshold standard.

Considering all alternatives, the program evaluation sought to recommend an "ideal" service area standard in terms of time and/or distance criterion and population threshold.

¹ VA 2001-2006 Strategic Plan, p. 44. The term "served" as used throughout this section refers to veterans residing within the geographic service area of a national or state veterans cemetery that is accepting new interments, to include full casket burials and/or cremated remains either in-ground or in a columbarium. Similarly, the term "unserved" refers to veterans living outside the boundaries of a particular service area standard.

1. Genesis and rationale of current standard

In accordance with the Government Performance Results Act, the VA has developed a performance measurement program which establishes targets, gathers data to measure performance on an annual basis, and sets priorities for the future. One of these performance measures, as stated in the VA Strategic Plan for Employees, 2003-2008, includes the goal to increase the percent of veterans served by a burial option within 75 miles of their residence. VA reports that 83.4 percent of veterans were served in FY 2007.² The FY 2008 target is 83.7 percent, with a strategic goal of reaching 90 percent by 2011.³

The current 75-mile standard is based on VA historical data and experience indicating that "over 80 percent of veterans interred in national cemeteries reside within 75 miles of the cemetery at their time of death." The 2001 *Study on Improvements to Veterans Cemeteries* (a.k.a. the *Millennium Study*) examined the steps that would need to be taken by VA to ensure that 90 percent of veterans are served by a VA burial option, defined as living within 75 miles of a national or state veterans cemetery with available space for the first interment of casketed or cremated remains (in-ground or in columbaria) beginning in 2005 and maintained through 2030.

Given this directive, the *Millennium Study* concluded that, to reach 90 percent served, an additional 31 cemeteries beyond those already in operation or planned at the time of the 2001 study would need to be constructed to reach VA's strategic goals for every 5-year period from 2005 to 2020. It documented the U.S. areas with the highest concentrations of veterans not served by an existing national or state veterans cemetery, and calculated the estimated costs of establishing such cemeteries. To reach the VA strategic target, the study recommended expanding the capacity of cemeteries scheduled to close soon, continuing grants to states that wish to build their own veteran cemeteries, and building new national cemeteries in the recommended locations if the first two options proved insufficient to meet VA's strategic target. Since the *Millennium Study* was competed, 6 new national cemeteries are being established at or near several of the recommended locations, including Birmingham, AL, Columbia/Greenville, SC, Sarasota, FL, Jacksonville, FL, Bakersville, CA, and Southeastern, PA.

2. Why consider alternative service standards?

A fundamental strategic goal of VA is to ensure that the burial needs of veterans and their family members are met, and part of meeting these needs is making certain that veterans and next of kin have reasonable, adequate access to national and state veteran cemeteries. There are several factors which can impact travel to a national cemetery for purposes of interment or visitation including: geographic barriers, transportation challenges in densely populated metropolitan areas, the absence of public transportation, and the lack of connecting highway systems that result in extensive driving times. To the extent that such factors impede reasonable and adequate access, VA seeks to remedy them through the application of fair and reasonable standards for new cemetery construction. The program evaluation examines the adequacy and reasonableness of the current standard.

² Department of Veterans Affairs (VA), 2007. *Fiscal Year 2007 Performance and Accountability Report. Part I: Performance Score Card* (p. 9) November 15. Accessed 5/1/08 from: http://www.va.gov/budget/report/2007/Part I/Performance Scorecard.pdf.

³ 2006-2011 VA Strategic Plan, pg. 65. Accessed 5/1/08 from http://www1.va.gov/op3/docs/VA 2006 2011 Strategic Plan.pdf.

⁴ Prettol, D.C. and Glace, Jr. P.J. (2001). Study on Improvements to Veterans Cemeteries Volume 1: Future Burial Needs. McLean, VA. Logistics Management Institute. p. 2-1.

3. Criteria for a reasonable, adequate standard

The program evaluation team, in consultation with VA representatives, agreed that any recommended standard, whether measured in distance or drive time, should be able to meet the following criteria to be considered ideal. At a minimum, an ideal standard needs to:

- Be easy for veterans to understand
- Be likely to be perceived as fair
- Be easily measurable with high accuracy using available data
- Not be subject to rapid change requiring constant reassessment
- Be responsive to demographic trends within the veteran community
- Serve a high percentage of current veterans.

The next section discusses current and recommended methods for measuring the percent of veterans served by a burial option, regardless of which standard is used. This issue is important because accurate measurement is a component of the definition of the ideal standard. Following this discussion, findings are presented on the relationship between 1) distance to the nearest national or state veterans cemetery and veterans' choice of burial location, and 2) distance to the veteran's actual burial location and whether a choice is made for a private or VA burial option. The relationships between these concepts and data are also explained to help inform the development of an ideal standard.

4. Measuring the percent served

This section describes the approach for measuring the percent of veterans served by a VA burial option. This step is necessary in order to evaluate the current 75-mile service area standard and to correctly measure the impact of changing to an alternative. A brief summary is presented on the key differences and refinements of the program evaluation measurement method, which is the recommended alternative, to the method employed in the *Millennium Study* and in current use by NCA.

In order to measure progress toward VA's strategic goal, a reliable method is required to generate a national-level estimate of the percent of veterans served by a VA burial option. VA's approach to this issue over the past decade has evolved and reflects continuous improvement. To arrive at the denominator needed to calculate this percentage, the *Millennium Study* used projections of the number and geographic distribution of veterans derived from the 1990 Census and updated by the VA's Office of the Actuary (OACT) to reflect 2000 Census data. To produce reliable yearly estimates of the veteran population that can be used VA-wide, OACT estimates changes in the number and geographic distribution of veterans given death rates, general mobility patterns, and rates of discharge from military service (i.e., new veterans). OACT's VetPop data provides a snapshot of the number and distribution of veterans during a given year,

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⁵ For example, a report issued in 1999 by the Office of the Inspector General (OIG) assessed the accuracy of VA's methodology for calculating the percent of veterans served. Department of Veterans Affairs (1999) *Accuracy of Data Used to Measure Percent of Veterans with a VA Burial Option.* (Report No. 9R5-B04-103) Washington D.C: Office of the Inspector General.) Although inconsistencies in NCA's estimate of the percent of veterans served were identified, they did not have a material impact.

with high accuracy for near-term years. Naturally, more distant projections of the size and distribution of the veteran population (e.g., for 2030) are subject to greater error.⁶

To calculate the numerator requires complete knowledge, for any given year, of all national and state veteran cemeteries that are open for new interments—including their precise locations. Each location can be considered the center of a service area defined by a circle 150 miles in diameter around the cemetery, with a 75-mile radius. Veterans and their family members living inside the circle are, by the current standard, considered served by that cemetery. Those living outside the circle may or may not be served by another, nearby national or state veterans cemetery.

The final step to generate the measure of percent served involves counting the total number of veterans living inside the arc of each cemetery's service area while eliminating the "double-counting" that would result from overlapping service areas, and summing these figures for a combined total. This total represents the number of veterans currently served by existing national or state veteran cemeteries. Dividing this figure by the total U.S. veteran population⁷, consisting of veterans in the 50 States, the District of Columbia, and Puerto Rico, in that year provides the national-level performance measure. In order to develop the geographic information systems (GIS) models needed to test current and alternative service area standards, all calculations of percent served presented in this chapter are based on veterans in the 50 states, the District of Columbia, and Puerto Rico.

While the VetPop model provides reliable data on the size and distribution of the veteran population (i.e., the denominator), calculating the numerator (i.e., the percent of veterans served) is more challenging because of the need to accurately sum veterans living inside existing service areas. These service areas—which can be conceptualized as a series of circles 150 miles in diameter, many of which overlap (see Exhibit 3-1)—do not easily map to any geographic identifiers commonly used by demographers to study population trends, such as zipcodes or counties. Since service areas tend to "spill over" county and zip-code boundaries, a method is needed to estimate the number of veterans that should be considered served in counties or zip codes *intersected* by the boundary of a given cemetery's service area. Also challenging is finding a method to avoid double counting veterans who may reside within the service area of more than one cemetery. Each of these issues must be resolved to generate an accurate measure of the percent of veterans served.

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⁶ Department of Veterans Affairs (VA), 2007. *Veteran Population Model VetPop: Executive Summary* (008A2). Washington, DC: Office of the Assistant Secretary for Policy and Planning. To conduct the geographic information systems (GIS) analysis needed to evaluate the current standard against potential alternatives, the research team used veteran population data contained in the Geolytics Census CD 2000 Long Form SF3 as it has census tract level data which are advantageous. Both data sources (Geolytics and VetPop) are based on the most recent U.S. Census, and they are compatible as of April 2000. For all GIS models examining future years, projected changes in the veteran population were derived from VetPop 2004, which was the VetPop data source available when the GIS analyses began in March of 2007 (VetPop 2007 was released in October of 2007). VetPop 2004 provides county level estimates as the smallest unit of analysis. To use census tract level data to measure those served with VetPop 2004, a file was created that assigns a percentage of veterans to each census tract within a county based on the original distribution of veteran population as established in Census 2000. VetPop's county-level changes due to separations, migrations and deaths that occur in future year estimates are apportioned among census tracts based on this assignment. An assumption of these census tract level data is that the proportional assignment of veterans to them will not significantly change between decennial census data collections.

⁷ The denominator for percent served, which is the total US veteran population, is defined as veterans from the 50 states, the District of Columbia, and Puerto Rico. It excludes veterans residing in Guam, Samoa, Northern Marianas Islands, and the Virgin Islands. This definition is used by VA when calculating percent served, as well as in this evaluation when conducting analyses on the percent served for 2010 and the out-years.

across these states.

Exhibit 3-1. Illustration of Overlapping Nature of the 75-mile Service Areas around National and State Veteran Cemeteries* * The cemeteries shown represent a sample illustrating service area overlap for mid-atlantic states surrounding Washington, DC. The Exhibit is not intended to provide

Source: ICF Geographic Information System (GIS) Analysis

an exhaustive count of all national and state cemeteries

The approach documented in the *Millennium Study* for calculating the numerator was a reasonable approach that took advantage of the tools and methods available at the time for conducting geographic analysis of population (e.g., MapInfo). Recent years have seen a great increase in the both the functionality of GIS software and in the processing power of computers to manage and display GIS data. These advances allow for very complex GIS models and processes to be undertaken that were time and cost prohibitive less than a decade ago. The program evaluation's updated approach to the calculation of the percent served takes advantage of this new technological capacity, and differs from VA's current method in a number of important ways that enhance accuracy. Exhibit 3-2 summarizes the key differences between these two approaches, which are described in more detail in the paragraphs that follow the Exhibit.

Exhibit 3-2. Approaches to Estimating Percent of Veterans Served by a VA Burial Option							
	Millennium Study Approach (Current NCA Method)	Approach for the Burial Program Evaluation					
Primary geographic identifier	Counties	Census tracts					
Method of resolving overlapping service areas (i.e., avoiding double counting)	Undetermined*	Construction of Thiessen polygons					
Decision rules for counting veterans living in geographic units bisected by a service area	"Rules of thumb"; entire county considered served if: - Entire county lies inside service area - Service area contains the county's population center, or - Half or more of the county is physically located within a service area of one or more cemeteries**	Proportional overlay to minimize double counting; the proportion of the Census tract population counted as served is equal to the area of the tract falling within the service area					

^{*}The Millennium Study documentation is silent on the issue of avoiding double counting, except to note that: "When cemeteries have overlapping SAs [service areas], we need to ensure we do not count the population in those SAs more than once." Vol. I, p. 3-2.

Source: LMI Millennium Study, Vol. 1 & ICF Geographic Information Systems Approach

Three major differences exist in the methodology of the two approaches. The first is that Census tracts rather than counties are employed as the fundamental geographic identifier in the new recommended approach. Census tracts are "small, relatively permanent statistical subdivisions of a county" that average about 4,000 inhabitants. As a building block of Census geography, Census tracts allow more detailed analysis of population data than counties, but also have the advantage of precise aggregation to the county level. Unlike zip-codes, Census tracts never overlap county boundaries; the sum of the veterans estimated to live within in a county's nested Census tracts is equal to the county-level veteran population. The advantage of using Census tracts as the main geographic identifier is that this method allows for a much larger number of potential locations to be tested during the process of judging where to place a new cemetery so that it will serve the largest number of veterans.

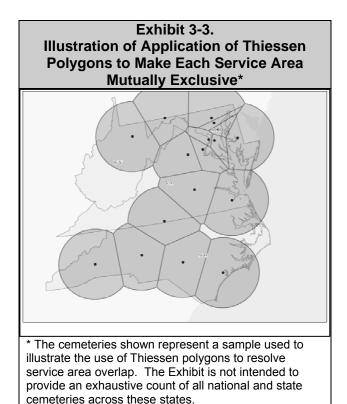
A second refinement inherent in the program evaluation approach relates to the method used to avoid double counting veterans who live within the 75-mile service area of *two or more* cemeteries. The program evaluation's method adds additional clarity through the creation of Thiessen polygons around each of the cemeteries, allowing each service area to remain mutually exclusive for counting purposes. Thiessen polygons are generated from a set of sample points. Each Thiessen polygon defines an area of influence around its sample point,

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^{**}Prettol and Glace, Study on Improvements to Veterans Cemeteries, p. 3-2.

⁸ U.S. Bureau of the Census. (2000) *Census 2000 Geographic Terms and Concepts*: p. A-11 Accessed 5/1/08 from: http://www.census.gov/geo/www/tiger/glossry2.pdf.

such that any location inside the polygon is closer to that point than any of the other sample points (Exhibit 3-3).



Source: ICF Geographic Information System (GIS)

Analysis

The third major refinement in the program evaluation methodology for estimating the percent served relates to the criteria used to determine how many veterans should be considered served who live in a Census tract that is only *partially* contained within the service area of an existing cemetery. There are thousands of such bisected or "split" Census tracts containing considerable numbers of veterans, so the decision rules applied in such cases are important.

The *Millennium Study* used a reasonable, yet somewhat arbitrary, set of decision rules about whether or not to count veterans in these areas as served. These rules were:

- If a county lies totally within an SA (i.e., service area), the county veteran population is counted as served.
- If the county's population center (i.e., largest city) lies within the SA, the whole county is counted as served.
- If an SA arc intersects a county, the county veteran population is considered served when:
- at least 50 percent of the county area lies within the SA;
- less than 50 percent of the area of the county lies within the SA, but the population center of the county lies within the SA, or;

• the county is intersected by the arcs of more than one SA and the area covered by the two arcs exceeds 50 percent of the area of the county.⁹

The program evaluation's approach to estimating the percent served within each 75 mile service area—proportional overlay—replaces the current "rule of thumb" approach with a more systematic methodology for counting veterans. In brief, proportional overlay capitalizes on modern GIS techniques that allow only veterans living *inside* the service area to be counted, while excluding those living beyond 75 miles of the cemetery.¹⁰

b. Current GIS Findings on the 75-Mile Standard

1. The relationship of distance to veterans' choice of burial location

Veterans and their next of kin must weigh the benefits of burial in a national or state veterans cemetery against certain factors, such as travel time, that may be less for private burial options. An important step in determining whether the current 75-mile standard is adequate and reasonable is to examine the relationship between distance to the nearest national or state veterans cemetery and veterans' choice of burial location. If the closest VA burial option is perceived as too distant to represent a net benefit, than veterans' likelihood, or "propensity", to choose that option will be low. By the same token, propensity to choose a VA burial option should be higher with closer proximity to a national or state veterans cemetery. As part of the approach to this research question, the program evaluation sought to identify or develop measures to examine how veterans' propensity is affected by their distance to the closest national or state veterans cemetery. A guiding assumption was that the distance at which propensity sharply declines and does not recover is the distance that most veterans and next of kin consider unreasonable, and the point at which the majority would not choose a VA burial option.

At least two methods were available to identify a measure of propensity and thus quantify the relationship of distance and choice of burial location: 1) use of survey data measuring veterans' attitudes and preferences on this topic, or 2) use of records that represent actual veteran interments, coupled with the best available information on their distance to the nearest national or state veterans cemetery at the time of death. Both methods have limitations. For example, although survey data can capture veterans' preferences prior to their death, these are subject to change over time, and as such they represent only intentions, not behaviors. The drawback of using records representing actual interments is that, while the burial location is known with certainty, the assumption must be made that the veteran was buried in the location of his or her choice. In considering these two approaches, the evaluation team concluded that using data that reflected actual burial decisions, whether made by the veteran or the next of kin, would offer greater validity in estimating the relationship between distance and burial choice.

Although there is no VA database that captures the burial choices of all veterans buried in a given year, data are collected from a sizable subset of veterans/next of kin who choose burial in

⁹ Prettol and Glace, Study on Improvements to Veterans Cemeteries (p. 3-2).

¹⁰ The proportional overlay method facilitates the allocation of population to bisected/clipped geographic units (i.e., Census tracts) based on the area of the unit. An even distribution is assumed and the population assigned to the portion retained is based on the percent of the area retained. The assumption that veterans are evenly distributed throughout the clipped Census tracts will not always hold, which introduces measurement error. However, this error will be random in nature, resulting in overestimation of the percent served in some of the clipped tracts, and underestimation in others. Because the error introduced is random, over- and under-estimation will tend to cancel each other out at the national level, where there are hundreds of Census tracts bisected by existing service areas.

a national or state veterans cemetery, as well as from those who contact VA to obtain headstones and markers for gravesites in private cemeteries. Information on these veterans/next of kin are contained, respectively, in the Burial Operations Support System (BOSS) and the Automated Monument Application System (AMAS); two large datasets maintained by NCA.

i. Methodology

Data and sample selection. By definition, BOSS exclusively contains records of next of kin and veterans who have been buried in a national or state veterans cemetery, while AMAS contains only records of those requesting a headstone or marker for use in a private cemetery. Upon obtaining the appropriate personnel, facility, and data clearances from VA to allow the research team to use data from these systems, it was requested that VA draw a large random sample of records from each system for use in the analysis. Since the record type itself was a reliable measure of choice of burial location, only a limited number of additional data fields from each record were needed to develop the variables for the analysis. Fields provided to the research team from each BOSS and AMAS record sampled included the next of kin's or spouse's name, address, and the address of the location where the veteran was buried. These files were cleaned and formatted in a manner that allowed for them to be merged into a single dataset for subsequent geospatial conversion of address data and statistical analysis. ¹¹

Key Assumptions. As noted, data on the actual burial choices of veterans and spouses offer a more ideal measure of propensity than intentions captured by survey data. Two key assumptions are made, however, in the use of BOSS and AMAS records to evaluate the adequacy and reasonableness of the 75-mile standard. First, the analysis assumes that the population represented by the records in these systems (i.e., veterans/spouses with knowledge of VA burial benefits) is an appropriate one from which to judge the adequacy and

For each type of record, two initial pieces of information were required to ensure that the record was usable for analysis. For BOSS records, the program evaluation required a complete address from the next of kin where the relationship field indicated that the applicant was the veteran's spouse, and a valid name of a national or state veterans cemetery. Only records with complete data in both fields that could be converted to geospatial coordinates (i.e., longitude and latitude) by GIS software were retained. For AMAS records, the program evaluation required a complete address for the applicant (i.e., the next of kin applying for a headstone and/or marker) and for the private cemetery of interment. There were more than 10,000 unique cemeteries in the AMAS records sampled, and many did not have addresses that met the criteria for geospatial conversion, and as such, were not retained. Approximately 25,000 BOSS and 12,000 AMAS records met the required criteria.

From these, 10,000 records from each pool were randomly sampled for further study. Records that could not be reasonably assumed to represent a spouse of a veteran, records with rural route numbers or P.O. Boxes, and outlier records (i.e., records where the next of kin address was more than 200 miles from the veteran's actual burial site) were excluded from the analysis. These outlier cases represented the extreme end of the distance distribution, and as such, the project team judged that including them would not contribute to the understanding of how most veterans and next of kin weigh distance when considering their choice of burial location. The final samples size for the analysis was 13,412 (5,378 AMAS and 8,034 BOSS records).

¹¹ VA provided requested data fields from 30,000 AMAS records representing applications for headstones or markers submitted in 2002. VA also provided requested data fields for 30,000 BOSS records containing information on next of kin of veterans interred in a national or state veterans cemetery in 2004. Based on a power analysis of the records needed for the analyses, sufficient files were requested to ensure that the research team would be able to exclude unusable records while maintaining a large sample size (i.e., five to ten thousand from each dataset). The BOSS and AMAS data were requested from slightly different time periods (i.e., records from 2004 for BOSS and records from 2002 for AMAS) because an important measurement variable needed for the analyses was discontinued from AMAS after 2002. As a result, these two data sources represented the best available data to conduct the analyses, and the research team believes that the small time difference between these two data sets do not present a significant threat to validity.

reasonableness of VA burial policy. What makes this assumption reasonable is the inclusion of records from families who chose a VA burial option <u>and</u> those who did not. This aspect of the approach allows avoidance of the obvious self-selection effects that would result from an analysis based on BOSS records alone. If the 75-mile standard proves adequate and reasonable for burial program beneficiaries contained in AMAS and BOSS, it will be adequate and reasonable for all veterans. ¹² This is because beneficiaries will constitute the burial program's most knowledgeable, attentive, and critical customers.

A second key assumption is that the address field for the next of kin in these datasets is a reasonable proxy for the address of the veteran's residence at time of death. This assumption is only valid if one can be reasonably confident that the residential address information in the sampled records is that belonging to the surviving spouse, and not some other member of the veteran's family (e.g., a son or daughter). The program evaluation took two steps in order to meet the requirements of this assumption. First, only BOSS records in which "spouse" was specified in the relationship field of the record were retained. Secondly, because the relationship status of the next of kin is not specified in a typical AMAS record, AMAS records where the next of kin's name was male were eliminated. This significantly enhanced the likelihood that the AMAS records used represented surviving spouses, ¹³ since the overwhelming majority of veterans interred in any cohort are male. Other data supporting this approach includes findings from the 2001 National Survey of Veterans which found that 73.3 percent of veterans are married and live with their spouse. These steps significantly enhanced the likelihood that the address on the AMAS record was in fact the last known address of the veteran.

Geocoding Addresses for Analysis. Using the combined BOSS/AMAS file geospatial conversion (i.e., "geocoding") was conducted for each address in the data. This process involves assigning geographic coordinates (i.e., latitude and longitude) to every address so that an accurate linear distance and drive time could be calculated between each spouse's address (also assumed to be the veterans' last known address) and:

- The nearest national or state veterans cemetery
- The location (i.e., cemetery) in which the veteran was actually interred.

These distances were calculated for each record, becoming new variables for analysis in the dataset.

ii. Analysis and Findings

Spouses' Distance to Actual Burial Location. Descriptive statistics (median, mean, and standard deviation) for all sampled BOSS and AMAS records of spouses living within 200 miles of their veteran's place of burial are shown in Exhibit 3-4. The following Exhibits 3-5 and 3-6

¹² It is important to reiterate that the records contained in BOSS and AMAS represent individuals with demonstrated knowledge regarding their VA burial benefits. An important reason this subgroup is the appropriate one from which to estimate the relationship of distance and choice of burial location is that veterans/next of kin who are not aware of their burial benefits will, by definition, select private cemeteries regardless of their proximity to national or state veterans cemeteries. Because lack of awareness precludes choice, it is not reasonable to include in this analysis individuals who are unaware that burial in a national or state veterans cemetery was (or is) an option.

¹³ To test this assumption, the evaluation team requested that NCA check 400 random selected AMAS records with next of kin names that were all female. NCA reported that three-fourths (74%) were, in fact, spouses of the deceased veteran.

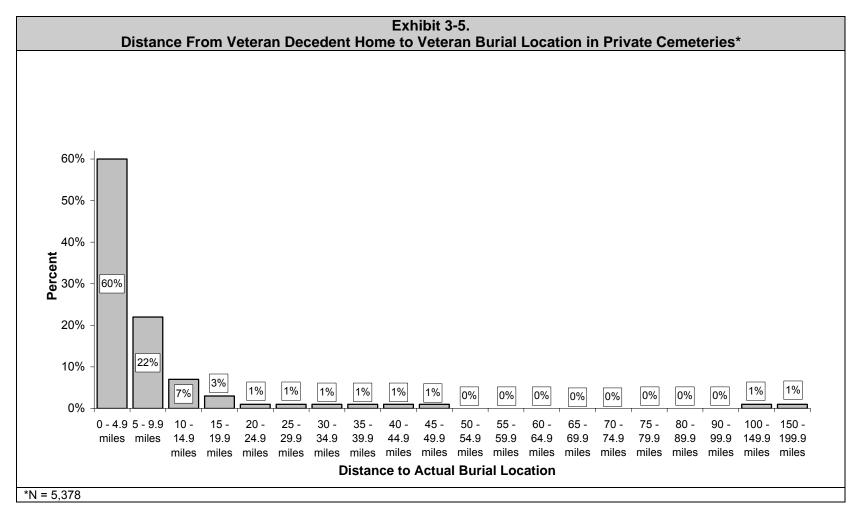
show graphs illustrating the distances from the veteran decedent's home to their actual burial location. Specifically, Exhibit 3-5 shows the distribution of distance for those buried a private cemetery, and Exhibit 3-6 focuses on those buried in national or state veterans cemeteries. These Exhibits illustrate the effect of distance on burial choice.

Exhibits 3-4, 3-5, and 3-6 clearly show that distance is a major factor in making burial choices. Most veterans are buried quite close to their surviving spouses; 92 percent of veterans buried in private cemeteries and 51 percent of veterans buried in national or state veteran cemeteries are buried within 20 miles of the spouse. However, when comparing median distances, those buried in national or state veteran cemeteries are buried significantly further from the residence of their spouse (19.2 miles) than those buried in a private cemetery (3.8 miles). This difference is evidence that many veterans and their spouses assign a significant premium to burial in a national or state veterans cemetery, because a surviving spouse will have longer travel times to veteran cemeteries, on average.

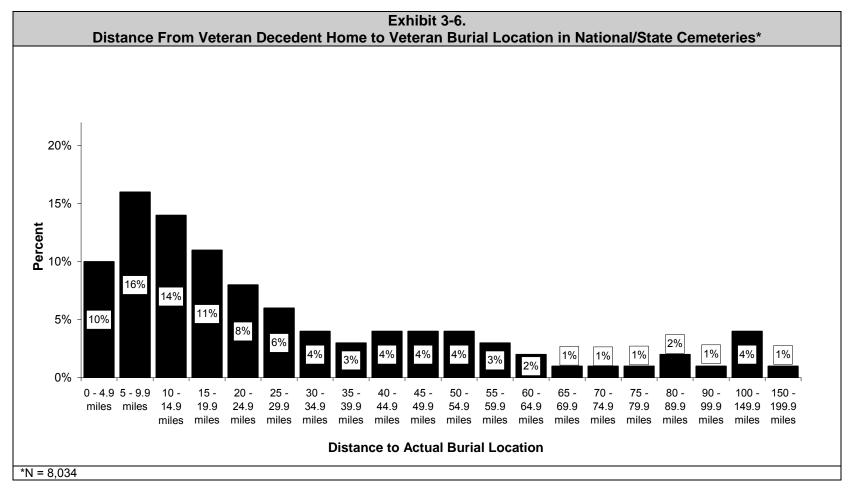
Though burial in a national or state veteran cemetery represents a clear premium, the data also show that the subjective value of a VA burial option is influenced by the distance required to take advantage of it. A relatively small percentage (35 percent) of spouses in the BOSS sample live more than 30 miles from the cemetery, whereas 80 percent live within 50 miles.

Exhibit 3-4. Spouses' Linear Distance to Actual Burial Location Descriptive Statistics for AMAS and BOSS AMAS Records (n=5,378) BOSS Records (n=8,034)							
	Private Cemeteries		National/State Cemeteries				
Variable	Median	Mean	St. Dev.	Median	Mean	St. Dev.	
Linear distance to burial location (miles)	3.8	9.4	21.1	19.2	30.5	30.7	
Linear distance to nearest national or state veterans cemetery (miles)	39.3	44.9	30.6	16.3	22.9	20.6	
* Sample size for analysis, n=13,412.							

Source: Automated Monument Application System (AMAS), CY 2002, Burial Operations Support System (BOSS), CY 2004 & Geographic Information System (GIS) Analyses

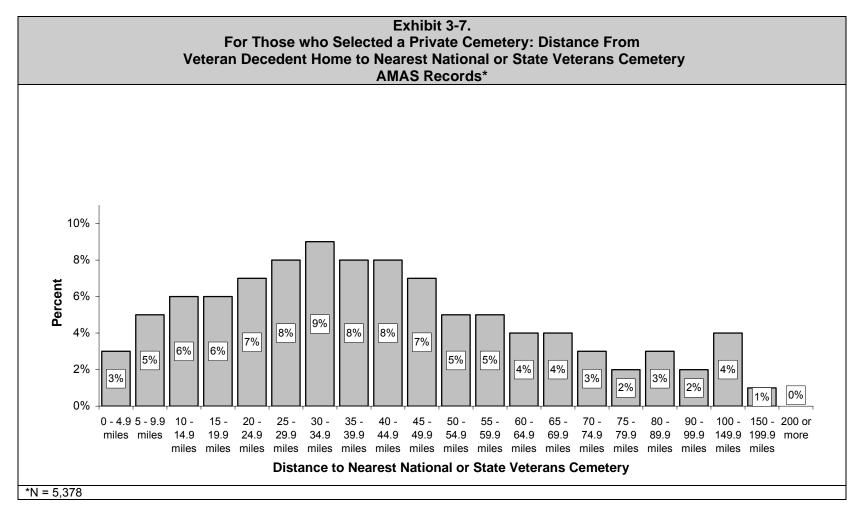


Source: Automated Monument Application System (AMAS), CY 2002 & ICF Geographic Information System (GIS) Analyses

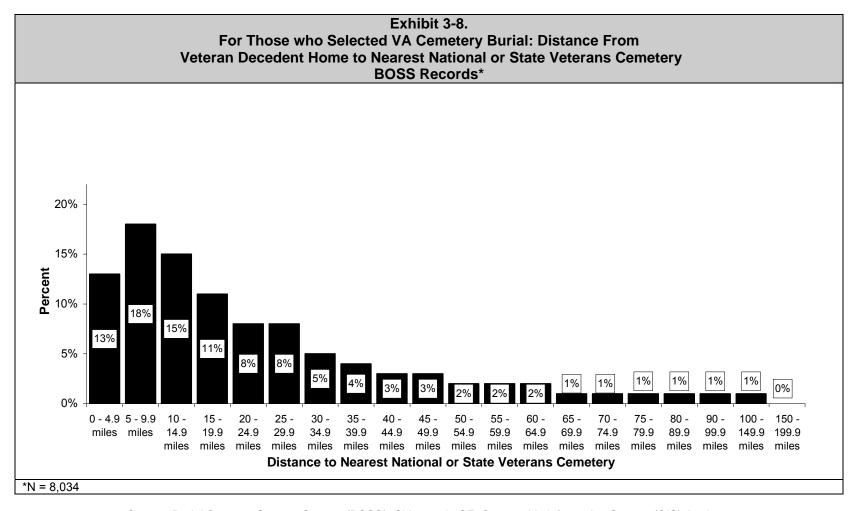


Source: Burial Operations Support System (BOSS), CY 2004 & ICF Geographic Information System (GIS) Analyses

Spouses' Distance to Nearest National or State Veterans Cemetery. The following Exhibits 3-7 and 3-8 show the distances from the veteran decedent's home to the *nearest national or state veterans cemetery, as contrasted with the distance to the nearest actual burial location presented in preceding Exhibits 3-5 and 3-6.* Specifically, Exhibit 3-7 shows how far away the nearest national or state cemetery is for those who decided on a <u>private</u> cemetery. Exhibit 3-8, by contrast, shows how far away how far away the nearest national or state cemetery is for those who chose a <u>VA burial</u>. Clearly, for most of those choosing a VA burial (Exhibit 3-8), the closest national or state cemetery also represents their actual burial location—though not in all cases. These Exhibits illustrate how proximity to a national or state veterans cemetery influences the choice of a VA burial.



Source: Automated Monument Application System (AMAS), CY 2002 & ICF Geographic Information System (GIS) Analyses



Source: Burial Operator Support System (BOSS), CY 2004 & ICF Geographic Information System (GIS) Analyses Note that VA burial includes burial in either a national or state veterans cemetery.

The descriptive statistics shown in Exhibit 3-4 and the graphs shown in Exhibits 3-7 and 3-8 clearly demonstrate that veterans and next of kin are more likely to choose a VA burial option the closer they live to a national or state veterans cemetery. Specifically, the median distance to the closest national or state veterans cemetery for those selecting a private cemetery is 39 miles. This distance contrasts sharply with the median distance of those who chose a burial in a national or state veterans cemetery (16 miles). Nearly all (91 percent) of the veterans/spouses in the sample who chose a VA burial option (Exhibit 3-6) lived within the service area of a national or state veterans cemetery as currently defined. A slightly lower percentage (88 percent) of veterans/spouses who ordered a VA headstone or marker for use in a private cemetery (Exhibit 3-7) lived within an existing service area.

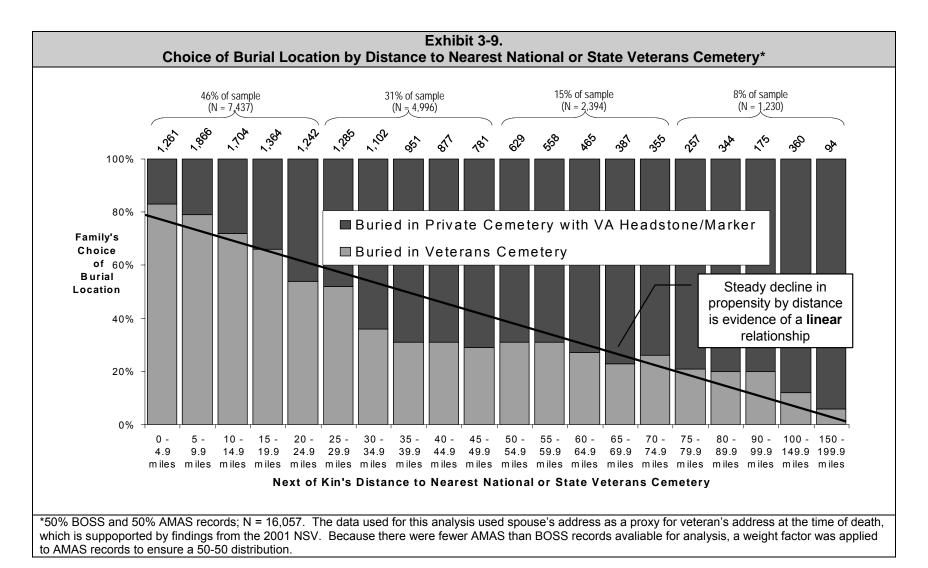
Though proximity to a nearest national or state veterans cemetery is a major driver for those choosing a VA burial option, factors other than distance also influence this decision. For example, it is notable that 44 percent of AMAS addresses in the sample were within 30 miles of a national or state veterans cemetery. This finding indicates clearly that there are many veterans and spouses who, though they are aware of VA burial benefits, prefer to be buried in a private cemetery even when a VA burial option is relatively close.

Exhibit 3-9 below reinforces the findings presented thus far by showing the relationship between distance to the nearest national or state veterans cemetery and the propensity of veterans and their families to choose burial in a national or state veterans cemetery. Specifically, the Exhibit shows the distribution of AMAS (private cemetery selection) and BOSS records (national/state cemetery selection) within defined ranges of distance. The Exhibit demonstrates that for veterans and families, there is a very strong propensity to take advantage of a VA burial option when living within 20 miles to a national or state veterans cemetery, and a very low usage rate for those who live beyond the current 75 mile service area standard.

Most important for the evaluation of the "ideal" distance standard, Exhibit 3-9 demonstrates that **propensity declines in roughly linear fashion rather than dropping off precipitously at some critical distance threshold**. The linear nature of the relationship between distance to the nearest national or state veterans cemetery and propensity to choose a VA burial option is shown in Exhibit 3-9 by the diagonal line superimposed over the bars.

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¹⁴ For this step in the analysis, a weight was applied to the AMAS data so that the sum of the weighted AMAS records was equivalent to sum of the BOSS records.



Source: Burial Operations Support System (BOSS) records, CY 2004, and Automated Monument Application System (AMAS) records, CY 2002.

Regression analysis can provide an estimate of the "average effect" of distance on the propensity of veterans and families to choose a VA burial option as the relationship between distance and choice of burial location is linear. The results of the regression model, which used records from all MSNs, are shown in Exhibit 3-10 below.¹⁵

Exhibit 3-10. Logistic Regression Model: All MSNs						
Dependent variable: Chose National or State Veterans Cemetery (1=yes 0=no) Predictor variable: Distance to Nearest National or State Veterans Cemetery						
Variables	В	S.E.	Wald	df	Sig.	Exp(B)
Distance	205	.004	2306.815	1	.000	.81
(Constant)049 .018 7.936 1 .005 .952						
* Sample size for analysis, n=13,412.						

Source: Burial Operations Support System (BOSS) records, CY 2004, and Automated Monument Application System (AMAS) records, CY 2002

The regression analysis shows that propensity to choose a national or state veterans cemetery drops as distance increases, supporting a finding that has already been demonstrated in earlier Exhibits and analysis. In Exhibit 3-10, the coefficient (*B*) associated with distance is negative and significant (-.205; sig. =.000)¹⁶. The regression model adds value by providing a method for VA to predict the average propensity to choose a VA burial option for veterans living particular distances from a national or state cemetery. Specifically, the model predicts that propensity declines by 5 percentage points per each increase of approximately 5 miles in distance¹⁷.

Similar regression models were estimated separately for each of the five MSNs using all available records. Comparison of the size of the resulting coefficients from each model allowed exploration of whether the relationship of propensity and distance varied (i.e., was stronger or weaker) across MSNs. The results suggest that the relationship of distance and propensity in the Philadelphia MSN (MSN 1—the most density populated region of the country) is stronger than in the others. Whereas an increase of about five miles is associated with a 5 percent decline in propensity for all MSNs, in MSN 1, the same increase in distance is associated with a decline of 7 percentage points. *This finding shows that, there are greater distance costs in time and effort for veterans and families in MSN 1 who might be considering a VA burial*

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To calculate the effect of distance on propensity to choose a VA burial option, a logistic regression model was calculated using the AMAS/BOSS sample, with propensity to choose a VA burial option as the dependent variable, and distance to the nearest national or state veterans cemetery as the predictor variable. Since the dependent variable has only two values, logistic regression was employed. In logistic regression, the coefficient, *B*, represents the change in log odds associated with a one-unit increase in the dependent variable. One unit in these models represents a distance of slightly over five miles. Exp(B) provides the "odds ratio" (e.g., .81/1), which represents the predicted odds that a respondent with a given distance value will choose VA burial over private burial. Odds ratios are easily converted to a more intuitive metric, probability, by using this formula: *prob* = *odds* / (1+*odds*). Using the model in Exhibit 3-10, an odds ratio of .81 is equivalent to 45% probability (.81/ [1+.81] = .45). Thus, a one unit increase (i.e., about 5 miles) in distance is associate with a 5% decline in propensity, on average, for all MSNs combined. The odds ratio shown in the model for MSN 1 (Philadelphia) is .74, which translates into 43% probability.

or an average decline of 7% per increase of about 5 miles.

A p value of .05 or below is the traditional cutoff point for statistical significance. In this case, .000 is below the .05 cutoff, and is therefore significant.

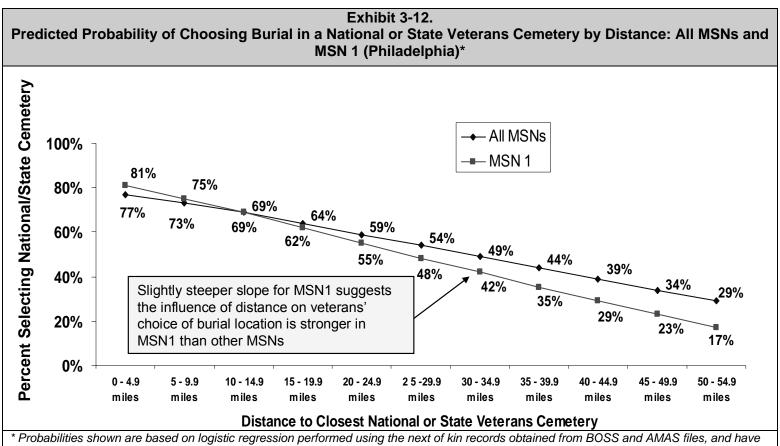
¹⁷ VA can use this model as a predictive tool to estimate propensity among current and future beneficiaries for policy and planning.

option. Compared to their counterparts in other MSNs, each additional mile from the closest national or state veteran cemetery represents a stronger disincentive to choose a VA burial option. Regression results for MSN 1 are shown in Exhibit 3-11.

Exhibit 3-11. Logistic Regression Model: MSN1 (Philadelphia only) Dependent Variable: Chose National or State Veterans Cemetery (1=yes 0=no)						
Predictor Variable: Distance to Nearest National or State Veterans Cemetery						
Variables	В	S.E.	Wald	df	Sig.	Exp(B)
Distance	306	.013	565.165	1	.000	.74
(Constant)084 .037 4.991 1 .025 .92						
* Sample size for analysis, n=3,444.						

Source: Burial Operations Support System (BOSS), CY 2004 and Automated Monument Application System (AMAS) records, CY 2002

Distance matters a great deal in all MSNs, but its impact on choice of burial location is strongest for those in the northeastern U.S., the county's most densely populated area in MSN 1. Exhibit 3-12 plots estimated propensity to choose a VA burial option by distance to the nearest national or state veterans cemetery, for all MSNs and for MSN 1 alone. The graph shows the influence that distance has on the propensity of veterans/next of kin in MSN 1 to choose national or state veteran cemeteries.



^{*} Probabilities shown are based on logistic regression performed using the next of kin records obtained from BOSS and AMAS files, and have been rounded to the nearest single digit. Because these families have knowledge of, and connection to, VA and VA benefits, their probability of choosing burial in a national or state veteran cemetery is likely to be higher than for the overall veteran population.

* Sample size for analysis, n=13,412.

Source: Burial Operations Support System (BOSS) records, CY 2004 and Automated Monument Application System (AMAS) records, CY 2002

2. Relationship of distance, drive time and choice of burial location

GIS methods were used to develop drive time estimates for all records in the BOSS/AMAS file. Each next of kin address in the file was geo-coded, and then the shortest driving distance allowed by the current road network was calculated to: 1) the closest national or state veteran cemetery and 2) the veteran's actual burial location. The geo-processing model used 3 datasets: census tract centroids¹⁸ for the entire USA and Puerto Rico territory¹⁹, points of national and state cemetery locations, and a database of the current road network.²⁰ The model used a software program to determine the closest centroid to each street address and the closest cemetery to each centroid. The geographic access information then was used to calculate the drive time to the nearest national or state veterans cemetery using posted speed limits.

At the national level, descriptive drive time statistics based on the AMAS/BOSS records sampled for this analysis are shown in Exhibit 3-13. The results shown in Exhibit 3-13 are further illustrated in the following two graph Exhibits.

Exhibit 3-13. Drive Time Descriptive Statistics from AMAS and BOSS Sampled Records						
AMAS Records (n=5,378) BOSS Records (n=8,034)						
	Private Cemeteries National/State Cemeteries					
Variable	Median	Mean	St. Dev.	Median	Mean	St. Dev.
Drive time to burial location (minutes)	10.1	19.7	38.0	43.4	59.0	54.3
Drive time to nearest national or state veterans cemetery (minutes)	75.4	84.7	63.3	38.4	47.4	41.1
* Sample size for analysis, n=13,412.						

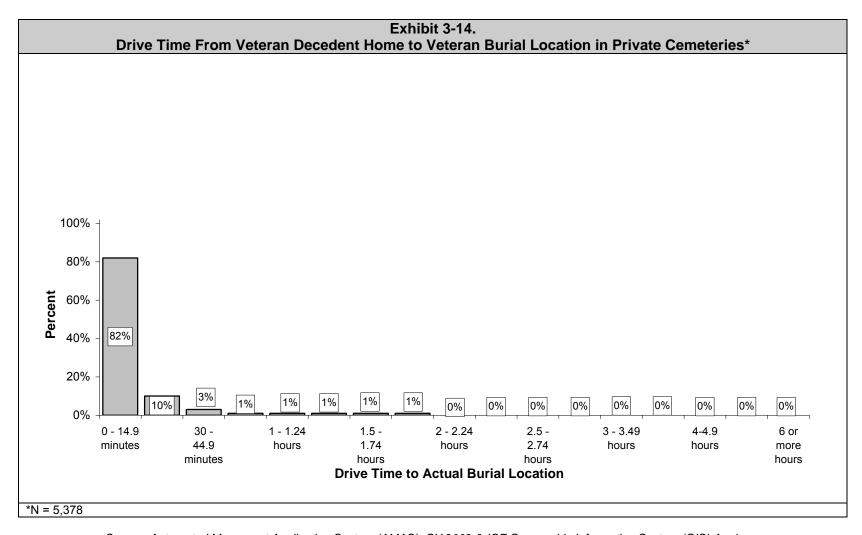
Source: Automated Monument Application System (AMAS), CY 2002, Burial Operations Support System (BOSS), CY 2004 & ICF Geographic Information System (GIS) Analyses

Drive times to the veteran's burial location for families choosing a private burial are shown in Exhibit 3-14. Drive times to the veteran's burial location for families choosing a national or state veterans cemetery are shown in Exhibit 3-15. These Exhibits show that a much larger percentage of families choosing a private cemetery live within a 45-minute drive of the cemetery than is true for families choosing a VA burial option (95 percent vs. 67 percent, respectively). Exhibit 3-15 also shows that while 67 percent of families choosing a VA burial option live within a 45-minute drive from the cemetery, an additional 33 percent live within a 45-minute to a 3.5hour drive from the cemetery. Like the linear distance data shown in earlier Exhibits, these drive time data illustrate the "premium" that veterans and family members associate with the VA burial option: on average, next of kin are willing to travel further for the benefit of their decedent's interment in a national or state veterans cemetery.

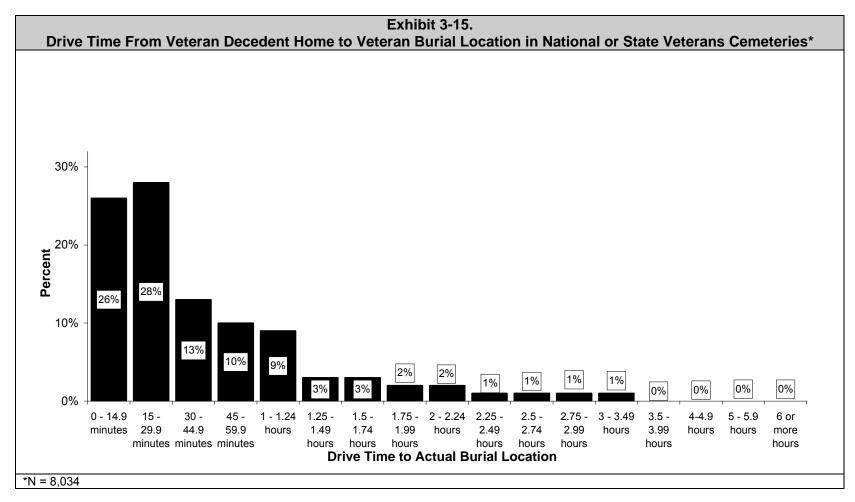
¹⁸ In geographic information systems, the centroid of a region of the Earth's surface is its geographical center. ¹⁹ Guam, Northern Marianas Islands, Samoa, and Virgin Islands were not included in the analysis, as road network

data for these areas are not reliable.

The road network dataset (Street Map Pro 2005) used for the test analysis was sourced from ESRI (Created by Tele Atlas) and it includes Primary Limited Access or Interstate, Primary US and State Highways, Secondary State and County, Local – Rural, Ramp, and Cul-de-sac – Traffic Circle. The census geography (shapefiles) at the tract level is included in the data files as part of the ArcGIS software suite (sourced from ESRI). The Environmental Systems Research Institute (ESRI) is a high-tech software development and services company providing professional, market-leading Geographic Information System (GIS) software and geodatabase management applications, along with extensive consulting and support for these products.



Source: Automated Monument Application System (AMAS), CY 2002 & ICF Geographic Information System (GIS) Analyses



Source: Burial Operations Support System (BOSS), CY 2004 & ICF Geographic Information System (GIS) Analyses

At the national level, drive time is so closely related to linear distance that one could serve as a proxy for the other for nearly any measurement purpose. Exhibit 3-16 shows the high correlation (r =.92) between these two variable in the sample of AMAS/BOSS records.²¹ While in theory drive time would seem to promise a fairer metric on which to base the service standard, in practice, this high correlation means that *drive time provides VA very little information that is not already captured by linear distance*.

Exhibit 3-16. Correlation Between Distance and Drive Time in the AMAS/BOSS File					
		Linear distance to burial location (miles)	Driving distance to burial location (minutes)		
Linear distance to	Correlation (r)	1	.915		
burial location	Sig. (2-tailed)		.000		
(miles)	N	13412	13412		

Source: Automated Monument Application System (AMAS), CY 2002, Burial Operations Support System (BOSS), CY 2004 & ICF Geographic Information System (GIS) Analyses

i. Implications of Adopting the Drive Time Standard

To examine the implications for existing national and state veteran cemeteries of switching to a drive time standard from a distance standard, the program evaluation analyzed next of kin drive times with a set of national and state veteran cemeteries sampled to represent the range of community sizes in the U.S. With input from VA, a set of cemeteries that fall into one of three categories based on the general size of the community being served were selected.²² The categories were:

- Urban eight national cemeteries serving some of the nation's largest cities, including New York NY, Boston MA, Dallas TX, and San Diego CA.
- Suburban seven national cemeteries serving communities that are smaller than major metro areas, but still within a few miles of a community with a population measured in the tens of thousands, including Annapolis MD, Davenport IA, Springfield MA, and Central Florida.
- Rural —This group includes four national cemeteries serving relatively small areas, including Mountain Home TN and Danville KY.

Once the sample of communities was selected, all sampled BOSS records which indicated the decedent was buried in one of the sampled cemeteries were extracted, and then were used to calculate the average drive time and driving distance data for each cemetery and its host community. More than 3400 records were employed, each representing the next of kin of a veteran interred in one of the sampled cemeteries. The resulting drive time averages, by size category²³, are presented in Exhibits 3-17, 3-18, and 3-19.

²¹ Pearson's correlation coefficient (r) reflects the degree of linear relationship between two variables. It ranges from 1.00 to -1.00. Where r = 1.00, there is a perfect positive linear relationship between the two variables. Similarly, a correlation coefficient of -1.00 implies a perfect negative correlation.

²² The terms urban, suburban and rural are used for convenience to distinguish the relative sizes of the communities served. The sampled communities may not conform exactly to official definitions of these terms.

²³ The size categories were classified based on data and descriptions/labels provided by the Census Bureau.

Exhibit 3-17. Sampled Veterans Cemeteries Serving Urban Areas: Average Driving Distances and Times				
Cemetery	N	Average Distance (miles)	Average Time (minutes)	Miles Per Minute
Dallas-Ft. Worth	217	22.93	33.34	0.69
Ft. Logan (Denver)	274	16.59	35.13	0.47
Ft. Rosecrans (San Diego)	191	25.92	40.73	0.63
Ft. Snelling (Minneapolis)	290	17.55	26.08	0.67
Jefferson Barracks (St Louis) Calverton (Long Island/New	286	20.59	43.34	0.47
York)	446	47.76	62.31	0.77
Massachusetts (Bourne/Boston)	165	40.44	54.63	0.74
Tahoma (Seattle/Tacoma)	187	25.98	40.11	0.64
	1839			mean = .64
Avg. driving distance in 90 minutes: 58 miles				
Avg. driving distance in 2 hours:	77 miles			
* Sample size for analysis, n=1,839.				

Source: Geographic Information Systems (GIS) Analysis and Burial Operations Support System (BOSS) records, CY 2004

As shown in Exhibit 3-17, 1839 BOSS records were available representing veterans interred in the eight sampled cemeteries serving urban communities. Average miles traveled per minute between the next of kin's residence and the national cemetery in which the veteran is interred varied by location, from a low of .47 miles per minute for those served by the Ft. Logan and Jefferson Barracks National Cemeteries, to a high of .77 for those served by the Calverton National Cemetery. The average *distance from residence to cemetery* was highest, however, for next of kin with veterans buried in Calverton (47.76 miles), meaning that that these next of kin generally faced the longest total drive times from among the eight urban communities that were analyzed (62.31 minutes).

The mean miles per minute for all eight urban communities was .64, meaning that next of kin in urban areas can travel, on average, about 58 miles in 90 minutes, and 77 miles in two hours. The data suggest that, in urban areas, most next of kin living within the current service area standard (75 miles) could reach their veteran's burial site cemetery within a two hour period.

Exhibit 3-18. Sampled Veterans Cemeteries Serving Suburban Areas: Average Driving Distances and Times					
Average Average Distance Time Miles Per N (miles) (minutes) Minute					
Biloxi	57	18.78	27.78	0.67	
Camp Butler (Springfield)	35	19.73	28.56	0.69	
Crownsville Veterans Cemetery (Annapolis)	55	16.42	27.28	0.6	
Florida (Bushnell)	426	48.89	69.39	0.7	
Ft. Custer (Kalamazoo)	58	26.82	42.17	0.62	

Exhibit 3-18. Sampled Veterans Cemeteries Serving Suburban Areas: Average Driving Distances and Times					
North Dakota Veterans Cemetery (Bismark)	24	18.53	33.76	0.54	
Rock Island (Davenport)	43	12.00	20.40	0.58	
	1339			mean = .63	
Avg. driving distance in 90 minutes: 57 miles					
Avg. driving distance in 2 hours: 76 miles					
* Sample size for analysis, n=1,339.					

Source: ICF Geographic Information Systems (GIS) Analysis and Burial Operations Support System (BOSS) records, CY 2004

As shown in Exhibit 3-18, 1339 BOSS records were available representing veterans interred in the seven sampled cemeteries serving suburban communities. Average miles traveled per minute between the next of kin's residence and the national or state veterans cemetery in which their veteran is interred varied by location, from a low of .54 miles per minute for those served by the North Dakota Veterans Cemetery to a high of .7 for those served by the Florida National Cemetery. The average *distance from residence to cemetery* was highest, however, for next of kin with veterans buried in Florida National Cemetery (48.89 miles), meaning that that these next of kin generally faced the longest total drive times of all seven suburban communities that were analyzed (69.39 minutes).

The mean miles per minute for all seven communities was .63, which implies that next of kin visiting national cemeteries in suburban areas can travel, on average, about 57 miles in 90 minutes, and 76 miles in two hours—very similar to the mean distances calculated for the urban communities shown in the previous Exhibit. The similarity between urban and suburban communities in the average distance that can be traveled in a given period of time does not favor the adoption of a drive time standard over the more easily measured linear distance standard.

Exhibit 3-19. Sampled Veterans Cemeteries in Rural Areas: Average Driving Distances and Times				
Average Distance Time Miles Per Cemetery N (miles) (minutes) Minute				
Black Hills (Sturgis)	40	22.56	30.42	0.74
Camp Nelson (Danville, KY)	21	19.64	28.01	0.7
Eagle Point (Oregon)	41	27.15	42.99	0.63
Mountain Home (TN)	31	24.89	40.07	0.62
226 mean = .67				
Avg. driving distance in 90 minutes: 60 miles Avg. driving distance in 2 hours: 80 miles * Sample size for analysis, n=226.				

Source: ICF Geographic Information Systems (GIS) Analysis and NCA cemetery data

As shown in Exhibit 3-19, 226 BOSS records were available representing veterans interred in the four sampled cemeteries serving rural communities. Average miles traveled per minute between the next of kin's residence and the national cemetery in which the veteran is interred varied only slightly by location, from a low of .62 miles per minute for those served by the Mountain Home National Cemetery, to a high of .74 for those served by the Black Hills National Cemetery. The average *distance from residence to cemetery* was highest for next of kin with veterans buried in Eagle Point (27.15 miles).

The mean miles per minute for all four rural communities was .67, meaning that next of kin in these areas can travel, on average, about 60 miles in 90 minutes, and 80 miles in two hours. While these distances are greater than the distances that could be covered in urban and suburban locations in the same time period, the differences are very slight.

Overall, these findings indicate that within two hours, next of kin from all three types of communities can travel to a national cemetery within 75 miles of their residence. Should VA consider a drive time standard, a two hour standard would be a good candidate because it is the closest approximation to the current 75 mile distance standard. These BOSS data illustrate that driving time is slightly better in rural areas, but the difference is at the margins and not sufficient to justify a switch to a drive time this standard given its shortcomings (i.e., drive time is very difficult to measure in a manner that accounts for continually shifting road and traffic conditions).

3. Summary of drive time and distance standard analysis

The high correlation between driving time and linear distance and the results of the preceding analysis support the position that that drive time has little to recommend it over linear distance as a service area standard for the establishment of new national cemeteries. Additionally, the following points favor a distance standard over a drive time standard:

- A distance standard is simpler and more likely to be perceived as fair, since a drive time standard will naturally lead many veterans and next of kin to consider whether it has been calculated correctly by VA. No matter what data source is used, the personal experience of some veterans will differ from the calculated drive time. They are likely to question, with merit, that their personal experience of bad roads, traffic conditions, etc. has not been considered by VA.
- Currently there is no national data source that accurately captures the real-time, frequently changing driving conditions that impact an individual's actual drive time. Current data sources and methods provide only averages based on road speeds, and can become quickly outdated without frequent updates requiring substantial resources including personnel, technology, and time. A drive time standard does not meet the need for reliability, and would be highly resource intensive to continuously update and maintain.

c. Evaluating Alternative Standards

As part of the evaluation of the adequacy and reasonableness of the current service area standard, the program evaluation employed the methodological approach documented at the beginning of this chapter to measure the percent of veterans served under the current standard and two alternative linear distances: 65 miles and 55 miles. These specific distances were chosen because they each represent a more stringent standard than the current policy, by 10 and 20 miles, respectively. A more "relaxed" distance standard (e.g., 85 miles) was not chosen because from a policy perspective, a shift to a standard that is larger than 75 miles could lead to

criticism that VA is simply trying to extend the service areas of existing cemeteries to count more veterans as served.

In addition to testing the three distance standards for the near term (i.e., 2010), a GIS model was developed to predict the percent of veterans that will be served in future years. This was done by applying VetPop 2004 projections of the future size and distribution of the veteran population at the county and census tract levels. The models of percent served under each alternative begin with the year 2010, and continue with increments of five years (e.g., 2015, 2020) until 2030. As with all future predictions, there is greater confidence in projections of percent served in the near term years, than in more distant years. This is primarily due to the fact that the size and distribution of the veteran population could change in unanticipated ways in the future, introducing error into VetPop projections for distant years. Assuming VetPop 2004 data are accurate for the near term (e.g., 2010, 2015), one can have high confidence in projections of the percent of veterans served by a VA burial option for these years.

NCA provided data on the location of all current operational national cemeteries and state veteran cemeteries, which were geocoded to establish current service areas (see Appendix VI for geocodes). NCA also provided the full schedule of cemetery closures and new openings. All models and analyses conducted to test the three standards were adjusted for this schedule. For example, if a new cemetery was scheduled to open in 2012, the analysis of the percent served for 2015 and subsequent years assumes, and accounts for, the presence of that cemetery and its associated service area.

d. Implications for VA of Specific Alternative Standards

1. Key assumptions

The analysis that follows assumes that, in future years, VA and/or the states will construct new veteran cemeteries that are not currently planned or under construction. The rate of new construction assumed is one cemetery per year. It is assumed that the location of these cemeteries will be based on the criteria of the service standards being tested, with priority given to the locations with the largest number of veterans not currently served. The analysis for each of the years being measured from 2010 – 2030 at five year increments assumes that new veteran cemeteries have been constructed in the top five areas with the largest concentration of unserved veterans as identified in the previous 5 year period. The data for years 2020-2030 can be found in Appendix II. For example, the estimate of the percent served in 2020 assumes the construction of new cemeteries in the top five unserved areas identified for the year 2015. We assume the same rate of new cemetery construction (1 per year) regardless of the size of the population that would be served by these new cemeteries. A second assumption. necessary for accurate calculation of the percent served, is that veterans can be served by only one veterans cemetery - the one closest to them. Although, in practice, veterans may live within the service area of more than one veterans cemetery, to avoid double counting, this assumption is essential for the analysis of alternative service standards.

A third assumption in the analysis is that whichever service standard VA adopts or maintains will apply not only for new cemetery construction, but for existing cemeteries as well. This assumption is valid on the basis of both logic and fairness. If the data suggest, for example, that there is a linear distance standard that is more adequate and reasonable than the current 75-mile standard, it is assumed it will apply to all national and state veteran cemeteries. In terms of fairness, applying a different distance standard for new construction may create perceptions of inequity among veterans who live in areas served by existing national

cemeteries, but who could also potentially benefit from the new standard if it were to be applied broadly.

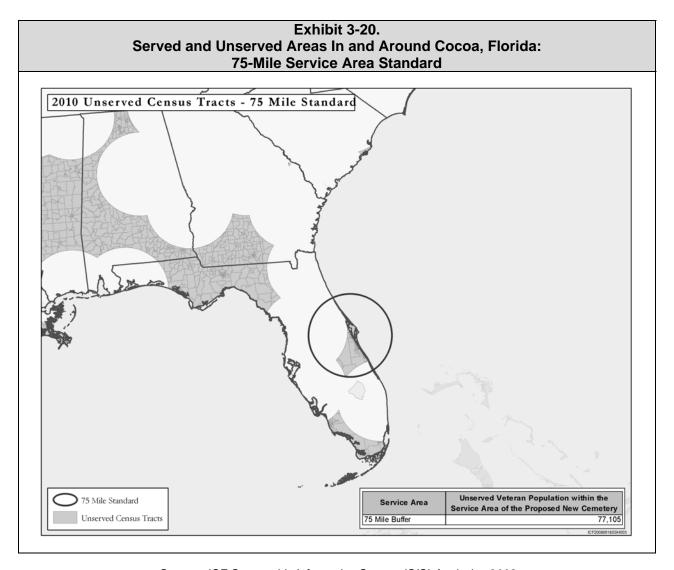
The assumption that both new and existing national and state veteran cemeteries will have the same service area standard has significant implications for the analysis presented in this chapter. For example, when testing alternative distance standards (e.g., 65 miles and 55 miles), the GIS models adjust the service areas of all national and state veteran cemeteries, not just the areas around potential new cemeteries. When comparing alternative standards, it becomes clear that the number of veterans served by a new cemetery is affected not only by the size of its own service area, but by the size of the service areas around neighboring cemeteries. This finding is illustrated in detail in the case study below.

i. How Changing the Distance Standard Impacts Percent Served: Cocoa Florida Example

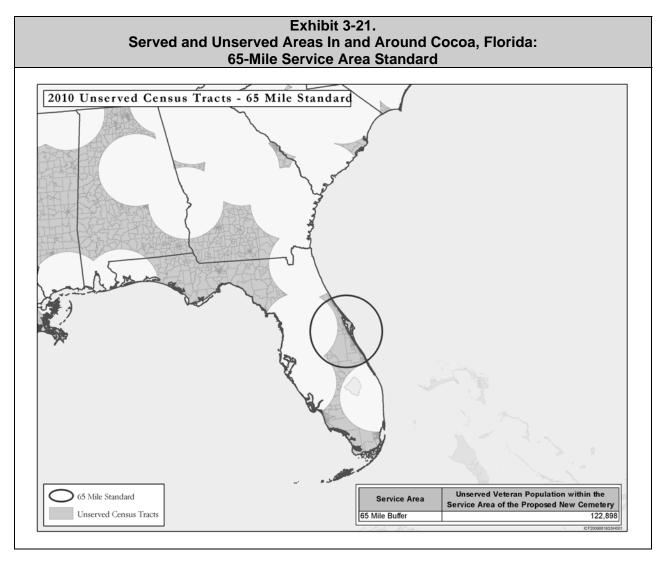
Before the implications for VA of specific alternative standards are discussed, it is important to clarify in general terms how the percent served will be affected if the linear distance standard is reduced. This section presents a short "case study" that illustrates the implications for a single region—Cocoa, Florida and the surrounding area—under three alternative scenarios: a 75-mile, 65-mile and a 55-mile service area standard.

There are two main goals of this case study. The first goal is to demonstrate how a reduction in the linear distance standard (e.g., from 75 to 65 miles) will reduce the percent of veterans served at the national level. Because the boundaries of every national cemetery's service area will "contract" under a smaller distance standard, many veterans living at or near the borders of the previous (75-mile) service area will not be served by the smaller 65-mile standard. At the national level, any reduction of the service area around existing cemeteries will, therefore, lead to a larger pool of unserved veterans. A second goal of this case study is to show how a reduction of the service area standard nationwide means that a new cemetery will often serve more people than it would under a larger standard. While counterintuitive, this phenomenon occurs because a smaller service standard nationwide always leads to a larger available pool of unserved veterans.

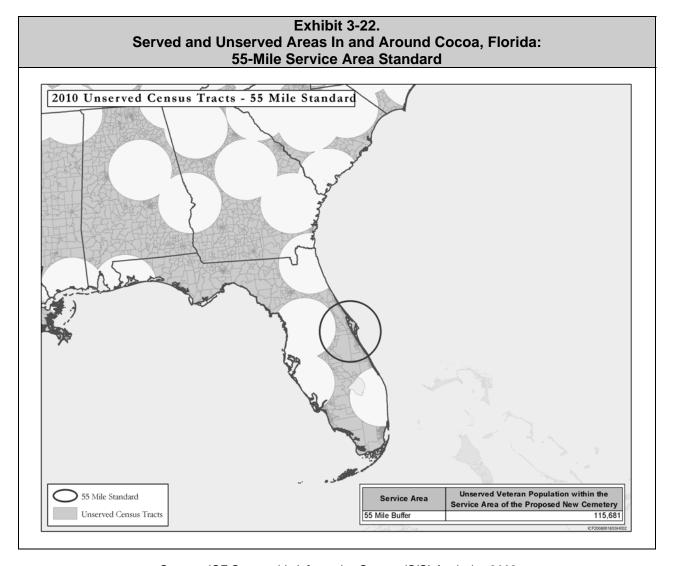
Exhibits 3-20, 3-21, and 3-22 show the relative sizes of the unserved and served areas in and around a proposed cemetery in Cocoa, Florida for the year 2010, under the three alternative standards. There are, of course, several existing veteran cemeteries that currently serve Florida. In the Exhibits below, the service areas represented by these cemeteries appear as white (unshaded), overlapping circles. *Veterans in the white areas are served by an existing VA burial option, and those in the gray regions are considered unserved.*



Source: ICF Geographic Information System (GIS) Analysis - 2008



Source: ICF Geographic Information System (GIS) Analysis - 2008



Source: ICF Geographic Information System (GIS) Analysis - 2008

In each of the Exhibits above, the black-outlined circle represents the service area of a hypothetical new cemetery that would be located in the Cocoa, FL region. Areas that would potentially be served by this cemetery include Cocoa and its suburbs and surrounding area.

The most important feature to consider in these three Exhibits is relative size of the gray, unserved region in and around the service area of the proposed new cemetery near Cocoa. Because the size of the unserved population grows as the service areas of the closest neighboring cemeteries contract, a new cemetery established in the Cocoa region would actually serve more veterans under a smaller distance standard (e.g., 55 miles) than it would under a larger standard (e.g. 75 miles). The fact that, in certain circumstances, a 55-mile service area standard could result in more veterans served by a new cemetery than a 75-mile standard is counterintuitive. As shown in the Exhibits above, this outcome, is simply a byproduct of the contraction of the service areas of adjacent cemeteries, which creates a larger total pool of unserved veterans.

A similar phenomenon as described in the Cocoa case study takes place at the national level when calculating the percent served under the three alternative standards (i.e., 75, 65, and 55

miles). Exhibits 3-23, 3-24, and 3-25 provide, respectively, national-level estimates of the percent of veterans that could be served by existing cemeteries in 2010 and 2015 under a 75-mile, 65-mile, and 55-mile standard, assuming construction of one cemetery per year at the locations recommended in this report. The number and percent of veterans served under the 75-mile standard and the two alternative standards for 2020, 2025, and 2030, are presented in the appendix. VetPop projections estimate there will be 22,051,212²⁴ living veterans within the 50 states, the District of Columbia, and Puerto Rico in 2010. In each of these Exhibits, the percent served for 2015 is lower than 2010 due to the pending closure of Jefferson Barracks National Cemetery (scheduled to close on or about 2017), which serves the Saint Louis, Missouri area.

Exhibit 3-23. Number and Percent of Veterans Served Under a 75-Mile Linear Distance Standard: 2010 and 2015				
Year	Total Veterans	No. Served	No. Unserved	Percent served
2010	22,051,212	19,484,310	2,556,902	88.4
2015	19,912,843	17,310,620	2,602,223	86.9

^{*} The data on the total number of veterans residing in the 50 states, the District of Columbia, and Puerto Rico for each year are based on VetPop projections that were available when the GIS analyses began in March of 2007 (based on VetPop 2004).

Source: VetPop 2004 and ICF Geographic Information System (GIS) Analysis

Exhibit 3-24. Number and Percent of Veterans Served Under a 65-Mile Linear Distance Standard: 2010 and 2015				
Year	Total Veterans	No. Served	No. Unserved	Percent served
2010	22,051,212	18,171,025	3,880,187	82.4
2015	19,912,843	16,107,993	3,804,850	80.9

^{*} The data on the total number of veterans residing in the 50 states, the District of Columbia, and Puerto Rico are based on VetPop projections that were available when the GIS analyses began in March of 2007 (based on VetPop 2004).

Source: VetPop 2004 and ICF Geographic Information System (GIS) Analysis

	Exhibit 3-25.					
Numbe	Number and Percent of Veterans Served Under a 55-Mile Linear Distance					
	Standard: 2010 and 2015					
Year	Total Veterans	No. Served	No. Unserved	Percent Served		
2010	22,051,212	16,344,839	5,706,372	74.1		
2015	19,912,843	14,476,632	5,436,211	72.7		

^{*} The data on the total number of veterans residing in the 50 states, the District of Columbia, and Puerto Rico are based on VetPop projections that were available when the GIS analyses began in March of 2007 (based on VetPop 2004).

Source: VetPop 2004 and ICF Geographic Information System (GIS) Analysis

Similar to the case study findings, the three Exhibits above demonstrate the impact that reducing the linear distance standard would have on the number and percent of veterans served at the national level. Because the current 75-mile service area around each existing national

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²⁴ The number of veterans residing in the 50 states, the District of Columbia, and Puerto Rico are based on VetPop projections that were available when the GIS analyses began in March of 2007 (based on VetPop 2004)

and state veterans cemetery would contract by 10 miles under a 65-mile standard, many veterans considered served by the 75-mile standard would not be served under a 65-mile standard. For example, the percent of veterans served in 2010 would drop from 88.4 percent to 82.4 percent if the service area standard was changed from 75 to 65 miles. With a 55-Mile standard the effect is more pronounced. If VA redefined the linear distance to 55 miles in 2010, the percent of veterans served nationally would fall to 74.1 percent.

In the following sections, the 75-mile service area standard and the areas with the largest concentrations of veterans not currently served by an existing national or state veterans cemetery are reviewed. A list of the top 10 most ideal locations to establish new national cemeteries is provided, based on GIS analysis of the size and distribution of the veteran population projected for 2010 and the locations of existing cemeteries. The results are then presented of the analysis for the two alternative standards tested: 65 miles and 55 miles, and the top 10 locations for new cemeteries under each of these alternative standards are identified. Tables and graphs depicting similar information for years 2015, 2020, 2025, and 2030 for all three standards are provided in the appendix. For each of these "out years," the Exhibits assume the existence of five new cemeteries, constructed in areas of greatest need as identified in the previous five year period.

2. 75-Mile linear distance standard

Exhibit 3-26 shows the ten areas in the US with the largest concentrations of veterans not served by an existing VA burial option in 2010. The chart takes into account all national and state veteran cemeteries that will be open for new interments in 2010. *The locations listed in Exhibit 3-26 represent the geographic centers of the largest pockets of unserved veterans in the US, as determined by GIS analysis.* Topping the list of the largest unserved communities are the areas surrounding and including Charleston, WV, Schuyler, NE, Tallahassee, FL, La Crosse, WA, and Houghton Lake, MI.²⁵ For those locations that are not well-known, the name of the nearest relatively well-known city is included in parentheses. The number of veterans not currently served by an existing burial option, but who would be if new cemeteries were established in or near a census tract in these areas, is shown in the "population served" column.

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²⁵ It is important to note that, although many of these locations are relatively small, most large areas in the US are <u>already served</u> by an existing national or state veterans cemetery. Each community listed has been identified as a candidate for a new cemetery because the number of veterans that would be served there *is higher than any alternative that appears lower on the list* (as well as any community not listed).

Exhibit 3-26. Top 10 Locations in 2010 With the Largest Concentration of Veterans Not Served by an Existing VA Burial Option: 75-Mile Standard					
Population Gained if New Cemetery Built					
Location	(under 75-mile service standard)				
Charleston, WV	122,941				
Schuyler, NE (Lincoln, NE)	120,019				
Tallahassee, FL	103,232				
La Crosse, WA (Walla Walla, Washington)	83,639				
Houghton Lake, MI (Saginaw, MI)	77,977				
Philadelphia, MS (Jackson, MS)	77,800				
Cocoa, FL (Cape Canaveral, FL)	77,112				
Hamlin, NY (Rochester, NY)	73,784				
Fort Atkinson, IA	69,577				
Newton, TX	67,324				
Total Veterans Gained	873,405				

Source: ICF Geographic Information System (GIS) Analysis - 2008

Note that all 10 communities fall below the current threshold of 170,000 unserved veterans, and would therefore not meet the existing criteria for a new national cemetery. Exhibit 3-27 displays these 10 locations on a map of the continental US. This map also shows, in gray, the total area of the continental US not served by a national or state veterans cemetery in 2010 under the 75-mile service area standard.

Exhibit 3-27. Top 10 Locations in 2010 With the Largest Concentration of Veterans Not Served by an Existing VA Burial Option: 75-Mile Standard 2010 Suggested Additional Cemeteries - 75 Mile Standard 75 Mile Standard Unserved Census Tracts

Source: ICF Geographic Information System (GIS) Analysis - 2008

3. 65-Mile linear distance standard

Exhibit 3-28 shows the ten areas in the US with the largest concentrations of veterans not served by a VA burial option in 2010 under a 65-mile service area standard. Topping the list of the largest unserved communities are the areas surrounding and including Hamden, OH, Ventura, CA, Cocoa, FL, Jones, OK, and Scribner, NE. The number of veterans not currently served by an existing burial option, but who would be if new cemeteries were established in or near a census tract in these areas, is shown in the "population served" column.

Exhibit 3-28. Top 10 Locations in 2010 With the Largest Concentration of Veterans Not Served by an Existing VA Burial Option: 65-Mile Standard			
Lasadan	Population Gained if New Cemetery Built		
Location	(under 65-mile service standard)		
Hamden, OH (Columbus, OH)	155,759		
Ventura, CA (Santa Barbara, CA)	128,608		
Cocoa, FL (Cape Canaveral, FL)	122,898		
Jones, OK (Oklahoma City, OK)	112,982		
Scribner, NE (Omaha, NE)	111,094		
Rochester, NY	102,093		
Cypress, FL (Tallahassee, FL)	96,903		
Mount Blanchard, OH (Toledo, OH)	91,425		
Avenal, CA (Fresno, CA)	86,131		
Hancock, NY	83,993		
Total Veterans Gained	1,091,886		

Source: ICF Geographic Information System (GIS) Analysis - 2008

Similar to the 75-mile standard, under a 65-mile service area standard, none of the top 10 communities meet the current 170,000 population threshold. It is also worthwhile to reiterate that, if the service area standard was reduced to 65 miles, the overall percent of veterans served would fall to about 82 percent. Since none of the top 10 communities would qualify for a new national cemetery under this scenario, switching to a 65-mile service area standard would make NCA's strategic service goal of 90 percent by 2011 unreachable in the near term. If NCA sought to maintain the 90 percent goal under this alternative standard, the change in linear distance would have to be accompanied by a reduction in the population threshold so that more locations would qualify for a new cemetery.

Exhibit 3-29 displays these 10 locations on a map of the continental US for a 65-mile standard. This map also shows, in gray, the total area of the continental US not be served by a national or state veterans cemetery in 2010 under the 65-mile service area standard. Compared to the map shown earlier depicting the 75-mile standard, the increase in the overall size of the unserved areas can easily be discerned. This increase is due to the "contracting" service area size of existing cemeteries.

Exhibit 3-29. Top 10 Locations in 2010 With the Largest Concentration of Veterans Not Served by an Existing VA Burial Option: 65-Mile Standard 2010 Suggested Additional Cemeteries - 65 Mile Standard 65 Mile Standard Unserved Census Tracts

Source: ICF Geographic Information System (GIS) Analysis - 2008

4. 55-Mile linear distance standard

Exhibit 3-30 shows the ten areas in the US with the largest concentrations of veterans not served by a VA burial option in 2010 under a 55-mile service area standard. Topping the list of the largest unserved communities are the areas surrounding and including Moorpark, CA (near Los Angeles), Logan, OH (outside Columbus and midway between Cincinnati and Cleveland), Attica, NY, Lake Huntington, NY, and Orlando, FL. The number of veterans not currently served by an existing burial option, but who would be if new cemeteries were established in or near a census tract in these areas, is shown in the "population served" column.

Exhibit 3-30. Top 10 Locations in 2010 With the Largest Concentration of Veterans Not Served by an Existing VA Burial Option: 55-Mile Standard			
Population Gained if New Cemetery But Location (under 55-mile service standard)			
Moorpark, CA (Los Angeles, CA)	262,274		
Logan, OH (Columbus, OH)	172,936		
Attica, NY (Buffalo, NY)	135,919		
Lake Huntington, NY	125,429		
Orlando, FL	124,354		
Coyle, OK (Oklahoma City, OK)	120,568		
North Baltimore, OH (Toledo, OH)	114,627		
Waterloo, NE (Omaha, NE)	100,896		
Freedom, IN (Terre Haute, IN)	94,733		
Arabi, LA (New Orleans, LA)	89,855		
Total Veterans Gained	1,341,591		

Source: ICF Geographic Information System (GIS) Analysis - 2008

Under an alternative 55-mile standard, two areas would immediately meet the criteria for the establishment of a new national cemetery under a population threshold of 170,000: Moorpark, CA and Logan, OH. If the reduction in the linear distance standard was accompanied by a change in the population threshold, many more locations would qualify. For example, if the threshold was reduced to 110,000 within 55 miles, five additional locations would meet the revised standard.

Exhibit 3-31 displays the top 10 locations on a U.S. map. The Exhibit also shows the total area served by national and state veteran cemeteries in 2010 (white areas) under the alternative 55-mile standard.

Exhibit 3-31. Top 10 Locations in 2010 With the Largest Concentration of Veterans Not Served by an Existing VA Burial Option: 55-Mile **Standard** 2010 Suggested Additional Cemeteries - 55 Mile Standard 55 Mile Standard Unserved Census Tracts

Source: ICF Geographic Information System (GIS) Analysis - 2008

5. Summary of current and alternative distance standards

The program evaluation examined short and long-term implications on the percent of veterans served by the 75-mile linear distance standard and two alternative distances: 65 miles and 55 miles. Data and implications were explored for five year increments: 2010, 2015, 2020, 2025, and 2030. (Exhibits covering the years 2015 to 2030 are provided in the appendix for all three standards tested). Finding for the current and alternative standards are highlighted below.

i. 75 mile service area standard

- The five largest concentrations of veterans in 2010 not served by a VA burial option under the current 75-mile standard are centered in and around Charleston, WV, Schuyler, NE, Tallahassee, FL, La Crosse, WA, and Houghton Lake, MI.
- None of the above locations currently meet the population threshold of 170,000 for the establishment of a new national cemetery.
- No US location will meet the criteria for the establishment of a new national cemetery under the current service area standard (i.e., 75 miles, 170,000 veterans) until 2015, in which only one community, the St. Louis, MO metropolitan area, will reach the population threshold of 170,000, due to the closing of Jefferson Barracks National Cemetery in or around 2017. GIS analysis revealed that the optimal Census tract to host a new cemetery for this region, if the current cemetery is not expanded, is at or near Crystal City, MO.

ii. Alternative service area standards (65 and 55 miles)

- A 65- or 55-mile service area standard will reduce the percent of veterans served by a VA burial option nationally. A linear distance standard of 65 miles will reduce the percent served to 82.4 percent in 2010, and a 55-mile standard will reduce the percent served to 74.1 percent in 2010.
- The five largest concentrations of veterans in 2010 not served by a VA burial option under a 65-mile alternative standard are centered in and around Hamden, OH, Ventura, CA, Cocoa, FL, Jones, OK, and Scribner, NE. However, none of these communities meet the current 170,000 population threshold.
- The five largest concentrations of veterans in 2010 not served by a VA burial option under a 55-mile alternative standard are centered in and around Moorpark, CA (near Los Angeles), Logan, OH (outside Columbus and midway between Cincinnati and Cleveland), Attica, NY, Lake Huntington, NY, and Orlando, FL. Two of these areas would immediately meet the criteria for the establishment of a new national cemetery under a population threshold of 170,000: Moorpark, CA and Logan, OH.

iii. Distance standards and the population threshold

- Very few areas will meet the criteria for a new national cemetery between 2010 and 2030 regardless of whether a 75, 65, or 55 mile standard is in effect, because they will not meet the 170,000 veteran population threshold.
- Several areas with relatively large numbers of veterans (i.e., more than 110,000) will remain unserved by a VA burial option if the veteran population threshold is not reduced.

 Lowering the population threshold to 110,000 would allow several areas to "qualify" for a new national cemetery under any of the three distance alternatives.

e. Drive Time Alternatives

Exhibit 3-32 displays, for the year 2010²⁶, the five areas with the largest concentrations of veterans not served by a VA burial option under the 75-mile standard. The Exhibit compares the number of veterans served under the 75-mile distance standard vs. three drive time alternatives: 60 minutes, 90 minutes, and 120 minutes. For each area, the Exhibit shows the number of veterans that would be served under each standard, assuming a new cemetery is established in or near the optimal Census tract as defined by the GIS analysis.²⁷

Exhibit 3-32. Number of Veterans in the Top 5 Unserved Locations in 2010 Who Would be Served Under 3 Drive Time Standards			
	Drive Time	75-Mile Standard	
Drive Time	Population Gained	Population Served	
	Rank #1 Charleston, W	V	
60 minutes	25,403		
90 minutes	58,716	122,941	
120 minutes	87,976		
	Rank #2 Schuyler, NE		
60 minutes	5,678		
90 minutes	14,495	120,019	
120 minutes	77,843		
	Rank #3 Tallahassee, I	-L	
60 minutes	27,945		
90 minutes	41,196	103,232	
120 minutes	64,426		
	Rank #4 La Crosse, W	Ά	
60 minutes	2,216		
90 minutes	6,175	83,639	
120 minutes	51,046		
Rank #5, Houghton Lake, MI			
60 minutes	12,241		
90 minutes	33,415	77,977	
120 minutes	61,137		

Source: ICF Geographic Information System (GIS) Analysis - 2008

 $^{\rm 26}$ The drive time data for the years 2015 to 2030 are provided in the appendix.

²⁷ The chosen drive time standards to test in this section is driven by the earlier analysis of AMAS and BOSS records showing that the median distance between the veteran's gravesite and the next of kin's residence was 10 minutes and 43 minutes, respectively. Based on these average drive times, it is estimated that a drive time standard beyond 120 minutes would be outside the range considered adequate and reasonable by most veterans and their next of kin. Among next of kin living within 200 miles of a loved one buried in a national or state veterans cemetery, only about 6 percent live beyond 120 minutes drive time.

Even considering the longest of the three drive time standards (120 minutes), the number of veterans that would be served in each of these areas is considerably lower than the number that would be served under the existing 75-mile standard.

Summary of Drive Time Alternatives

The findings from the drive time analyses add to the evidence against the feasibility of replacing the current distance standard with a drive time standard. The GIS analysis shown in Exhibits 3-32 comparing various drive time standards with the linear distance standard clearly establish that, in order for a drive time standard to serve similar numbers and percentages of veterans as the current 75-mile standard, it would have to be beyond 120 minutes. It is likely that a drive time standard over two hours would be found unreasonable by many veterans, based on earlier analysis of propensity.

f. Alternative Population Thresholds

Each potential alternative standard for the establishment of new national cemeteries has two components. The first is an area component (i.e., linear distance or drive time), and the other is the veteran population threshold. The combination of these components determines if an unserved area meets the criteria for a new cemetery.

The evaluation of three alternative distance standards and the feasibility of switching to a drive time standard has revealed the sensitivity of NCA's current performance measure (i.e., percent of veterans served) to any redefinition of the *area* component of the standard. For example, the analysis revealed that if a 65-mile distance standard were adopted in 2010, the percent of veterans served nationally would fall to 82 percent. Additionally, the analysis has shown that reducing the distance standard would not necessarily have a major impact on veterans' burial options, because very few areas would meet the population threshold required for a new cemetery. A closer focus on the population component of the current standard is therefore required.

NCA currently uses a firm population threshold of 170,000 veterans within a 75-mile service area to establish a new national cemetery. For this program evaluation, three alternative population thresholds suggested by VA that could potentially replace the current threshold were tested. These alternative thresholds were 130,000; 110,000; and 90,000.

As was shown earlier in the discussion of alternative linear distance standards, there is currently no unserved area in the US that meets the current population threshold of 170,000 veterans within a 75 mile radius, *and this also true of the 130,000 alternative threshold.*

Exhibit 3-33 shows that two locations—Charleston, WV and Schuyler, NE—would meet the threshold of 110,000 veterans within a 75-mile radius needed to establish a new national cemetery under this potential alternative in 2010.

Exhibit 3-33.		
Areas Unserved in 2010 Meeting a Population Threshold of 110,000 Within a 75 Mile Radius		
Location Population Served		
Charleston, WV	122,941	
Schuyler, NE	120,019	

Source: ICF Geographic Information System (GIS) Analysis - 2008

Exhibit 3-34 shows the areas that would meet a threshold of 90,000 veterans within a 75 mile radius in 2010. Under this smaller threshold, one additional location—Tallahassee, FL—would meet the criteria for a new cemetery, plus those areas shown in Exhibit 3-33.

Exhibit 3-34.			
Areas Unserved in 2010 Meeting a Population Threshold			
of 90,000 Within a 75 Mile Radius			
Charleston, WV	122,941		
Schuyler, NE 120,019			
Tallahassee, FL	103,232		

Source: ICF Geographic Information System (GIS) Analysis - 2008

If it is assumed that the construction of new national cemeteries in or around Charleston, WV, Schuyler, NE, and Tallahassee, FL between the years 2010 and 2015 occurs, only one additional location—the St. Louis, MO area—would meet any of the three population thresholds in 2015. The closure of the Jefferson Barracks National Cemetery in the coming years will leave the St. Louis metropolitan area as the largest unserved area when it closes, and it will meet all three alternative population thresholds, as well as the 170,000 threshold.

Summary of Alternative Population Thresholds

The analysis generally supports a change in the population threshold, rather than a redefinition of the area component of VA's standard. The data suggest that adjusting the population standard to meet the current and future burial needs of veterans is a more logical and practical approach than changing the definition of the service area through a revised linear distance, or through implementing a drive time standard. The following points summarize the utility of revising the population threshold rather than the area component:

- The population threshold component of 170,000 is currently so high that no areas of the country will qualify for a new national cemetery under the current 75-mile standard until the Jefferson Barracks National Cemetery closes (in or around 2017).
- Similarly, only a handful of new locations would qualify for a new national cemetery even if the linear distance component was reduced to 65 or 55 miles.
- Revising the population standard will not rollback progress VA has made over the last decade in gradually increasing the percent of veterans served. By contrast, reducing the linear distance standard would substantially reduce the percent served nationally, as would switching to a drive time standard any lower than 2.5 hours.
- Adjusting the population threshold downward from 170,000 would link VA policy to current and future demographic changes in the veteran community (e.g., migration, death rates, military discharges) more effectively than adjusting the area component of the service standard. That is, as the veteran population begins to decline, so should the threshold.

g. Recommendations

Based on the analyses presented in this section, it is recommended that VA adopt the following policies/methods to better serve veterans' burial needs:

CHAPTER 3. ENSURING BURIAL NEEDS

- Recommendation #1: Retain the 75-mile service area standard for the construction of new national cemeteries, but reduce the population threshold to 110,000 to allow more unserved communities to qualify.
- Recommendation #2: Between 2010 and 2015, construct new national cemeteries, or assist states in constructing their own state veteran cemeteries at or near the following locations, all of which meet a criterion of 110,000 unserved veterans within a 75-mile radius: Charleston, West Virginia and Schuyler, Nebraska.
- Recommendation #3: Between 2015 and 2020, construct a new national cemetery, or assist the state with construction of a state veterans cemetery at or near Crystal City, Missouri to replace Jefferson Barracks National Cemetery scheduled to close in or about 2017.
- Recommendation #4: Revise the method used by NCA to calculate the annual performance measure of percent of veterans served by a VA burial option to a method similar to that used for this evaluation. The revised methodology will integrate new capabilities offered by 21st century GIS technology to provide needed improvements in measurement precision. Specifically:
 - Use Census tracts, rather than counties, as the primary geographic unit to test and identify potential locations for new national cemeteries and to count the percent served.
 - Use the Thessien polygon approach to deal with the issue of overlapping service areas, ensuring veterans are never double-counted when calculating NCA's performance measure.
 - Replace 'decision rules' for counting/not counting veterans in counties bisected by a service area with a proportional overlay method.

B. Cremation Only as an Acceptable Burial Option

VA's service area standard is currently measured and defined as the percentage of veterans living within a 75-mile radius of an open national or state veterans cemetery, including national cemeteries which accept only cremated remains. The proportion of cremation-only cemeteries may increase in future years as the inventory of casket gravesites at existing national cemeteries declines, and some cemeteries close to new casketed interments. This trend, however, is balanced by the likelihood that VA will continue to build new national cemeteries to maximize the percentage of veterans served, expand existing cemeteries by acquiring adjacent land, and introduce new burial options for veterans as appropriate. However, the service standard leaves open the issue of whether cremation-only cemeteries are "serving" the veteran community in cases where the veteran may not prefer cremation.

a. Does Cremation-Only Provide an Acceptable Burial Option?

The program evaluation set out to determine whether interment or inurnment of cremated remains only, either in ground or in columbaria, is an acceptable burial option for veterans when it is the only option available at a nearby national/state veterans cemetery. Specifically, the research questions asked included:

- What percentage of veterans would consider themselves served and unserved if cremation was their only burial option? Are the two burial options (casket and cremains) comparable?
- What are the demographic and social profiles of veterans who would consider themselves served and unserved by a cremation-only burial option?

The findings associated with each of these research questions are presented below.

1. What percentage of veterans would consider themselves served and unserved if cremation was their only burial option?

The survey conducted for this evaluation, the 2008 Veterans Burial Benefits Survey, asked several important questions that help shed light on the percentage of veterans who would consider themselves served and unserved if cremation was their only burial option. Specifically, the survey asked respondents in question 16: "if cremation was the only burial option available at the closest national or state veterans cemetery, how likely would you be to choose this cemetery?" Among all respondents, 37 percent indicated very/somewhat likely, 12 percent indicated neither, and 51 percent indicated very/somewhat unlikely (see Exhibit 3-35, top portion).

The analyses that follow were conducted on a specific veteran subpopulation. This subpopulation was identified on the basis of those survey respondents who indicated that they were very or somewhat likely of choosing burial in a national/state veterans cemetery on survey question 15. This subpopulation is the main population of interest as it is comprised of veterans most likely to use VA burial services. This subpopulation comprises approximately 43 percent of the total survey respondent sample.

For respondents who indicated a likelihood of burial in a national/state veterans cemetery, 68 percent would accept cremation if it was the only burial option available at the nearest national/state veterans cemetery. On the other hand, 32 percent indicated they would not

accept cremation if it was the only burial option available at the nearest national/state veterans cemetery (see Exhibit 3-35, bottom portion).

Exhibit 3-35. Veterans Indicating Burial in Cremation Only Cemetery is Acceptable Q16. If cremation was the only burial option available at the closest national or state		
veterans cemetery, how likely would you be to choose this cemetery?		
Likelihood	Percentage of Veterans	
Very likely	20.4%	
Somewhat likely	16.5%	
Neither likely nor unlikely	11.7%	
Somewhat unlikely	8.2%	
Very unlikely	43.2%	

Q16. [Of those who answered Very likely or Somewhat likely to Q15 – Burial in National/State Veterans Cemetery], if cremation was the only burial option available at the closest national or state veterans cemetery, how likely would you be to choose this cemetery?

Likelihood	Percentage of Veterans	Percentage of Veterans (Collapsed)	Percentage of Veterans (Collapsed)
Very likely	36.2%		
Somewhat likely	24.4%	60.6%	
Neither likely nor unlikely	7.7%	7.7%	68.3% = Accepter
Somewhat unlikely	5.4%		
Very unlikely	26.3%	31.7%	31.7% = Non-Accepter

^{*} This analysis represented in the bottom portion of the table was conducted on only veterans who indicated likelihood to choose burial in a national/state veterans cemetery (Q15) as it is this subpopulation who would be most likely to consider burial in a national/state veterans cemetery if cremation was the only option (n= 6,567).

Source: 2008 Veterans Burial Benefits Survey

2. What are the demographic and social profiles of veterans who would consider themselves served and unserved by a cremation-only burial option?

The large-scale survey conducted for this evaluation, the 2008 Veterans Burial Benefits Survey, asked about the demographic and social profiles of veterans who would consider themselves served and unserved by a cremation-only burial. The following demographics and social profile variables were examined based on their availability within the survey database: religion, region (MSN), service period, ethnicity, age, military career years, benefit usage, and gender. The relationship of these demographic and social profile variables are examined in relation to the primary outcome, acceptance of a cremation-only burial. The relationship was examined by computing a measure of effect size using Cramer's V that captures the strength of association or dependency between two categorical (nominal) variables. As Exhibit 3-36 shows, the variables with the strongest relationship to acceptance of a cremation-only burial were: Religion (effect size = 0.102), MSN or region (effect size = 0.087), and service period (effect size = 0.042).

^{*} For this analysis, the percentage of veterans indicating "neither likely nor unlikely" was classified into the "accepter" rate because it is assumed that this small number of veterans will accept cremation, since they are not indicating "unlikely" when provided an opportunity to do so.

Exhibit 3-36. Key Demographic Variables in Explaining Acceptance of Cremation Only Burial Option			
Accepter/Non-Accepter Demographic Variable (Effect Size)			
Religion	0.102		
MSN (region)	0.087		
Service Period	0.042		
Ethnicity	0.040		
Age	0.032		
Career Years	0.015		
Benefit Usage	0.014		
Gender	0.005		

^{*} This analysis was conducted on veterans who indicated likelihood to choose burial in a national/state veterans cemetery (Q15). This is the subpopulation who would consider burial in a national/state veterans cemetery if cremation was the only option (n=6,567 – 5,877, depending upon the particular demographic variable that is examined in relation to acceptance).

Source: 2008 Veterans Burial Benefits Survey

Based on the results of the analysis above, the relationship of the top three variables (i.e., religion, MSN, and service period) to the dependent variable of acceptance of a cremation-only burial was explored by conducting cross-tabulations. Exhibit 3-37 shows that there is a difference in acceptance of cremation when comparing veterans of a declared religion (67 percent indicated acceptance) to veterans of no declared religion (85 percent indicated acceptance).

^{*} The sample of veterans surveyed was drawn randomly to achieve representation of the full population of veterans on demographics such as religion, MSN, and service period (see appendix for more details on sampling). However, since this analysis was conducted on the subpopulation of veterans who indicated likelihood to choose burial in a national/state veterans cemetery, the data is not representative of the general US veteran population, but only an important sub-group.

^{*} Cramer's V is a statistic measuring the strength of association or dependency between two (nominal) categorical variables. It is based on Chi-square analysis.

^{*} Demographic variables are presented in the table in order of magnitude on Cramer's V, from highest to lowest.

^{*} Chi-square analyses conducted on the relationship between the independent variables and the dependent variable indicate that all relationships are significant at the p=.000 level.

Exhibit 3-37.				
Impact of Religion on Acceptance of Cremation Only Burial Option				
Religion of Veteran				
	Declared Religion No Religion			
Accepter	67.1%	85.4%		
Non-Accepter	32.9% 14.6%			

- * This analysis was conducted on veterans who indicated likelihood to choose burial in a national/state veterans cemetery (Q15). This is the subpopulation who would consider burial in a national/state veterans cemetery if cremation was the only option (n=6,339 when examined in relation to religion).
- * The sample of veterans surveyed was drawn randomly to achieve representation of the full population of veterans on demographics such as religion (see appendix for more details on sampling). However, since this analysis was conducted on the subpopulation of veterans who indicated likelihood to choose burial in a national/state veterans cemetery, the data is not representative of the general US veteran population, but only an important sub-group.
- * The various religious faiths were collapsed into one category and labeled "declared religion" as there was little apparent difference among them. In addition, some uncertainty existed regarding the statistical validity of data representing each faith's reported acceptance of cremation.
- * Approximately 7 percent of veterans indicated no religion.
- * Chi-square value 74364, 1 df, p value=0.000.

Source: 2008 Veterans Burial Benefits Survey

Exhibit 3-38 presents the impact of region (MSN) on acceptance of cremation-only burial, which indicates that the highest acceptance rates were for veterans residing in the Oakland Memorial Service Network or MSN 5 (74 percent acceptance rate) and lowest for veterans in the Atlanta Memorial Service Network or MSN 2 (63 percent acceptance rate).

_	Exhibit 3-38.				
Impa	act of Region (N	ISN) on Accep	tance of Crema	ation Only Buria	Il Option
		Region (M	emorial Servic	e Network)	
	Philadelphia	Atlanta	Denver	Indianapolis	Oakland
	Memorial	Memorial	Memorial	Memorial	Memorial
	Service	Service	Service	Service	Service
	Network Network Network Network				Network
	(MSN 1) (MSN 2) (MSN 3) (MSN 4) (MSN 5)				(MSN 5)
Accepter	66.2%	62.8%	69.2%	70.2%	74.4%
Non-					
Accepter	33.8%	37.2%	30.8%	29.8%	25.6%

^{*} This analysis was conducted on veterans who indicated likelihood to choose burial in a national/state veterans cemetery (Q15). This is the subpopulation who would consider burial in a national/state veterans cemetery if cremation was the only option (n=6,567 when examined in relation to MSN).

Source: 2008 Veterans Burial Benefits Survey

^{*} The distribution of the sample (n=6,567) was even enough among MSNs to provide statistically valid data on these sub-groups.

^{*} The sample of veterans surveyed was drawn randomly to achieve representation of the full population of veterans on demographics such as MSN (see appendix for more details on sampling). However, since this analysis was conducted on the subpopulation of veterans who indicated likelihood to choose burial in a national/state veterans cemetery, the data is not representative of the general US veteran population, but only an important sub-group.

^{*} Chi-square value 67255, 4 df, p value=0.000.

Exhibit 3-39 presents the impact of period of service on acceptance of cremation-only burial, which indicates that the highest acceptance rates were for veterans of the World War II period (71 percent acceptance rate) and the lowest were for veterans of the Gulf War period (66 percent acceptance rate).

Exhibit 3-39.					
Impact of Period of Service on Acceptance of Cremation Only Burial Option					
	Period of Service				
	WWII Korean Vietnam Gulf Peacetime				
Accepter	71.3%	66.1%	69.3%	65.9%	69.9%
Non-Accepter	28.7%	33.9%	30.7%	34.1%	30.1%

^{*} This analysis was conducted on veterans who indicated likelihood to choose burial in a national/state veterans cemetery (Q15). This is the subpopulation who would consider burial in a national/state veterans cemetery if cremation was the only option (n=6,567 when examined in relation to period of service).

Source: 2008 Veterans Burial Benefits Survey

Finally, a logistic regression was used to assess the impact of the demographic/social predictor variables on acceptance of cremation-only burial for the sub-population of interest (i.e., veterans who indicated likelihood to choose burial in a national/state veterans cemetery). Logistic regression is a powerful analysis because it simultaneously controls for shared variance accounted for by the predictor variables. As shown in Exhibit 3-40, the predictors accounted for 5.2 percent of the variance in cremation-only burial acceptance. Based on the magnitude of the standardized coefficients (*B* or Beta weights), the top predictors of acceptance, such that they are associated with being likely to accept cremation-only burial (reflected in the positive Beta coefficients) were: no religion, MSN 5 (Oakland Memorial Service Network), and Navy military service. The top predictors of non-acceptance, such that they are associated with being unlikely to accept cremation-only burial (reflected in the negative Beta coefficients) were: African American and Native Hawaiian/Pacific Islander.

Practically speaking, these findings indicate that for those preferring burial in a national/state veterans cemetery, veterans with no declared religion are approximately 3 times as likely to accept burial in a national or state veterans cemetery that provides cremation as the only burial option than veterans with a declared religion (as expressed in the odds ratio in the Exhibit below). Similarly, of those preferring burial in a national/state veterans cemetery, veterans in MSN 5 and veterans that served in the Navy are each approximately 1.5 times as likely to accept burial in a national or state veterans cemetery that provides cremation as the only burial option, compared to other veterans.

^{*} The distribution of the sample (n=6,567) was even enough among Periods of Service to provide statistically valid data on these sub-groups.

^{*} The sample of veterans surveyed was drawn randomly to achieve representation of the full population of veterans on demographics such as Period of Service (see appendix for more details on sampling). However, since this analysis was conducted on the subpopulation of veterans who indicated likelihood to choose burial in a national/state veterans cemetery, the data is not representative of the general US veteran population, but only an important sub-group.

^{*} Chi-square value 15866, 4 df, p value=0.000.

Exhibit 3-40. Multivariate Logistic Regression Results: Top Predictors of Acceptance of Cremation Only Burial Option					
Top Predictors ¹ Coefficient (B) ² Odds ratio					
Nagelkerke R Square=0.052 ³					
No religion	1.098	2.999			
Black or African American	-0.644	0.525			
Native Hawaiian or Other Pacific Islander	-0.598	0.550			
MSN 5	0.439	1.550			
Navy	0.397	1.488			

^{*} This analysis was conducted on veterans who indicated likelihood to choose burial in a national/state veterans cemetery (Q15). This is the subpopulation who would consider burial in a national/state veterans cemetery if cremation was the only option (n=5,000 when examined in relation to the demographics in the logistic regression).

¹ All presented predictors are statistically significant (α =0.05).

² Variables are presented in the table in order of magnitude on Coefficient (B), from highest to lowest.

Source: 2008 Veterans Burial Benefits Survey

b. What are the Policy Implications for Future VA Burial Program Costs and Activities?

Based on the analyses of these data, there are several policy implications. Given that a majority of burials remain casketed burial, of those who indicate a likelihood of selecting burial at a national or state veterans cemetery, an acceptance rate of 68 percent of cremation under these circumstances (i.e., where cremation is the only burial option at the nearest national/state veterans cemetery) is quite high. As a result of these findings, one alternative policy VA needs to consider is to adjust its formula for calculating the percent served by classifying two-thirds of veterans living exclusively within 75 miles of a cremation-only national/state veterans cemetery as served and one-third as unserved. Although the ratio could be higher for MSN 5, given the acceptance rate is higher for this geographic area, this is not warranted when the logistic regression analysis showed that less than 5 percent of the variance in acceptance is accounted for by the demographic/social predictors. Based on these findings, VA should consider adjusting its formula for calculating percent served by a VA burial option (overall performance measure related to objective four in the VA Strategic Plan, Meeting Burial Needs) by classifying two-thirds of veterans living exclusively within 75 miles of a cremation-only national/state veterans cemetery as served and one-third as unserved.

There is also a second option for adjusting the key performance measure. Given that the number of cremation-only cemeteries may increase, and that the evaluation found that one-third of veterans who would consider a national or state veterans cemetery would feel unserved by a cremation-only burial option, VA could track and set performance targets for the following two measures: 1) percent of veterans within 75 miles of a national or state veterans cemetery offering both a casketed and cremation burial option and, 2) percent of veterans within 75 miles of a national or state veterans cemetery offering only a cremation burial option. This policy

^{*} This sample of veterans surveyed was drawn randomly to achieve representation of the full population of veterans on key demographics (see appendix for more details on sampling). However, since this analysis was conducted on the subpopulation of veterans who indicated likelihood to choose burial in a national/state veterans cemetery, the data is not representative of the general US veteran population, but only an important sub-group.

³ Although there is no equivalent of R Square in logistic regression similar to linear regression, Nagelkerke R Square is used as a pseudo-measure to represent the percent of variance explained by the model.

^{*} A positive Coefficient (B) means likely to accept a cremation-only burial option (negative means unlikely).

approach would allow VA to measure both important statistics (i.e., two levels of service), and report these data to VA leadership, the Office of Management and Budget (OMB), and other constituents. These two measures would be beneficial in that they are easily measured and empirically justified based on this program evaluation.

c. Findings and Recommendations

In summary, a primary finding was that for those preferring burial in a national/state veterans cemetery, about 68 percent would accept cremation if it was the only burial option available at the nearest national/state veterans cemetery. A second major finding was that for the subgroup of interest (i.e., veterans preferring burial in a national/state veterans cemetery) the demographic and social factors most related to acceptance of a cremation-only burial included: religion, MSN (region), and service period. More specifically, among veterans preferring burial in a national/state veterans cemetery, veterans with no declared religion are approximately 3 times as likely to accept burial in a national or state veterans cemetery that provides cremation as the only burial option than veterans with a declared religion. Among veterans preferring burial in a national/state veterans cemetery, veterans in MSN 5 (Oakland Memorial Service Network) and veterans that served in the Navy are each approximately 1.5 times as likely to accept burial in a national or state veterans cemetery that provides only cremation, compared to other veterans.

Based on the findings two alternative options are recommended:

- Recommendation #5A: Adjust the formula for calculating percent served by a VA burial option by classifying two-thirds of veterans living exclusively within 75 miles of a cremation-only national/state veterans cemetery as served and one-third as unserved.
- Recommendation #5B: Track and set targets for two performance measures related to percent of veterans served by a VA burial option: 1) percent of veterans within 75 miles of a national or state veterans cemetery offering both a casketed and cremation burial option and, 2) percent of veterans within 75 miles of a national or state veterans cemetery offering only a cremation burial option.

C. Factors Influencing Burial Choice

At its national cemeteries, VA provides burial options for veterans who choose casket and cremation. To plan for the future, in terms of providing sufficient burial options for veterans, VA must stay current with the burial choices of veterans, and the factors that influence them.

Based on this policy issue, the program evaluation set out to answer the following research questions:

- What is the role of religious affiliation, culture, familial practices, generational differences, and geographic location on veterans' burial choices?
- What would be the impact on VA if new services were implemented to address veteran preferences not currently served?

The findings associated with each of these research questions are presented below.

a. What is the Role of Religious Affiliation, Culture, Familial Practices, Generational Differences, and Geographic Location on Veterans' Burial Choices?

The large-scale survey conducted for this evaluation, the 2008 Veterans Burial Benefits Survey, asked several important questions on the burial choice of veterans. Specifically, survey question 13 asked respondents: "regardless of how much you've thought about it, what type of burial do you prefer?" When asked this question, 51 percent indicated in-ground casket burial, 28 percent said cremation, 3 percent said mausoleum, and 7 percent said "something else." It needs to be noted that an analysis of the responses to the "something else" category, which was a write-in response item, revealed that a majority of these individuals preferred cremation (see Exhibit 3-41).

Exhibit 3-41. Veteran Burial Preferences				
Q13. Regardless of how much you've thought about it,	what type of burial do you prefer?			
Likelihood Percentage of Veterans				
In-ground casket burial	50.6%			
Cremation, in-ground burial 18.9%				
Cremation columbarium (a vault for cremation remains)	8.6%			
Mausoleum (i.e., tomb within a monument or building)	3.0%			
Something else (Please be specific): 6.8%				
Don't know	5.7%			
Missing	6.4%			
*A I				

^{*} An analysis of the responses to the "something else" category, which was a write-in response item, revealed that a majority of these individuals preferred cremation.

* Sample size for analysis, n=15,692.

Source: 2008 Veterans Burial Benefits Survey

The 2008 Veterans Burial Benefits Survey also asked several important questions (e.g., questions 20, 10, and 11) on the role of religious affiliation, culture, familial practices, generational differences, and geographic location on veterans' burial choices. The following demographics and social profile variables were examined based on their availability within the survey database: religion, region (MSN), service period, ethnicity, age, military career years, benefit usage, and gender. The first step in answering this question was to examine the relationship of these demographic and social profile variables to the primary outcome, burial choice (i.e., casket vs. cremation). The relationship was examined by computing a measure of effect size that captures the strength of association or dependency between two categorical (nominal) variables. As Exhibit 3-42 shows, the variables with the strongest relationship to burial choice were: Religion (effect size = 0.191), MSN (effect size = 0.151), and career years (effect size = 0.056).

Exhibit 3-42. Impact of Demographic Variables on Burial Choice			
Casket/Cremation Demographic Variable (Effect Size)			
Religion	0.191		
MSN	0.151		
Career Years	0.056		
Gender	0.052		
Ethnicity	0.049		
Age	0.046		
Benefit Usage	0.040		
Service Period	0.037		

^{*} This analysis was conducted on veterans who indicated either casket or cremation (n=13,993 – 11,956, depending upon the particular demographic variable that is examined in relation to acceptance).

Based on the results of the analysis above, the relationship of the top three variables (i.e., religion, MSN, and career years) was explored with the dependent variable of burial choice. Exhibit 3-43 presents the impact of religion on burial choice, which indicates a difference in burial choice for veterans with a declared religion (63 percent preferred casket burial) versus veterans with no religion (26 percent preferred casket burial).

Exhibit 3-43.			
Impact of Religion on Burial Choice			
Religion of Veteran			
	Declared religion No religion		
Casket	62.8%	26.2%	
Cremation	37.2%	73.8%	

^{*} This analysis was conducted on veterans who indicated either casket or cremation (n=13,293 when examined in relation to religion).

^{*} The sample of veterans surveyed was drawn randomly to achieve representation of the full population of veterans on demographics such as religion, MSN, and career years (see appendix for more details on sampling). However, since this analysis was conducted on the subpopulation of veterans who indicated casket or cremation (excluding veterans who indicated a burial preference for mausoleum or veterans who indicated they are not sure of their burial option at the current time), the data is not representative of the general US veteran population, but only an important sub-group.

^{*} Cramer's V is a statistic measuring the strength of association or dependency between two (nominal) categorical variables. It is based on Chi-square analysis.

^{*} Demographic variables are presented in the table in order of magnitude on Cramer's V, from highest to lowest.

^{*} Chi-square analyses conducted on the relationship between the independent variables and the dependent variable indicate that all relationships are significant at the p=.000 level.

^{*} The sample of veterans surveyed was drawn randomly to achieve representation of the full population of veterans on demographics such as religion (see appendix for more details on sampling). However, since this analysis was conducted on the subpopulation of veterans who indicated casket or cremation (excluding veterans who indicated a burial preference for mausoleum or veterans who indicated they are not sure of their burial option at the current time), the data is not representative of the general US veteran population, but only an important sub-group.

^{*} Approximately 7 percent of veterans indicated no religion.

^{*} Chi-square value 645652, 1 df, p value=0.000.

Exhibit 3-44 presents the impact of region (MSN) on burial choice, which indicates that the highest percentage of veterans preferring casket burial resided in MSN 2 or the Atlanta Memorial Service Network (65 percent). The highest percentage of veterans preferring cremation resided in MSN 5, or the Oakland Memorial Service Network (55 percent).

	Exhibit 3-44.				
	Impact of Region (MSN) on Burial Choice				
		Region (M	lemorial Servic	e Network)	
	Philadelphia	Atlanta	Denver	Indianapolis	Oakland
	Memorial Memorial Memorial Memorial				
	Service	Service	Service	Service	Service
	Network	Network	Network	Network	Network
	(MSN 1) (MSN 2) (MSN 3) (MSN 4) (MSN 5)				
Casket	62.9%	65.4%	64.2%	63.3%	45.2%
Cremation	37.1%	34.6%	35.8%	36.7%	54.8%

^{*} This analysis was conducted on veteran respondents who indicated either casket or cremation (n=13,993 when examine in relation to MSN).

* Chi-square value 441257, 4 df. p value=0.000.

Source: 2008 Veterans Burial Benefits Survey

Exhibit 3-45 presents the impact of military career years on burial choice, which indicates that the highest percentage of veterans preferring casket had served from 0-2 years (63 percent).

Exhibit 3-45. Impact of Career Years on Burial Choice				
	Career Years Active Duty			
	10 years or			
	0-2 years 3-9 years more			
Casket	63.2%	58.0%	56.6%	
Cremation	36.8%	42.0%	43.4%	

^{*} This analysis was conducted on veteran respondents who indicated either casket or cremation. Sample size for analysis, n=11,956.

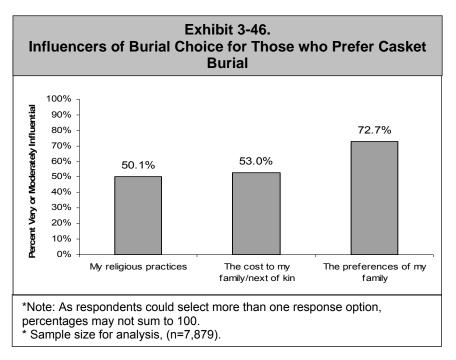
Source: 2008 Veterans Burial Benefits Survey

The two following Exhibits present the impact of non-demographic factors on burial choice. These data indicate that veterans preferring casket burial were most likely to attribute this choice to the preferences of their family (73 percent).

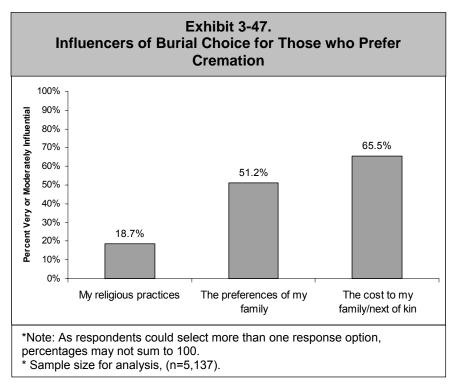
^{*} The sample of veterans surveyed was drawn randomly to achieve representation of the full population of veterans on demographics such as MSN (see appendix for more details on sampling). However, since this analysis was conducted on the subpopulation of veterans who indicated casket or cremation (excluding veterans who indicated a burial preference for mausoleum or veterans who indicated they are not sure of their burial option at the current time), the data is not representative of the general US veteran population, but only an important sub-group.

^{*} The sample of veterans surveyed was drawn randomly to achieve representation of the full population of veterans on demographics such as the number of active duty career years (see appendix for more details on sampling). However, since this analysis was conducted on the subpopulation of veterans who indicated casket or cremation (excluding veterans who indicated a burial preference for mausoleum or veterans who indicated they are not sure of their burial option at the current time), the data is not representative of the general US veteran population, but only an important sub-group.

^{*} Chi-square value 52632, 2 df, p value=0.000.



The veterans selecting cremation were most likely to indicate that cost was a factor in selecting this burial choice (66 percent).



CHAPTER 3. ENSURING BURIAL NEEDS

Finally, a logistic regression was run to examine the impact of the predictor variables on burial choice. To allow for assessing the added impacts of the non-demographic variables (e.g., cost, preferences of family) on veterans' decisions around burial choice, the demographic predictors were arrayed in the model on Exhibit 3-48, and the non-demographic factors were arrayed subsequently in the same Exhibit.

As shown in Exhibit 3-48, the demographic predictors accounted for 11.2 percent of the variance in burial choice. Based on the magnitude of the standardized coefficients (*B* or Beta weights), the top predictors of likelihood to prefer cremation (reflected in the positive Beta coefficients) were no religion, MSN 5 (Oakland Memorial Service Network), and female. The top predictors of being likely to prefer casket (reflected in the negative Beta coefficients) were Native Hawaiian/Pacific Islander and African American. The non-demographic variables accounted for an additional 16.4 percent of the variance in burial choice, which indicates that non-demographic factors (e.g., cost, preferences of family) play a large role in burial choice, above and beyond the role of demographic factors.

Practically speaking, these findings indicate that for the sub-group of veterans who prefer either casket or cremation, veterans with no declared religion are approximately 4.3 times as likely to prefer cremation, veterans from MSN 5 are 1.9 times as likely to prefer cremation, and female veterans are 1.8 times as likely to prefer cremation, compared to their respective counterparts. In terms of attitudinal factors, these findings indicate that for the sub-group of veterans who prefer either casket or cremation, veterans indicating that cost was influential in their decision around burial choice were 2.5 times as likely to select cremation compared to veterans who said cost was not influential.

Exhibit 3-48.				
Multivariate Logistic Regression Results: Preference	e for Cremation			
Top Predictors ¹	Coefficient (B)	Odds ratio ²		
Demographic Variables Only (Nagelkerke R Square = 11.2%) ³				
No religion	1.460	4.306		
Native Hawaiian or Other Pacific Islander	-1.358	0.257		
Black or African American	-1.236	0.291		
MSN 5	0.646	1.908		
Female	0.585	1.794		
Demographic and Attitudinal Variables (Nagelkerke R Square = 27.6%; Change in Nagelkerke R Square =				
16.4%)				
My religious practices (strength of influence on burial type choice)	-1.293	0.275		
The preferences of my family (strength of influence on burial type choice)	-0.975	0.377		
The cost to my family/next of kin (strength of influence on burial type choice)	0.920	2.509		

^{*} The sample of veterans surveyed was drawn randomly to achieve representation of the full population of veterans on key demographics (see appendix for more details on sampling). However, since this analysis was conducted on the subpopulation of veterans who indicated casket or cremation (excluding veterans who indicated a burial preference for mausoleum or veterans who indicated they are not sure of their burial option at the current time), and veterans who responded to all of the demographic and attitudinal variables used in the model, the data is not representative of the general US veteran population, but only an important sub-group.

^{*} Sample size for analysis, n=9,714.

^{*} A positive Standardized Coefficient (B) means likely to prefer cremation (negative means likely to prefer casket).

 $^{^{1}}$ All presented predictors are statistically significant (α =0.05).

² Variables are presented in the table in order of magnitude on Standardized Coefficient (B), from highest to lowest.

³ Although there is no equivalent of R Square in logistic regression similar to linear regression, Nagelkerke R Square is used as a pseudo-measure to represent the percent of variance explained by the model.

The large-scale survey conducted for this evaluation, the 2008 Veterans Burial Benefits Survey, asked several questions on the preferences of burial location for veterans for either national/state veterans cemetery or other. Specifically, question 15 asked respondents: "what is the likelihood you will choose burial in a national or state veterans cemetery?" When asked this question, 43 percent said very/somewhat likely, 12 percent said neither, and 45 percent said very/somewhat unlikely (see Exhibit 3-49).

Exhibit 3-49. Veteran Burial Location Preferences Q15. What is the likelihood that you will choose burial in a national or state veterans cemetery?					
Percentage of Percentage of Veterans Percentage of Veterans (Collapsed)					
Very likely	26.9%				
Somewhat likely	16.3%	43.2%			
•			43.2% = Likely		
Neither likely nor unlikely 12.1% 12.1%					
Somewhat unlikely 11.4%					
Very unlikely	33.3%	44.7%	56.8% = Unlikely		

^{*} For this analysis, the percentage of veterans indicating "neither likely nor unlikely" was classified into the "unlikely" rate because it is assumed that these veterans will not select burial in a national or state veterans cemetery (n=15,971). This assumption was set in view of the fact that most veterans are not buried in national or state veteran cemeteries.

Source: 2008 Veterans Burial Benefits Survey

The large-scale survey conducted for this evaluation, the 2008 Veterans Burial Benefits Survey, asked several important questions (e.g., questions 20, 10, and 11) on the role of religious affiliation, culture, familial practices, generational differences, and geographic location on veterans' burial choices. The following demographics and social profile variables were examined based on their availability within the survey database: religion, region (MSN), service period, ethnicity, age, military career years, benefit usage, and gender. The first step in answering this question was to examine the relationship of these demographic and social profile variables to the primary outcome, burial location (i.e., national/state veterans cemetery vs. other). The relationship was examined by computing a measure of effect size using a statistical test called Cramer's V that measures the strength of association or dependency between two categorical (nominal) variables. As Exhibit 3-50 shows, the variables with the strongest relationship to burial location were: service period (effect size = 0.164), age (effect size = 0.152), and career years (effect size = 0.107).

Exhibit 3-50.			
Impact of Demographic Variables on Burial Location			
Likely/Unlikely Burial in National/Sta			
5	Veterans Cemetery		
Demographic Variable	(Effect Size)		
Service Period	0.164		
Age	0.152		
Career Years	0.107		
Ethnicity	0.082		
Religion	0.069		
Benefit Usage	0.059		
MSN	0.050		
Gender	0.044		

^{*} Sample size for analysis, n=15,971 – 13,685, depending upon the particular demographic variable that is examined in relation to burial location.

Exhibit 3-51 presents the impact of service period on burial location in either a national/state or private cemetery. These data indicate that the highest percentage of veterans preferring burial in a national/state veterans cemetery served during the Gulf War (59 percent). The lowest percentage of veterans preferring burial in a national/state veterans cemetery served during the World War II (32 percent).

Exhibit 3-51. Impact of Period of Service on Burial Location					
National/State		Р	eriod of Servi	ce	1
Veterans Cemetery	WWII Korean Vietnam Gulf Peacetime				
Very or		Horoan	Violitain	Juli	- r daggaming
somewhat likely	32.3%	37.3%	43.2%	58.9%	37.4%
Neither likely nor unlikely	8.4%	8.5%	14.4%	15.1%	9.9%
Very or	0.470	0.070	14.470	10.170	3.570
somewhat unlikely	59.3%	54.2%	42.4%	26.0%	52.7%

^{*} Sample size for analysis, n=15,971.

^{*} The sample of veterans surveyed was drawn randomly to achieve representation of the full population of veterans on demographics such as service period, age, and career years (see appendix for more details on sampling). The analysis was conducted on the full sample of veteran respondents who provided their demographics on the survey, and is therefore, representative of the general US veteran population.

^{*} Effect size was determined using Cramer's V, a statistic measuring the strength. It is based on Chi-square analysis.

^{*} Demographic variables are presented in the table in order of magnitude on Cramer's V, from highest to lowest.

^{*} Chi-square analyses conducted on the relationship between the independent variables and the dependent variable indicate that all relationships are significant at the p=.000 level.

^{*} The sample of veterans surveyed was drawn randomly to achieve representation of the full population of veterans on demographics such as period of service (see appendix for more details on sampling). The analysis was conducted on the full sample of veteran respondents who provided their period of service, and is therefore, representative of the general US veteran population.

^{*} Chi-square value 1636281, 16 df, p value=0.000.

Exhibit 3-52 presents the impact of age on burial location in either a national/state or private cemetery, which indicates that the highest percentage of veterans preferring burial in a national/state veterans cemetery were between 20-39 years of age (52 percent). The lowest percentage of veterans preferring burial in a national/state veterans cemetery were between 80-98 years of age (34 percent).

Exhibit 3-52. Impact of Age on Burial Location				
National/State Veterans		A	ge	
Cemetery	20-39 40-59 60-79 80+			
Very or somewhat likely	51.9%	54.1%	41.8%	33.6%
Neither likely nor unlikely	21.6%	14.5%	12.4%	7.8%
Very or somewhat				
unlikely	26.5%	31.4%	45.8%	58.6%

^{*} Sample size for analysis, n=14,166.

Source: 2008 Veterans Burial Benefits Survey

Exhibit 3-53 presents the impact of military career years on burial location in either a national/state or private cemetery, which indicates that the highest percentage of veterans preferring burial in a national/state veterans cemetery had served for 10 or more years (55 percent). The lowest percentage of veterans preferring burial in a national/state veterans cemetery served between 0 and 2 years (38 percent).

Exhibit 3-53. Impact of Career Years on Burial Location					
National/State Veterans Career Years Active Duty					
Cemetery	0-2 years 3-9 years 10 or more				
Very or somewhat likely	37.8%	42.3%	55.2%		
Neither likely nor unlikely	11.9%	12.9%	12.3%		
Very or somewhat unlikely	50.3%	44.8%	32.5%		

^{*} Sample size for analysis, n=13,685.

^{*} The sample of veterans surveyed was drawn randomly to achieve representation of the full population of veterans on demographics such as age (see appendix for more details on sampling). The analysis was conducted on the full sample of veteran respondents who provided their age on the survey, and is therefore, representative of the general US veteran population.

^{*} Chi-square value 1339845, 12 df, p value=0.000.

^{*} While it may seem intuitive that age and career years are correlated, these two demographics are not correlated because older as well as younger veterans may have served for 0-2 years of active duty.

^{*} The sample of veterans surveyed was drawn randomly to achieve representation of the full population of veterans on demographics such as career years (see appendix for more details on sampling). The analysis was conducted on the full sample of veteran respondents who provided the number of years they were active duty on the survey, and is therefore, representative of the general US veteran population.

^{*} Career years is defined as total time serving active duty.

^{*} Chi-square value 468503, 8 df, p value=0.000.

^{*} While it may seem intuitive that age and career years are correlated, these two demographics are not correlated because older as well as younger veterans may have served for 0-2 years of active duty.

Finally, a logistic regression was run to examine the impact of the predictor variables on burial location in either a national/state or private cemetery. To allow for assessing the added impacts of the non-demographic variables (e.g., cost, preferences of family) on veterans' decisions around burial location, the demographic predictors were examined first by the model and the non-demographic factors were examined second by the model.

As shown in Exhibit 3-54, based on the magnitude of the standardized coefficients (*B* or Beta weights), the top two demographic predictors of being likely to select burial in a national/state veterans cemetery (reflected in the positive Beta coefficients) were African American and Asian. The top predictor of being unlikely to select burial in a national/state veterans cemetery (reflected in the negative Beta coefficients) was no religion. The non-demographic variables accounted for an additional 34.9 percent of the variance in burial location as shown in demographic top row, which indicates that non-demographic factors (e.g., cost, preferences of family) play a much larger role in the selection of burial location than do demographic factors.

Practically speaking, the most significant finding on analyses conducted on the respondent sample is that veterans with a strong connection to or affiliation with the military are 7 times as likely to prefer burial in a national or state veterans cemetery, compared to other veterans.

Exhibit 3-54. Multivariate Logistic Regression Results: Likelihood of Choosing Burial in			
National/State Veteran			
Top Predictors ¹	Coefficient (B)	Odds ratio ²	
Demographic Variables Only (Nagelkerke R Squ	ıare = 8.5%) ³		
Black or African American	0.892	2.439	
Asian	0.592	1.807	
No Religion	-0.466	0.628	
Hispanic	0.464	1.591	
Native Hawaiian or Other Pacific Islander	0.436	1.547	
Demographic and Attitudinal Variables (Nagelk	erke R Square = 34	1.9 % ; Change in	
Nagelkerke R Square = 26.4%)			
My connection to the military/past service to country (strength of influence on burial location choice)	2.067	7.901	
Wish to be buried with other family members (strength of influence on burial location choice)	-0.882	0.414	
The preferences of my family (strength of influence on burial location choice)	-0.367	0.693	
The cost to my family/next of kin (strength of influence on burial location choice)	0.355	1.426	

^{*} Sample size for analysis, n=11,243.

^{*} The sample of veterans surveyed was drawn randomly to achieve representation of the full population of veterans on demographics such as service period, age, and career years (see appendix for more details on sampling). The analysis was conducted on the full sample of veteran respondents who provided a response to all of the variables included in the model (both demographic and attitudinal), and therefore, may not be representative of the general US veteran population.

^{*} A positive Coefficient (B) means likely to choose burial in national/state veterans cemetery (negative means unlikely).

¹ Variables are presented in the table in order of magnitude on Coefficient (B), from highest to lowest.

 $^{^2}$ All presented predictors are statistically significant ($\alpha\text{=}0.001$).

³ Although there is no equivalent of R Square in logistic regression similar to linear regression, Nagelkerke R Square is used as a pseudo-measure to represent the percent of variance explained by the model.

b. What would be the Impact on VA if New Services were Implemented to Address Veteran Preferences Not Currently Served?

As shown in Exhibit 3-41 showing survey data analysis, approximately 85 percent of veterans plan to select casket or cremation at their time of death. Of the remaining veterans, 12 percent either do not know what they plan for burial or skipped answering the question on the survey, leaving only 3 percent of veterans indicating mausoleum. The findings indicate that VA burial options meet the needs and expectations of almost all veterans. It is important, however, that VA maintain current on veteran burial preferences, so that if veterans' burial preferences expand, VA can offer additional options as necessary, appropriate, and feasible.

c. Findings and Recommendations

In summary, a primary finding from the evaluation is that VA is currently meeting the burial needs of almost all veterans, as demonstrated by 97 percent selecting casket or cremation, or unknown/skipped at the current time. The remaining 3 percent of veterans plan to select burial in a mausoleum. In terms of the demographic factors most influencing this choice, an analysis on the sub-sample of veterans who prefer either casket or cremation found that veterans with no declared religion are approximately 4.3 times as likely to prefer cremation, veterans from MSN 5 are 1.9 times as likely to prefer cremation, and female veterans are 1.8 times as likely to prefer cremation, compared to their respective counterparts. In terms of attitudinal factors, an analysis on the sub-sample of veterans who prefer either casket or cremation found that veterans indicating that cost was influential in their decision around burial choice were 2.5 times as likely to select cremation compared to veterans who said cost was not influential.

A second primary finding was that 43 percent of veterans surveyed said they were likely to choose burial in a national/state veterans cemetery, with the largest demographic factors being service period, age, and career years. Specifically, younger veterans, as demonstrated by their service period and age, are more likely to prefer burial in a national/state veterans cemetery, compared to older veterans. This finding may be explained due to the fact that older veterans, who are closer to their time of death, may have already selected a private cemetery due to family preferences and/or the decisions of other family members. Younger veterans, who are more distant from the terminus of life, may now indicate burial in national/state veterans cemetery, but then may alter their decisions at a later date. Perhaps the most significant finding from analyses conducted on the respondent sample is that veterans with a strong connection to or affiliation with the military are 7 times as likely to prefer burial in a national or state veterans cemetery, compared to other veterans.

Based on the findings the following is recommended:

 Recommendation #6: Maintain current information on veteran burial preferences by conducting recurrent surveys of a representative sample of the veteran population at the MSN and national level every three to five years.

D. Methods by Which Veterans and their Families Access Information on VA Burial Benefits

Congress passed the Veterans Education and Benefits Expansion Act of 2001 (Public Law 107-103) in order to:

"...modify and improve authorities relating to education benefits, compensation and pension benefits, housing benefits, burial benefits, and vocation rehabilitation benefits for veterans, to modify certain authorities relating to the United States Court of Appeals for Veterans Claims, and for other purposes..."²⁸

Title III of the Act addressed transition and outreach activities, focusing on the time period when a member of the Armed Forces is separating from military service, and becoming eligible for a number of veteran benefits. The Act is clear on the need to begin pre-separation counseling no later than 90 days before separation, with 12 to 24 months prior to separation being preferable.

The Act also states that whenever a veteran or dependent first applies for *any* benefit from VA, the Department will provide information on all the benefits available within three months of that application. In short, Congress has enacted legislation directing that the information on veterans' benefits to be widely known and easily available.

The veteran population is its own "population pyramid", spanning from World War II to our current age. The oldest veterans have found themselves being introduced to new technology (e.g., the Web), while the younger veterans grow up with and use technology daily as part of their activities. This situation presents a challenge as well as an opportunity for VA: how to communicate information about burial benefits in a way that is best for a particular audience.

The program evaluation set out to identify the primary sources veterans, families, and funeral directors use to get information on VA burial benefits, the demographic factors related to accessing sources of information on VA burial benefits, and most importantly, the ways to best reach various veteran subpopulations as well as their families.

a. What are the Primary Sources Veterans, Families, and Funeral Directors Use to Get Information on VA Burial Benefits?

The large-scale survey for this evaluation, the 2008 Veterans Burial Benefits Survey, was used to gather data from veterans on the sources of information they use to access details on VA burial benefits. In addition, data was gathered from funeral directors and next of kin (includes both veterans and veteran family members) via focus groups at five sites across the country. The results are presented for each group below.

Veterans

On the survey conducted as part of this evaluation, veterans were asked to indicate which sources they would use to obtain information about burial benefits. Specifically, the survey asked veterans on question 27: "if you wanted more information about VA's burial benefits, what sources would you try?" Respondents could indicate as many answer choices as applied to their situation. Exhibit 3-55 below displays the results.

Each source from the survey is listed in descending order of frequency of being selected. The data show that veterans most frequently use VA sources for information about burial benefits. Almost half of the veterans would use VA's toll-free number, and over 40 percent of veterans

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²⁸ P.L. 107-103, preamble.

would try looking for the information on VA's Web site. The data clusters into several groupings, along a dimension that can be thought of as "probability of getting the information I want". The top most cluster, VA's toll-free number and VA's Web site was perceived as having the highest probability of containing the information veterans want. The next highest cluster, comprised of visiting a VA facility, the VA benefits handbook, and a Veterans Service Organization, had a slightly lower probability of yielding the information the veteran wants.

It is important to note that 10 percent of veterans indicated not knowing where to go for burial benefits information. Given the current veteran population, this suggests that about 2.5 million veterans do not know where to go for burial benefits information.

Exhibit 3-55. Sources of Burial Benefits Information Used by Veterans for Burial Benefits in Descending Frequency of Selection					
Sources	Percent Respondents				
Veteran Affairs by toll-free	48.6%				
telephone					
Veteran Affairs Web Site	42.9%				
Visit Dept. of Veteran Affairs	32.3%				
facility					
VA benefits handbook	31.0%				
Veterans Service Organization	27.2%				
Funeral home	20.8%				
Social Security Administration	16.0%				
Internet Search Engine	15.4%				
A fellow veteran	14.5%				
Don't know	9.7%				
Military Web Site	9.5%				
Senior Citizens Group	7.3%				
Family member	4.4%				
Non-government Web Site	3.9%				
Newspaper or magazine	1.4%				
TV or radio public service	1.4%				
announcement					
Physician	0.9%				
Employer	0.5%				
Not interested in getting	0.3%				
information					
Other	0.3%				
*Note: As respondents could select more than one response option, percentages may not sum to 100.					

^{*} Sample size for analysis, n=15,584.

Veterans and Veteran Family Members

Next of kin, which included both veterans and veteran family members, were recruited to participate in focus groups in five U.S. cities. Focus group participants were asked about their main sources of information about VA burial benefits. Of the participants:

- Most indicated that they did not receive information from VA prior to time of need, while a few stated that they did receive information from their local VA office.
- Several next of kin indicated that they knew about the benefit via their respective branch
 of service, either through fellow service members, or because of previous experience
 using VA benefits through a deceased family member.
- Several indicated that they used Veteran Service Organizations or similar organizations such as the Disabled Veterans of America, the Retired Officers Association, VA hospital, or hospice to gather information on burial benefits.
- The majority indicated that much of the information they obtained, such as amount of the benefit, burial flag, headstones, and the Presidential Memorial Certificate, came from the funeral director or the funeral home.
- Some participants indicated that they did their own researching on burial benefits via the Internet.
- When asked what information source was the most effective, most of the focus group participants stated that funeral directors and/or funeral homes were the best source.
- While a few participants mentioned the Internet as a source, many participants indicated that VA's Web site, in their opinion, could be better organized to make it easier to find information.
- When asked to identify the most useful information that they received, veteran family members brought up two: (1) the amount of money that VA would pay for plot and burial allowances, and (2) the importance of DD Form 214 for processing requests for burial benefits.

In summary, most veteran family members in the focus groups stated that they get information about VA burial benefits from the funeral director and/or funeral home. Although some use the World Wide Web, it appears that it may not be the most used and informative resource.

Funeral Directors

Funeral directors were asked in focus groups about the information that they passed on to veterans and their families, and about the sources for that information.

- Many funeral directors indicated that veteran family members either have no information about VA burial benefits or that the information they have is incorrect at their time of need.
- Some funeral directors indicated that veteran family members know exactly what they
 want with respect to burial, including knowing the location for burial.
- According to the funeral directors, many family members who understand their burial benefits have learned via their deceased veteran and/or experiences at a VA hospital or through Veteran Service Organizations such as the Veterans of Foreign Wars.

- The funeral directors indicated they often get a sense that veteran family members expect VA to take care of everything, including paying for everything and making burial arrangements.
- Some of the funeral directors indicated that many veterans/veteran families mistakenly believe that only veterans who die in a VA hospital are eligible for the VA burial benefit.

In summary, although veterans' families tended to see funeral directors as a very helpful and informed sources of VA burial benefit information, the funeral directors saw themselves as sources of benefit information to fill a gap.

1. What are the demographic factors related to accessing sources of information on VA Burial Benefits?

Some demographic factors may have bearing on the sources that veterans intend to use to obtain information about burial benefits. For example, it is widely held that there are significant age differences among Web users, and that older persons have different performance characteristics in doing Web-related tasks.²⁹

Exhibit 3-56 displays the preferred information sources for burial benefits information by period of service. The percentages in each cell represent the proportion of veterans indicating each source as a preferred source in that "period of service" group. The percentages in the last row of the Exhibit indicate the relative proportion of veterans from that period of service as compared to all veteran respondents. Thus, World War II veterans comprise about 12 percent of the respondents, and Vietnam veterans comprise about 31 percent of the respondents. Looking for variations by Period of Service identifies several striking findings:

- While only 17 percent World War II veterans selected VA's Web site as a preferred source of information about burial benefits, over three out of four Gulf War veterans selected the Web as a preferred choice.
- Vietnam veterans chose the toll-free number and VA's Web site as having an equally high probability of yielding the information they would need.
- Word War II and Korean veterans gave very similar responses with regard to their preferred sources of information. This is consistent with the fact that both of these groups of veterans are older than any other group³⁰.

Exhibit 3-56. Sources of Burial Benefits Information by Period of Service								
Sources of Information World Korean Vietnam Gulf War II Conflict Vietnam War								
Veteran Affairs by toll-free telephone	49.6%	50.1%	50.4%	44.1%	49.2%			
Veteran Affairs Web Site	17.2%	18.3%	49.9%	76.2%	27.0%			
Visit Dept. of Veteran Affairs facility	28.2%	32.5%	32.7%	36.8%	29.7%			

²⁹ See, for example, Grahame, M. J., Laberge, C. T. Scialfa. (2004). Age differences in search of web pages: the effects of link size, link number, and clutter. *The Journal of the Human Factors and Ergonomics Society*, *46* (3), pp. 385-398.

³⁰ The official end of the Korean Conflict occurred on 31 January 1955. Conceivably, someone at the age of 20 could have been discharged then. That veteran would be 73 years old at the time of this evaluation. A veteran from World War II would be about 83 years of age.

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Exhibit 3-56.						
Sources of Buria	I Benefits Ir	nformation b	y Period of	Service		
Sources of Information	World War II	Korean Conflict	Vietnam	Gulf War	Peacetime	
VA benefits handbook	28.0%	29.8%	29.9%	39.6%	26.5%	
Veterans Service Organization	28.7%	29.7%	26.6%	29.6%	24.2%	
Funeral home	26.4%	25.3%	20.0%	15.6%	21.9%	
Social Security Administration	16.4%	14.6%	17.6%	11.3%	18.8%	
Internet Search Engine	6.1%	5.4%	18.4%	28.8%	8.3%	
A fellow veteran	7.7%	8.4%	16.6%	23.1%	10.2%	
Don't know	11.4%	12.9%	8.5%	4.7%	13.3%	
Military Web Site	2.7%	2.9%	8.5%	23.9%	4.2%	
Senior Citizens Group	8.3%	8.8%	7.3%	3.5%	9.3%	
Family member	5.1%	4.0%	4.0%	5.5%	3.7%	
Non-government Web Site	1.1%	0.9%	3.7%	9.5%	1.8%	
Newspaper or magazine	1.0%	1.5%	1.5%	1.5%	1.6%	
TV or radio public service announcement	0.9%	1.4%	1.8%	1.3%	1.2%	
Physician	1.1%	1.2%	0.9%	1.0%	0.8%	
Employer	0.1%	0.1%	0.4%	1.2%	0.2%	
Not interested in getting	0.7%	0.1%	0.2%	0.2%	0.4%	
information			0.270	0.2 /0	0.470	
Other	0.4%	0.1%	0.2%	0.4%	0.2%	
Proportion by Period of Service	11.9%	10.6%	31.2%	21.9%	24.4%	

^{*}Note: As respondents could select more than one response option, percentages may not sum to 100.

Exhibit 3-57 presents sources of information cross-tabulated by the presence or absence of a disability rating based on the answer to survey question 7. The table shows that veterans with a disability rating selected VA facility, the VA benefits handbook, and Veterans Service Organizations more frequently than veterans without a disability rating.

Exhibit 3-57. Sources of Burial Benefits Information by Veteran Disability Rating						
Sources of Information	Has Disability Rating	Does NOT Have Disability Rating				
Veteran Affairs by toll-free telephone	49.3%	47.9%				
Veteran Affairs Web Site	44.3%	43.7%				
Visit Dept. of Veteran Affairs facility	38.1%	28.4%				
VA benefits handbook	36.5%	26.8%				
Veterans Service Organization	33.1%	22.6%				
Funeral home	20.2%	21.5%				
Social Security Administration	13.6%	18.0%				
Internet Search Engine	14.0%	17.4%				
A fellow veteran	15.5%	14.2%				
Military Web Site	10.4%	9.4%				

^{*} Sample size for analysis, n=15,584.

Sources of Burial Benefits Information by Veteran Disability Rating						
Sources of Information Has Disability Rating Does NOT Have Disability Rating						
Senior Citizens Group	5.5%	8.6%				
Family member	4.1%	4.4%				
Non-government Web Site	4.2%	3.9%				
Newspaper or magazine	1.5%	1.4%				
TV or radio public service announcement	1.3%	1.5%				
Physician	1.1%	0.8%				
Employer	0.7%	0.3%				
Don't know	7.9%	10.8%				
Not interested in getting information	0.2%	0.4%				
Other	0.3%	0.2%				
Proportion by Disability Rating 45.1% 54.9%						

The survey data for preferred information sources were summarized and cross-tabulated by a number of additional demographic variables. These tables can be found in Appendix II. Examination of these tables reveals differences in selection of preferred information sources for four demographic variables:

- **Gender**. Female veterans tended to choose Web resources more often compared to their male counterpart. This may be due to the fact that female veterans tend to be younger, and are veterans of more recent periods of service such as the Gulf war, than male veterans.
- **Education**. Veterans with college education tended to choose Web related resources more frequently (twice as often) than those with a high school level education.
- Household income. Veterans indicating an annual household income of \$50,000 or more selected Web related sources much more frequently than those in the lower household income brackets.
- Years spent in the military. Veterans who spent more than 15 years in the military selected Web related sources more frequently than those with fewer years. This finding may be due to age, in the sense that veterans from more distant war periods spent less time in the active duty military, since the military at this time was comprised of draftees rather than volunteers.

The final Exhibit in this section (see Exhibit 3-58) shows the preferred sources of burial benefits information cross-tabulated by self-professed knowledge of specific benefits before taking this survey³¹. No pattern of differences among preferred sources of information emerges.

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³¹ Veterans were asked the following question in the survey: "Q28. Please indicate if you have heard about these benefits before filling out this survey: (Mark ALL that apply.)"

Exhibit 3-58. Information Sources by Knowledge of Specific Benefits Before This Survey							
information S	Burial at Veterans	Headstone and Burial	PMC for Next of	Cash Plot	Cash Burial	Military	
Sources of Information	Cemetery	Markers	Kin	Allowance	Allowance	Honors	U.S. Flag
Veteran Affairs by toll-free telephone	51.6%	50.3%	51.7%	51.0%	50.8%	50.3%	50.2%
Veteran Affairs Web Site	53.4%	48.0%	52.0%	49.8%	48.9%	53.6%	50.3%
Visit Dept. of Veteran Affairs facility	40.1%	37.9%	42.3%	38.9%	37.6%	39.4%	37.6%
VA benefits handbook	36.0%	36.1%	41.5%	41.7%	39.2%	36.9%	35.4%
Veterans Service Organization	31.5%	33.4%	35.5%	34.6%	33.3%	33.8%	31.9%
Funeral home	22.9%	26.6%	23.2%	24.2%	26.5%	24.6%	24.5%
Social Security Administration	16.0%	16.7%	17.1%	19.1%	18.6%	16.2%	16.6%
Internet Search Engine	19.2%	16.5%	16.9%	16.1%	17.0%	19.2%	18.2%
A fellow veteran	17.7%	17.0%	16.4%	16.2%	16.2%	19.2%	17.9%
Military Web Site	13.2%	12.2%	14.3%	14.8%	13.4%	13.7%	12.2%
Senior Citizens Group	7.5%	6.8%	6.5%	8.5%	8.1%	6.8%	7.1%
Family member	4.7%	4.3%	6.3%	5.8%	5.1%	5.1%	5.1%
Non-government Web Site	5.4%	4.8%	6.2%	6.0%	5.4%	5.4%	4.8%
Newspaper or magazine	1.6%	1.7%	1.9%	2.1%	1.5%	1.7%	1.6%
TV or radio public service announcement	1.6%	1.6%	1.7%	1.8%	1.4%	1.6%	1.6%
Physician	0.7%	0.9%	1.5%	1.0%	0.8%	0.9%	0.9%
Employer	0.5%	0.5%	0.5%	0.6%	0.5%	0.5%	0.5%
Don't know	4.8%	6.0%	4.4%	4.1%	5.3%	5.1%	6.2%
Not interested in getting information	0.2%	0.2%	0.2%	0.4%	0.2%	0.2%	0.2%
Other	0.3%	0.3%	0.5%	0.5%	0.5%	0.4%	0.4%
Proportion by Known Benefit	66.1%	53.3%	16.7%	13.5%	20.2%	62.8%	79.8%

^{*}Note: As respondents could select more than one response option, percentages may not sum to 100.
* Sample size for analysis, n=15,584.

b. Findings and Recommendations

The findings and recommendations are presented below.

1. What are the barriers and enablers of accessing sources of information on VA Burial Benefits by demographic variables?

The barriers for accessing this information are:

Digital Divide – The "digital divide"³² that separates those who have access to computer technology and those who do not. The ones who do not have access are those normally underserved in other areas of society: the elderly, the poor, and others.

The enablers for accessing sources of information on VA burial benefits are:

- The Funeral Industry Funeral directors frequently provide the necessary forms for burial benefits application at the time of death. Frequently, they help fill out the necessary forms and mail them to VA.
- VA's Web site the VA web site offers information on burial benefits; forms can be downloaded, and the available hyperlinks help veterans and their families navigate the site.
- VA Staff high motivation among VA staff to help veterans is something that is communicated and felt by veterans and their families.

2. What is the effectiveness of current VA outreach strategies?

The term "outreach effectiveness" is operationalized as the proportion of veterans and veteran family members who know about the full array of burial benefits for which they may be eligible.

Under that definition, VA outreach strategies should use a targeting approach to rectify the following:

- The three benefits that include the Presidential Memorial Certificate, burial allowance, and plot allowance are not known by most veterans. Even many funeral directors do not know about the burial and plot allowances.
- Much of the information that veterans and their families believe they have is erroneous.
 For example, many families think that VA will pay for the whole funeral as well as the burial and the plot in a private cemetery.
- Almost none of the family members knew that DoD DD Form 214 was crucial to filing for burial benefits (see focus group findings presented above)³³.
- One out of every 10 veterans does not know where to go for burial benefits information (see Exhibit 3-55 above).

On VA's Web site, the DD Form 214 is mentioned in the Frequently Asked Questions (FAQ) section, but only in the contexts of either obtaining a copy of one, or amending one.

³² See, for example: United States Department of Commerce (2000). Falling Through The Net: Toward Digital Inclusion - A Report On Americans' Access To Technology Tools, Washington, DC.

c. What are the Opportunities for Increasing Outreach Effectiveness and Penetration?

The challenge to increasing outreach effectiveness and penetration lies in developing mechanisms to tailor the information to (1) what the veteran or the family member wants to know, and (2) presenting it to the family member using the method or media that they prefer.

1. What are the specific recommendations?

The specific recommendation is:

 Recommendation #7: Develop an interactive web-based tool targeting outreach to younger veterans and their family members, so that potential beneficiaries could enter information, and then get an explanation of the burial benefits to which they are eligible, including ones currently unknown to many.

2. What are the cost-effectiveness considerations based on analysis for implementing the selected recommendations?

The cost effectiveness consideration for implementing the recommendation is:

 Building an interactive web-based tool would take a team of five developers about six months. The cost would be approximately \$486,000.

d. Summary

In summary, veterans use many different methods of obtaining burial benefits information. The actual sources used depend on a number of demographic factors, the most important of which is age (and war period), followed by education and income.

The next chapter, Chapter 4, presents findings on the research questions around memorialization of veteran service to our nation, including the National Shrine mandate, symbolic expressions of remembrance, and the Presidential Memorial Certificate.

This chapter presents findings on three primary policy issues:

- Identify and Evaluate Challenges in Meeting the National Shrine mandate
- Adequacy and Impact of Symbolic Expressions of Remembrance
- Impact of Presidential Memorial Certificate

The program evaluation findings associated with each of these policy issues are presented below.

A. Identify and Evaluate Challenges in Meeting the National Shrine Mandate

A legislative mandate of the Department of Veterans Affairs (VA) is that "all national and other veterans' cemeteries under control of the National Cemetery Administration (NCA) shall be considered national shrines (Title 38, Veterans Benefits, Part II General Benefits, Chapter 24 National Cemeteries and Memorials)." In an effort to operationalize this National Shrine mandate, NCA has defined a national shrine as:

"...a place of honor and memory that declares to the visitor or family member who views it that, within its majestic setting, each and every veteran may find a sense of serenity, historic sacrifice and nobility of purpose. Each visitor should depart feeling that the grounds, the gravesites and the environs of the national cemetery are a beautiful and awe-inspiring tribute to those who gave much to preserve our Nation's freedom and way of life."

In accordance with the Government Performance Results Act (GPRA), NCA has established a set of performance measures for the National Shrine mandate to measure its results in achieving the Mandate for all of its national cemeteries as well as to link performance, budget, and accountability.

The evaluation of the National Shrine mandate addresses two primary questions:

- 1. Are the current set of performance measures adequate in terms of their validity, completeness, and quality?
- 2. What are the challenges inherent in meeting and maintaining the National Shrine mandate (e.g., increasing interments, aging infrastructure, etc.)?

Each of these research questions, and the findings associated with each, are presented below.

a. Are the Current Set of Performance Measures Adequate in Terms of Their Validity, Completeness, and Quality?

This section conducts a review to determine whether the measures address the intended constructs for measurement and to assess whether all areas of performance that relate to the National Shrine mandate are included. NCA utilizes six performance measures to examine

whether each national cemetery, each Memorial Service Network (MSN), and NCA-overall meets the National Shrine mandate. Exhibit 4-1 presents each performance measure related to the Mandate, along with the source of data and strategic performance target (2008) for each measure.

	Exhibit 4-1. National Shrine Mandate Performance Measures						
	Performance Measure	Data Source	Strategic Performance Target				
1.	Percent of respondents who rate national cemetery appearance as excellent	National Survey of Satisfaction with National Cemeteries	100%				
2.	Percent of respondents who would recommend the national cemetery to veteran families during their time of need	National Survey of Satisfaction with National Cemeteries	100%				
3.	Percent of headstones and/or markers in national cemeteries that are at the proper height and alignment	Semi-Annual cemetery assessments	90%				
4.	Percent of headstones, markers and niche covers that are clean and free of debris or objectionable accumulations	Semi Annual cemetery assessments	90%				
5.	Percent of gravesites that have grades that are level and blend with adjacent grade levels	Semi Annual cemetery assessments	95%				
6.	Percent of national cemetery buildings and structures that are assessed as acceptable according to National Shrine Standards	Annual cemetery assessments	90%				

Source: 2008 National Cemetery Administration Scorecard

Measure 1 provides an overall assessment of cemetery appearance, and measures 3, 4, 5, and 6 assess specific aspects of cemetery appearance. In addition, measure 2 assesses both tangible (cemetery appearance, service, and operations) and intangible factors.

In this section, each of the current National Shrine performance measures is examined with respect to their validity, completeness, and quality. In addition, measures are also reviewed based on available data.

1. Performance Measure One – Percent of respondents who rate national cemetery appearance as excellent

A key performance measure of the National Shrine mandate is the percent of respondents who rate the appearance of national cemeteries as excellent in the annual Survey of Satisfaction with National Cemeteries. Ratings are provided by next of kin that interred a loved one at a national cemetery in the past 12 months. A favorable rating is one where the survey respondent

agrees (either strongly agrees or agrees) that the overall appearance of the national cemetery is excellent. The strategic target for this measure is 100 percent.

Based on a review of this measure, the following two observations can be made:

- (1) Measure One Serves as Adequate Composite Measure or Overall Impression of Appearance. An individual's perception about whether a cemetery is a "national shrine" is largely related to their overall impression when visiting the cemetery. Closely aligning with the Mandate, the performance measure assesses overall appearance of the cemetery, which is based on several aspects of the cemetery that includes items such as grounds and alignment of headstones. As a result, the advantage of this measure is that it is a good composite representation for appearance, which is a core value for the National Shrine mandate.
- **(2) Further Clarity is Needed to Determine What Factors Influence Ratings of Cemetery Appearance.** Since performance measure one examines overall appearance, it is unclear what individual factors influence ratings of cemetery appearance. It is important to validate the measure by determining the factors that influence ratings of overall appearance. This analysis will allow national cemeteries that have lower ratings on overall appearance to identify evidenced-based "levers" to focus on in an effort to maximize ratings on this overall appearance measure.

Data from the annual NCA Survey of Satisfaction with National Cemeteries (hereafter called the Survey) was used to determine the specific aspects of appearance that are closely associated with respondents' rating of overall appearance. Specific measures of appearance collected on the Survey include the following aspects of a national cemetery: grounds maintenance, landscaping features, committal shelter, headstone/marker/columbaria niche upkeep, and gravesite appearance. The correlations among each of these measures, including the measure of overall appearance were computed to provide data to determine how strongly the aspects of appearance are related.

The correlation matrix of these items is presented in Exhibit 4-2. All measures of appearance are highly correlated (correlation coefficient > .5) with each other and with performance measure one. The strongest correlation with overall appearance occurs with ratings of maintenance of cemetery grounds and maintenance of landscape features. These data, provided by next of kin, indicate that the overall measure of appearance is effective in representing specific appearance measures. It also suggests that cemetery grounds and landscape features are most closely related to overall cemetery appearance and have specific utility when attempting to determine and implement improvements to increase overall appearance ratings.

	Exhibit 4-2. Appearance Ratings Correlation Matrix*								
			Surve	y Que	stion				
	а	b	С	d	m	р			
а	1.00								
b	0.71	1.00							
С	0.75	0.68	1.00						
d	0.54	0.55	0.57	1.00					
m	0.62	0.65	0.61	0.52	1.00				
р	0.69	0.60	0.69	0.52	0.63	1.00			

- a Maintenance of cemetery grounds are excellent
- b Upkeep of the headstones, markers and columbarium niche covers is excellent
- c Maintenance of other landscape features is excellent
- ${\sf d}$ Committal shelter used for the service was clean, free of safety hazards, and private
- m Appearance of loved one's gravesite/columbaria niche is excellent
- p Overall appearance of the national cemetery is excellent

Source: 2007 NCA Survey of Satisfaction with National Cemeteries

Exhibit 4-3 presents the percent of respondents to the 2007 Survey who highly rated the various appearance measures (strongly agree or agree). These results provide support to the approach of improving landscape features and individual gravesites to improve the overall appearance rating.

Exhibit 4-3. National Cemetery Appearance Ratings (Percent of Respondents who Strongly Agree or Agree)					
Performance Measure	2007				
Overall appearance of the national cemetery is excellent	97%				
Maintenance of the cemetery grounds is excellent	97%				
Upkeep of the headstones, markers, or columbarium niche covers is excellent	96%				
Maintenance of other landscape features (e.g., flowers, trees, shrubs) is excellent	95%				
Committal shelter used for the service was clean, free of safety hazards and private	96%				
The appearance of my loved one's gravesite/columbaria is excellent	94%				
*Sample size for analysis, n=11,253-12,239.					

Source: 2007 NCA Survey of Satisfaction with National Cemeteries

^{*}All correlation coefficients presented are significant at the α = 0.001 level.

2. Performance Measure Two – Percent of respondents who would recommend the VA national cemetery system to veteran families during their time of need

A second key performance measure of the National Shrine mandate assesses the willingness of next of kin to recommend the VA national cemetery system to other veteran families during their time of need. These ratings are collected annually on the Annual Survey of Satisfaction with National Cemeteries. Ratings are provided by next of kin who interred a loved one at a national cemetery in the past 12 months. A favorable rating is one where the respondent either strongly agrees or agrees that they would recommend the cemetery to veteran families during their time of need. The strategic target for this measure is 100 percent.

Based on a review of this performance measure, the following observation can be made:

(1) Further Clarity is Needed to Determine what Factors Influence Individuals' Willingness to Recommend National Cemeteries. To validate this measure, it is important to dissect it by determining what factors influence individuals' willingness to recommend national cemeteries. These may include the intangible aspects of the National Shrine definition, such as a "place of honor and memory", and "place of serenity, historical significance and nobility of purpose". Data from the Survey of Satisfaction with National Cemeteries were used to determine which aspects of the cemetery have the greatest impact on the willingness to recommend.

In all, ratings on more than twenty aspects of national cemeteries are available from the Survey. The ratings appear to fall into three categories, which were confirmed based on the results of an exploratory factor analysis (note: the results of the factor analysis can be found in Appendix II). The factors can be labeled as follows:

- Appearance This includes aspects addressing cemetery appearance on domains such as cemetery grounds, headstones, markers, columbarium niche covers, landscape features, committal shelter, and gravesite.
- Operations This includes aspects addressing visitor accommodations and cemetery operations such as handicap accessibility, availability of restrooms, signage, parking, hours of operation, roadways and intersections, and information kiosks.
- Intangible and overall measures These are "intangible" aspects as well as non-appearance and non-operational aspects that offer overall ratings of the national cemetery that address cemetery honors for veterans, quality of service, promoting a sense of patriotism and heritage, and respondents' overall satisfaction and expectations.

A composite of each of these factors was used in the analysis drawn from the survey data and used in the following regression model.

A regression model was developed to determine which aspects of national cemetery performance influence cemetery recommendation among next of kin. The likelihood that next of kin will recommend a cemetery can be predicted by appearance, quality of service, operations, sense of patriotism and heritage, and honor using the following composite factors, where:

- Appearance = composite mean of measures of appearance (Survey questions a, b, c, d, m, p)
- Quality of service = rating of quality of service received from cemetery staff (Survey question k)
- Cemetery operations = composite mean of individual measures of cemetery operations (Survey questions e, f, h, i, j, l, n)
- Sense of patriotism and heritage = public ceremonies and events at the cemetery promote a sense of patriotism and heritage (Survey question o)
- Honor veterans = the cemetery honors all veterans and their service to our nation (Survey question g).

Exhibit 4-4 presents the results of the regression analysis for NCA overall. Each independent variable listed above is statistically significant and the model explains over 50 percent ($R^2 = 0.555$) of the variation in the dependent variable, the recommendation of a national cemetery. As shown in the relative magnitude by order, appearance is most predictive of the likelihood to recommend, followed by quality of service, sense of patriotism, perception that the cemetery honors veterans, and cemetery operations. Importantly, this analysis demonstrates that this performance measure captures some of the "intangible" aspects of the National Shrine definition.

These findings vary somewhat by MSN. While cemetery appearance is the most predictive variable among all MSNs, the rankings of other independent variables were not the same for each MSN. Exhibit 4-5 shows the relative differences among factors for each independent variable by MSN. Quality of service ranked behind cemetery appearance for MSNs 1 and 5. Public ceremonies ranked behind cemetery appearance for MSNs 2 and 3. Cemetery honors ranked behind cemetery appearance for MSN 4.

Exhibit 4-4.					
Recommend Cemetery to Veteran Families*,**					
Multivariate Regression Results					
	Standardized				
Significant Predictors	Coefficient (ß) *****				
Overall (All MSN's) (Adjusted $R^{2**} = 0.555$)					
Cemetery appearance***	0.345				
The quality of service received from cemetery staff is excellent.	0.201				
Public ceremonies and events at the cemetery promote a sense of patriotism and heritage.	0.192				
The cemetery honors all veterans and their service to our nation. 0.145					
Cemetery operations****	0.028				

^{*}The following control variables were included in the model: Veteran/Service Member yes/no; Relationship to deceased; Number of times visited national cemetery since the committal service; Distance live from national cemetery; Burial option chosen for loved one.

Source: 2007 NCA Survey of Satisfaction with National Cemeteries

Exhibit 4-5. Recommend Cemetery to Veteran Families Multivariate Regression Results by MSN: Standardized Coefficients (ß)*,***								
Significant Predictors MSN 1 MSN 2 MSN 3 MSN 4 MSN 5 All MSNs								
Cemetery appearance***	0.311	0.406	0.363	0.306	0.326	0.345		
The quality of service received from cemetery staff is excellent.	0.240	0.148	0.148	0.203	0.272	0.201		
Public ceremonies and events at the cemetery promote a sense of patriotism and heritage.	0.162	0.195	0.251	0.171	0.180	0.192		
The cemetery honors all veterans and their service to our nation.	0.139	0.068	0.136	0.229	0.144	0.145		
Cemetery operations****	0.061	0.078		****	*****	0.028		
(Adjusted R ^{2**})	0.556	0.544	0.560	0.544	0.578	0.555		

^{*}The following control variables were included in the model: Veteran/Service Member or not; Relationship to deceased; Number of times visited national cemetery since the committal service; Distance live from national cemetery; Burial option chosen for loved one.

Source: 2007 NCA Survey of Satisfaction with National Cemeteries

The regression model developed above with 2007 annual survey data were also used to compare high and low performing cemeteries to actually test through statistical analysis whether

^{**}Demographic data were not available to control for other factors, such as age and socioeconomic status.

^{***}This variable is a composite mean of several individual measures (Cronbach's Alpha = 0.901).

^{****}This variable is a composite mean of several individual measures (Cronbach's Alpha = 0.871).

^{*****}All presented predictors are statistically significant (α =0.05).

^{******}Sample size for analysis, n=9,504...

^{**}Demographic data were not available to control for other factors, such as age and socioeconomic status.

^{***}This variable is a composite mean of several individual measures (Cronbach's Alpha = 0.901).

^{****}This variable is a composite mean of several individual measures (Cronbach's Alpha = 0.871).

^{*****}This variable is not a significant predictor (p value > .05)

^{******}Sample size for analysis, n=1,469 - 2,113.

some cemetery ratings are more important than others in explaining differences between cemeteries. *An important finding is that the largest differences between high and low performing cemeteries are in areas related to appearance.* To determine high and low performing cemeteries, a composite average was computed on three key indicators collected on NCA's annual satisfaction survey 1 for each cemetery. High performing cemeteries were defined as those with the highest composite average (n=4) and the low performing cemeteries as those with the lowest composite average (n=4). The means of all 21 indicators for each group of cemeteries (high and low performing), from the annual survey are presented in Exhibit 4-6. (It is important to note that even the lowest performing cemeteries achieved average ratings below 2, with one exception, indicating "somewhat satisfied".)

Exhibit 4-6. Performance Summary of High and Low Performing Cemeteries*						
	Lowest Performing Cemeteries (n=4)	Highest Performing Cemeteries (n=4)				
Indicator	Mean**	Mean**	Difference in Means***			
c) The maintenance of other landscape features (e.g., flowers, trees, shrubs) is excellent	1.87	1.19	0.69			
p) The overall appearance of the national cemetery is excellent	1.80	1.12	0.68			
a) The maintenance of the cemetery grounds is excellent	1.72	1.15	0.58			
f) The availability of restrooms is suitable to accommodate visitors on busy days	2.13	1.57	0.56			
h) There are sufficient signs within the cemetery to assist visitors	1.93	1.38	0.55			
e) There is adequate handicap accessibility for visitors who need it	1.89	1.34	0.54			
m) The appearance of my loved ones gravesite is excellent	1.76	1.26	0.50			
u) My experiences with the national cemetery exceeded my expectations	1.83	1.34	0.49			
b) The upkeep of the headstones, markers, or columbarium niche covers is excellent	1.65	1.18	0.47			
k) The quality of service received from cemetery staff is excellent	1.65	1.21	0.44			
q) Overall, I am satisfied with my experiences at the national cemetery	1.60	1.16	0.44			
n) The information kiosks are helpful to me	1.88	1.45	0.43			
j) The cemetery's roadways and intersections are safe and easily navigated	1.80	1.38	0.42			
The national cemetery hours of operation meet my needs	1.69	1.29	0.40			

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¹ The key indicators included in the composite average are quality of service (Survey question k), overall appearance (p) and recommendation of the national cemetery (r). Note this composite average is different from the composite averages used in the regression model discussed early in this chapter.

Exhibit 4-6. Performance Summary of High and Low Performing Cemeteries*					
	Lowest Performing Cemeteries (n=4)	Highest Performing Cemeteries (n=4)			
Indicator	Mean**	Mean**	Difference in Means***		
d) The committal shelter used for the service was clean, free of safety hazards, and private	1.53	1.15	0.37		
g) The cemetery honors all veterans and their service to our nation	1.51	1.14	0.37		
o) Public ceremonies and events at the cemetery promote a sense of patriotism and heritage	1.62	1.26	0.36		
r) I would recommend the cemetery to veteran families during their time of need	1.47	1.14	0.33		
s) I am willing to rely on VA and the National Cemetery Administration to meet the burial needs of veterans in the					
future	1.53	1.21	0.31		
t) I am willing to rely on VA and the National Cemetery					
Administration to maintain national cemeteries as national	1.40	4.20	0.20		
shrines in the future	1.49	1.20	0.30		
Parking at the cemetery is adequate to accommodate visitors on most days	1.81	1.52	0.30		

^{*}High and low performing cemeteries are the top and bottom 5% ranked cemeteries based on a composite of k, p, and r.

Source: 2007 NCA Survey of Satisfaction with National Cemeteries

A second way to examine the differences between high and low performing cemeteries is to compare the results using the regression model (Exhibit 4-4) that determined the factors that influence the National Cemetery recommendation. Exhibit 4-7 presents the results from the testing of this model using the factors identified. While the same predictors are significant for high and low performing cemeteries (p<.05), appearance is a stronger predictor for low than high performing cemeteries. This finding also confirms the importance of appearance as a factor distinguishing high and low performing cemeteries.

^{**}Ratings are on a 5-point scale ranging from 1 very satisfied to 5 very dissatisfied.

^{***}All differences are statistically significant at the 0.001 α-level.

^{****}Sample size for analysis, lowest performing cemeteries, n=624-846.

^{*****} Sample size for analysis, highest performing cemeteries, n=270-344.

Exhibit 4-7. Multivariate Regression Results: Recommend Cemetery to Veteran Families (Highest and Lowest Performing Cemeteries)*,***				
Significant Predictors*** Standardized Coefficient (ß) *****				
Four Highest Performing Cemeteric	es (Adjusted R** = 0.497)			
The quality of service received from cemetery staff is excellent.	0.351			
Cemetery appearance****	0.230			
Public ceremonies and events at the cemetery promote a sense of patriotism and heritage.	0.222			
The cemetery honors all veterans and their service to our nation.	0.195			
Four Lowest Performing Cemeterie	es (Adjusted R** = 0.601)			
Cemetery appearance****	0.365			
The quality of service received from cemetery staff is excellent.	0.251			
Public ceremonies and events at the cemetery promote a sense of patriotism and heritage.	0.214			
The cemetery honors all veterans and their service to our nation.	0.133			
*The following control variables were included in the model: Veteran/Service Member or not; Relationship to				

^{*}The following control variables were included in the model: Veteran/Service Member or not; Relationship to deceased; Number of times visited national cemetery since the committal service; Distance live from national cemetery; Burial option chosen for loved one.

Source: 2007 NCA Survey of Satisfaction with National Cemeteries

3. Performance Measures Three through Six – Headstones, markers, niche covers, gravesites, and cemetery buildings and structures

The remaining performance measures assess physical attributes of three major components of national cemeteries; headstones/markers/niche covers, gravesites, and buildings and structures.

Based on a review of these measures, the following three observations can be made about these performance measures:

(1) Performance Measures Address Tangibles of National Shrine Definition. These measures address cleanliness of headstones/markers/niche covers, height and alignment of headstones/markers, grades at gravesites and appearance and maintenance of cemetery buildings. As a result, they address the tangible aspects of the National Shrine definition, specifically the beauty of the grounds, gravesites and environs.

^{**}Demographic data were not available to control for other factors, such as age and socioeconomic status.

***A variable measuring cemetery operations was included in the regression models, but was not found to be a statistically significant predictor of the outcome measure for the best and worst performing cemeteries.

^{****}This variable is a composite mean of several individual measures (Cronbach's Alpha = 0.901).

^{*****}All presented predictors are statistically significant (α =0.05).

^{******}Sample size for analysis, lowest performing cemeteries, n=632.

^{*******}Sample size for analysis, highest performing cemeteries, n=268.

- (2) Measures have been Validated Based on Research. These measures are similar to some of the appearance standards included in LMI's study of cemetery operations². The standards proposed in that study were based on a comprehensive study of many of the best cemeteries in the world, and focused primarily on appearance aspects. Many more of LMI's standards are included in NCA's Operational Standards and Measures, used to guide the maintenance and care efforts of cemetery directors and staff at national cemeteries. The measures themselves appear to be based on a solid foundation and have been in use for several years.
- (3) Further Clarity Is Needed to Determine the Relative Importance of these Measures. The determination of the set of measures that need to be included as key NCA performance measures should be based on those that are most representative or predictive of National Shrine status. The analyses conducted above support the importance of appearance and as a predictor of a family member's willingness to recommend a national cemetery to other families of veterans. The headstones/markers/niche covers, gravesites, and buildings and structures are representative of important aspects of the National Shrine mandate and are likely to be predictive of a cemetery's ability to meet the Mandate. Some data were provided to determine the relative importance of each of the measures in predicting high and low performing cemeteries. However, a specific cemetery level analysis, which was outside the scope of this study, would require an analysis focused on cemetery-level data.

Despite the fact that there is research support showing that the performance measures used by NCA are the most predictive for desired outcomes based on their adoption from the LMI study, and as shown from the analysis conducted in this report, the statement of the measures still needs to be assessed. Terms used in the measures include "proper height and alignment", "objectionable accumulations", "grades....blend with adjacent grade levels" and "acceptable according to National Shrine Standards". Without further operational definition, use of these subjective terms may lead to inconsistencies across cemeteries. However, NCA's Operational Standards and Measures manual does provide appropriate definitions for these terms. For example, regarding the "proper height" of headstone, the manual provides the following definition "uniform in (24"-26" above ground)". For flat markers the definition is "no more than 1" above grade". The guidance provided by the manual and further detailed in a Facilities Maintenance Checklist provides operational definitions to support these performance measures.

For each of these performance measures, NCA was between 12 and 21 percentage points below the strategic targets in 2007 (See Exhibit 4-8). Since 2004, NCA has made some progress towards meeting their strategic targets. Achieving the targets will likely take several years and require additional resources. In addition, a number of factors exist that will present significant challenges to NCA in meeting the targets in the future. These are outlined in the next section.

³ National Cemetery Administration. National Shrine Commitment: Operational Standard and Measures. P. 23.

² Logistics Management Institute, <u>Review of National Cemetery Operations Volume 3: Cemetery Standards of Appearance</u>. October 2001.

Exhibit 4-8. Selected National Cemetery Administration (NCA) Performance Measures					
Performance Measure	2004	2005	2006	2007	Strategic Target
Percent of headstones and/or markers in national cemeteries that are at the proper height and alignment	64%	70%	67%	69%	90%
Percent of headstones, markers and niche covers that are clean and free of debris or objectionable accumulations	76%	72%	77%	75%	90%
Percent of gravesites that have grades that are level and blend with adjacent grade levels	79%	84%	86%	83%	95%
Percent of national cemetery buildings and structures that are assessed as acceptable according to National Shrine Standards	N/A	N/A	N/A	N/A	90%

Source: 2008 NCA Scorecard Presented in the 2009 Budget Document

Research Question Two – What are the Challenges Inherent in Meeting and Maintaining the National Shrine Mandate that Include Increasing Interments, Aging Infrastructure and Developing New Cemeteries

The number of interments, changing burial preferences, population migration, and aging infrastructure are factors that will impact NCA's ability to meet the National Shrine mandate. Each of these trends is examined in this section to determine how they might affect NCA's ability to meet the National Shrine mandate and whether changes to the National Shrine performance measures are necessary to counter the trends. Not discussed is the backlog of one-time repair projects identified in LMI's Study on Improvements to Veterans Cemeteries, which in 2002 totaled 928 projects, estimated to cost \$280 million. NCA has steadily been making these repairs and in its FY2009 budget submission to Congress, requested \$28 million to address gravesite renovation projects.

Interments. In 2007, interments (veteran and family members) in national cemeteries totaled 100,185. Exhibit 4-9 presents estimated number of interments through 2030. VA estimates interments will exceed 100,000 annually from 2008 through 2017. After reaching a peak in 2009, the number of interments is projected to taper off for the next twenty years to just over 71,000 in 2030. Nevertheless, during this 27-year period the number of interments in national cemeteries is expected to increase by 2.1 million. Interments involve opening and closing gravesites and represent a major workload measure at national cemeteries.

The number of gravesites in national cemeteries will increase significantly. The number of gravesites is a measure of the inventory that must be maintained by national cemeteries to ensure National Shrine standards. VA estimates the number of gravesites will increase by 1.4 million by 2030. This is a 50 percent increase from 2008. The number of gravesites at national cemeteries is provided in Exhibit 4-10. Providing service to these increasing numbers of gravesites will require greater resources.

These findings do not suggest the need for changes or additions to the existing performance measures or their metrics, other than needed changes in performance based budgeting allocations. These findings do suggest that additional financial resources at existing national

cemeteries will be needed. In addition, new staffing resources will be required for cemeteries currently under construction, to ensure that performance targets can be reached with the desired result of meeting the Mandate . In the absence of increased resources, it may be necessary to reassess and adjust downward performance measurement targets.

Exhibit 4-9. Historical and Projected Interments in National Cemeteries (Veterans and Family Members) – 2003 through 2030						
		Change from Previous Year				
Year	Total	Number	Percent			
Actual						
2003	89,753					
2004	93,033	3,280	4%			
2005	93,246	213	0%			
2006	96,797	3,551	4%			
2007	100,185	3,388	4%			
Projected						
2008	102,419	2,234	2%			
2009	109,341	6,922	7%			
2010	109,301	-40	0%			
2011	108,853	-448	0%			
2012	108,972	119	0%			
2013	108,911	-61	0%			
2014	107,941	-970	-1%			
2015	106,390	-1,551	-1%			
2016	104,358	-2,032	-2%			
2017	100,765	-3,593	-3%			
2018	96,209	-4,556	-5%			
2019	91,655	-4,554	-5%			
2020	87,760	-3,895	-4%			
2021	85,649	-2,111	-2%			
2022	83,673	-1,976	-2%			
2023	81,706	-1,967	-2%			
2024	79,759	-1,947	-2%			
2025	78,266	-1,493	-2%			
2026	76,251	-2,015	-3%			
2027	74,799	-1,452	-2%			
2028	73,568	-1,231	-2%			
2029	72,419	-1,149	-2%			
2030	71,212	-1,207	-2%			
2008-2030	2,120,177					

Source: U.S. Department of Veterans Affairs, NCA Projections, 2003-2030, FY 2007

Exhibit 4-10. Historical and Projected Cumulative Gravesites in National Cemeteries – 2003 through 2030				
Natio		Increase		
Year	Total	Number	Percent	
Actual				
2003	2,574,489			
2004	2,640,925	66,436	3%	
2005	2,706,054	65,129	2%	
2006	2,774,634	68,580	3%	
2007	2,842,684	68,050	2%	
Projected		·		
2008	2,914,453	71,769	3%	
2009	2,994,163	79,710	3%	
2010	3,072,602	78,438	3%	
2011	3,150,102	77,500	3%	
2012	3,227,302	77,200	2%	
2013	3,303,913	76,611	2%	
2014	3,381,908	77,995	2%	
2015	3,455,570	73,662	2%	
2016	3,527,708	72,138	2%	
2017	3,595,177	67,469	2%	
2018	3,659,271	64,093	2%	
2019	3,721,292	62,022	2%	
2020	3,777,901	56,608	2%	
2021	3,832,919	55,018	1%	
2022	3,886,719	53,800	1%	
2023	3,939,390	52,672	1%	
2024	3,990,989	51,599	1%	
2025	4,041,577	50,588	1%	
2026	4,090,213	48,635	1%	
2027	4,137,937	47,725	1%	
2028	4,184,814	46,876	1%	
2029	4,230,579	45,765	1%	
2030	4,274,895	44,316	1%	
2008-2030		1,432,211	50%	

Source: U.S. Department of Veterans Affairs, NCA Projections, 2003-2030, FY 2007

Burial Choice. In 2007, 58 percent of the interments at national cemeteries were for full caskets, 27 percent were for in-ground cremations, and 15 percent were for columbaria niches. Changes in burial preferences are expected to impact the demand for each type of burial in the future. Exhibit 4-11 provides VA's projections of the number of interments (veterans and family members) by burial type through 2030 and reflects expected changes in burial preferences. While the percentage of in-ground full casket interments is not expected to change, the percentage or interments in columbaria niches is expected to increase over the next 20 years.

Exhibit 4-11. Annual Number of Interments in National Cemeteries							
	by Type of Burial – 2003 through 2030						
Year	Total Interments	Full Casket	% total	In-Ground Cremations	% total	Columbaria Niches	% total
Actual							
2003	89,753	56,515	63%	23,311	26%	9,927	11%
2004	93,033	57,479	62%	23,818	26%	11,736	13%
2005	93,246	57,201	61%	24,680	26%	11,365	12%
2006	96,797	57,620	60%	26,108	27%	13,069	14%
2007	100,185	57,845	58%	27,088	27%	15,252	15%
Projecte	d						
2008	102,419	58,559	57%	27,694	27%	16,165	16%
2009	109,341	61,625	56%	28,770	26%	18,946	17%
2010	109,301	62,648	57%	28,573	26%	18,080	17%
2011	108,853	62,502	57%	27,293	25%	19,057	18%
2012	108,972	62,430	57%	26,632	24%	19,911	18%
2013	108,911	62,389	57%	26,314	24%	20,209	19%
2014	107,941	61,895	57%	25,989	24%	20,058	19%
2015	106,390	60,992	57%	25,493	24%	19,906	19%
2016	104,358	59,974	57%	24,848	24%	19,536	19%
2017	100,765	57,981	58%	23,716	24%	19,068	19%
2018	96,209	54,876	57%	22,950	24%	18,383	19%
2019	91,655	52,246	57%	21,545	24%	17,864	19%
2020	87,760	49,976	57%	20,053	23%	17,730	20%
2021	85,649	48,610	57%	19,671	23%	17,369	20%
2022	83,673	47,387	57%	19,259	23%	17,027	20%
2023	81,706	46,171	57%	18,150	22%	17,384	21%
2024	79,759	44,959	56%	17,597	22%	17,203	22%
2025	78,266	44,133	56%	17,237	22%	16,896	22%
2026	76,251	42,618	56%	16,818	22%	16,815	22%
2027	74,799	41,887	56%	16,380	22%	16,532	22%
2028	73,568	41,190	56%	16,123	22%	16,255	22%
2029	72,419	40,531	56%	15,875	22%	16,013	22%
2030	71,212	39,831	56%	15,634	22%	15,747	22%
	Increase 2008-2030						
Number	2,120,177	1,205,410	57%	502,614	24%	412,154	19%

Source: U.S. Department of Veterans Affairs, NCA Projections, 2003-2030, FY 2007

Exhibit 4-12 provides VA's projections of the number of gravesites at national cemeteries by burial type through 2030. By 2030, VA estimates it will maintain 4.3 million gravesites. While the number of full casket burials is expected to increase by 33 percent, the number of in-ground cremations is expected to double (97 percent) and the number of columbaria niches is expected to quadruple (319 percent) between 2007 and 2030. By 2030, it is estimated that national cemeteries will maintain nearly 450,000 columbaria niches. As more veterans and family members are buried in columbaria niches, the appearance and maintenance of these structures

will have a greater impact on family members' and veterans' assessments of overall cemetery appearance.

Exhibit 4-12.							
Annual Change in the Number of Gravesites in National Cemeteries							
by Type of Burial – 2003 through 2030							
	Annual Change						
	in Total	Full	%	In-Ground	%	Columbaria	%
Year	Interments	Casket	total	Cremations	total	Niches	total
Actual							
2004	66,436	42,297	63%	14,826	22%	9,677	14%
2005	65,129	40,770	62%	15,197	23%	9469	14%
2006	68,580	41,424	60%	16,905	24%	10,670	15%
2007	68,050	40,674	58%	17,154	24%	12,583	19%
Projecte	d						
2008	71,769	41,282	58%	17,746	25%	12,741	18%
2009	79,710	45,359	57%	19,269	24%	15,082	19%
2010	78,438	44,621	57%	18,707	24%	15,111	19%
2011	77,500	44,348	57%	16,933	22%	16,219	21%
2012	77,200	43,912	57%	16,595	21%	16,693	22%
2013	76,611	43,419	57%	16,370	21%	16,821	22%
2014	77,995	46,067	59%	15,311	20%	16,618	21%
2015	73,662	41,265	56%	15,984	22%	16,412	22%
2016	72,138	40,319	56%	15,649	22%	16,170	22%
2017	67,469	37,235	55%	14,682	22%	15,553	23%
2018	64,093	35,597	56%	13,781	22%	14,715	23%
2019	62,022	34,241	55%	13,363	22%	14,418	23%
2020	56,608	31,644	56%	10,602	19%	14,363	25%
2021	55,018	30,049	55%	10,572	19%	14,396	26%
2022	53,800	29,345	55%	10,332	19%	14,122	26%
2023	52,672	28,676	54%	10,136	19%	13,860	26%
2024	51,599	28,040	54%	9,948	19%	13,611	26%
2025	50,588	27,441	54%	9,772	19%	13,376	26%
2026	48,635	26,393	54%	8,638	18%	13,604	28%
2027	47,725	25,847	54%	8,495	18%	13,382	28%
2028	46,876	25,355	54%	8,358	18%	13,163	28%
2029	45,765	24,726	54%	8,039	18%	13,000	28%
2030	44,316	23,857	54%	7,770	18%	12,689	29%
Increase 2008-2030							
Number	1,432,211	799,037		297,054		336,120	
Percent	50%	33%		97%		319%	
Total Gra	Total Gravesites by 2030						
	4,274,895	3,229,419		602,226		443,250	

Source: U.S. Department of Veterans Affairs, NCA Projections, 2003-2030, FY 2007

Results from the 2008 Veterans Burial Benefits Survey confirm a change in burial preference from what was once predominantly full casket burial. Exhibit 4-13 presents the survey findings and with the exception of columbarium preferences, the proportions are similar to those used by the VA (Exhibit 4-12).

Exhibit 4-13. Burial Choice				
Burial Type	Percent			
In-ground casket burial	54.0%			
Cremation, in-ground burial	20.2%			
Cremation columbarium	9.2%			
Mausoleum	3.2%			
Something else	7.3%			
Don't know	6.1%			
Total 100%				
*Sample size for analysis, n=15,692.				

Source: 2008 Veterans Burial Benefits Study

Given the expected increased importance of columbaria at national cemeteries, the inclusion of a separate performance measure for columbaria is recommended. Satisfaction with key aspects of columbaria is such a measure. The National Cemetery Satisfaction Survey collects ratings from next of kin on their satisfaction with the quality and design of the columbaria (survey question 27). The specific measure is:

"Percent of respondents whose loved one was interred in a columbarium and who rate the quality and design of the columbaria as excellent."

An appropriate strategic target, one that is consistent with similar performance measures, is slightly less than 100 percent.

Population Migration. Over the past several years, the United States has experienced disproportionate population increases among regions, with increases in the South and West outpacing growth in the Northeast and Midwest. The same trend is true of the population 65 years old or older. Exhibit 4-14 presents population estimates for 2030 by region. These projections indicate that the current demographic trend is expected to continue with increases in the over 65 population projected to be greatest in the South and West, where the population 65 years old and older is expected to more than double by 2030.

Exhibit 4-15 presents population estimates for 2030 by VA MSN. As expected the MSNs in the West and South will experience greater increases in population 65 years old and older that in the East and Midwest. Planning models need to take into consideration the variation in projected growth among the MSN. National cemeteries in high growth MSNs will likely be under greater pressure to maintain the cemeteries to the National Shrine standards. This finding does not necessarily support establishing different performance measures by MSN, but does indicate the importance of closely monitoring the performance measures of each MSN. Ensuring cemeteries have the proper resources, particularly in high growth MSNs is important.

Exhibit 4-14. Population Projections by Region Population 65 Years or Older						
Geographic	July 2005	July 2030	Increa	ase		
Area	July 2003	July 2030	Population	Percent		
Northeast	7,471,709	12,171,269	4,699,560	62.9%		
Midwest	8,391,915	13,858,370	5,466,455	65.1%		
South	13,281,938	28,325,849	15,043,911	113.3%		
West	7,550,342	17,097,983	9,547,641	126.4%		
TOTAL	36,695,904	71,453,471	34,757,567	94.7%		

Source: U.S. Census Bureau, Population Division, Interim State Population Projections, 2005

Exhibit 4-15. Population Projections by VA MSN Population 65 Years or Older							
MSN	July 2005	July 2030	Increas	se			
INISIA	July 2003	July 2030	Population	Percent			
MSN 1 (Philadelphia Network Office)	9,434,872	15,973,456	6,538,584	69.3%			
MSN 2 (Atlanta Network Office)	8,065,982	17,676,474	9,610,492	119.1%			
MSN 3 (Indianapolis Network Office)	8,117,159	13,455,496	5,338,337	65.8%			
MSN 4 (Denver Network Office)	4,415,405	9,169,668	4,754,263	107.7%			
MSN 5 (Oakland Network Office)	6,662,486	15,178,377	8,515,891	127.8%			
TOTAL	36,695,904	71,453,471	34,757,567	94.7%			

Source: U.S. Census Bureau, Population Division, Interim State Population Projections, 2005

Aging Infrastructure. Of the current 125 national cemeteries, nearly two-thirds opened before 1900, many around the time of the Civil War. As a result, the average age of national cemeteries exceeds 100 years making them the oldest facilities in the VA infrastructure. Only in MSN 5 (Oakland) is the average cemetery age less than 100 years.

As noted earlier, LMI's Study on the Improvements to Veterans Cemeteries assessed the condition of various key aspects of each national cemetery. The study identified more than 900 projects that require attention in maintaining the National Shrine mandate. The number of projects distributed by MSN is presented in Exhibit 4-16

MSN 1 and MSN 2 maintain the largest number of cemeteries, along with some of the oldest cemeteries, so these findings are not surprising. However, when comparing the dollar value of the projects, the projects in MSN 5 capture 36 percent of the total. One likely reason for this disparity is greater burial activity, due to population trends. This shows that regional veteran population age is a considerable factor that affects the ability of a MSN and its cemeteries to meet the National Shrine standards.

Exhibit 4-16 Projects at National Cemeteries Required to Maintain National Shrine Status - 2002							
	Required	d Projects	Cos	t			
Memorial Service Network	Number	Percent of Total	Cost	Percent of Total			
MSN 1 (Philadelphia Network Office)	233	25%	\$71,660,056	26%			
MSN 2 (Atlanta Network Office)	250	27%	\$30,145,757	11%			
MSN 3 (Indianapolis Network Office)	121	13%	\$39,929,084	14%			
MSN 4 (Denver Network Office)	174	19%	\$38,101,807	14%			
MSN 5 (Oakland Network Office)	150	16%	\$100,009,368	36%			
TOTAL	928	100%	\$279,846,072	100%			

Source: Logistics Management Institute, Study on Improvements to Veterans Cemeteries, Volume 2: National Shrine Commitment, 2002, p. iv.

Facility age, however, does have a significant impact. It is probable that the age of the cemetery and the age of the cemetery's infrastructure (roadways, buildings, other structures, etc.) are directly related. Older cemeteries are likely to have older infrastructure and as this infrastructure continues to age, it will become more difficult and costly to maintain to National Shrine Standards. The recent addition of an operational performance measure that assesses cemetery buildings and structures will help NCA monitor its cemetery infrastructure. This performance measure provides an overall assessment (like the cemetery appearance performance measure) and can be used to identify general issues.

National cemetery directors use a Facility Condition Assessment to identify potential infrastructure issues and allow MSN and NCA staff to plan resource allocation for cemetery improvements. The Assessment requires directors to rate the condition of each cemetery facility/structure as well as other infrastructure aspects (roads, parking, fencing, walks, etc.) of their cemetery. The condition of each facility is assessed (using a letter grade, A-F) on a number of areas. These areas relate to the structural and functional condition of the facility as well as its appearance and provide a comprehensive assessment.

Findings and Recommendations

This program evaluation examined the performance measures designed to assess NCA's ability to meet the National Shrine mandate. The National Shrine definition provided guidance on what should be measured, in regards to both tangible and intangible aspects of the cemetery. Overall, data analysis findings show that the six existing performance measures address the key components of outlined in the National Shrine definition. These performance measures are supplemented by the national cemetery operational standards and measures that currently guide cemetery directors and staff on necessary maintenance and care.

NCA's annual survey of next of kin and funeral directors has two limitations. The first is that data are collected from next of kin who interred a loved one in a national cemetery in the past year. Opinions of next of kin who return to the cemetery more than one year after the interment are not captured and their perceptions of the cemetery may be different. Data collected from next of kin at different time periods would provide better information on which to base policy

changes. A second limitation is that data on the annual survey are not collected for cemeteries that have been closed to new internments.

The following are recommendations to enhance the performance measures:

- Recommendation #8: Develop a new performance measure to assess satisfaction with columbaria and measure it on the National Cemetery Satisfaction Survey. The specific measure is: "Increase the percent of respondents rating the quality of the columbaria as excellent."
- Recommendation #9: Review strategic targets of 100% to reset these targets as these performance levels are not achievable.
- Recommendation #10: Expand the annual Survey of Satisfaction with National Cemeteries⁴ as described in Recommendations 10A and 10B below.
 - Recommendation #10A: Expand the sample of the Survey to include next of kin who interred a veteran or family member in a national cemetery within the past 5 years.
 - Recommendation #10B: Conduct annual intercept surveys of visitors at closed cemeteries to collect data from these visitors. Enumerators would administer a short survey (approximately 10 questions) to a random sample of visitors. Depending on the expected number of visitors, the data collection period could range from one day to one week.

This chapter also identified several factors that will affect NCA's ability to meet the National Shrine mandate in the future. Increasing interments, gravesites and an aging infrastructure will pose considerable challenges in maintaining the national cemeteries as national shrines.

B. Adequacy and Impact of Symbolic Expressions of Remembrance

Congress has authorized a number of different symbolic expressions of remembrance for veterans that include:

- A U.S. Flag that is draped over the coffin during the funeral/burial ceremony and is presented to the next of kin at the end of the ceremony (United States Code, Title 38, Section 2301).
- A Headstone or marker for the gravesite. The Army General Quartermaster was charged with providing headstones made of wood during the Civil War to Union soldiers who died in battle. The current headstone and marker benefit is governed by the provisions of Title 38 of the United States Code, Section 2306).

⁴ The Survey provides data at the NCA, MSN, and individual cemetery levels for two of the six National Shrine performance measures. As applied to NCA's performance measures, the current Survey data have two limitations. The first is that data are collected from next of kin who interred a loved one in a national cemetery in the past year. Opinions of next of kin who return to the cemetery more than one year after the interment are not captured and their perceptions of the cemetery may be different. Data collected from next of kin at different time periods would provide better information on which to base policy changes. A second limitation is that data on the Survey are not collected for closed cemeteries.

- A Presidential Memorial Certificate. Statutory authority for this program is given by United States Code, Title 38, Section 112 in March, 1962.
- Military Honors at veterans' funerals have been held ever since service members have been killed while on active duty, even going back to the Revolutionary War period. In 2000 the Department of Defense was required (via Public Law 106-65) to provide a military honors funeral ceremony if an eligible veteran's family member requests one. Although the Department of Defense (DoD) is responsible for providing the military honors, VA staffers can assist in arranging for one.

Of these four benefits, the survey results and focus group participants have indicated that three of these (U.S. flag, Headstone or marker, and military honors) are among the benefits most widely known by veterans and their family members.

a. What is the Adequacy and Impact of the Current Set of Symbolic Expressions of Remembrance?

Veterans were asked in the survey (survey question 33): "how important are each of these burial benefits to you as recognition of your Service?" Exhibit 4-17 below shows the results. All four of the benefits were rated either important or very important by at least three out of four veterans. The U.S. flag and the headstone/marker benefit were rated higher than the PMC and military honors, possibly because the first two benefits are better known among veterans⁵.

Exhibit 4-17. Importance of Various Symbolic Expressions of Remembrance							
Very Important/ Not Very Important/ Do Not							
Burial Benefits	Important	Not at All Important	Know	Total			
U.S. Flag	89.0%	8.1%	2.9%	100.0%			
Headstone or marker	85.6%	11.1%	3.3%	100.0%			
Presidential Memorial Certificate	73.3%	21.7%	5.0%	100.0%			
Military Honors	73.6%	21.5%	4.9%	100.0%			
*Sample size, n=14,232 - 14	4,974.						

Source: 2008 Veterans Burial Benefits Survey

Veterans were also asked the following in survey question 31: "a headstone or marker is a burial benefit available to all eligible veterans, regardless of where they are buried. Please indicate your level of agreement with the following statements." Exhibit 4-18 shows the results. At least four out of five veterans agreed or agreed strongly with the two sentiments that the country appreciates the service of veterans during wartime and peacetime. A much smaller portion (though still the majority) agreed with the sentiment that they personally will be remembered. This is a striking finding in that it shows the collective identity and support that veterans feel for each other, rather than just thinking about their own place in history or the affection by the nation.

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⁵ See Appendix III, pages III-29 and III-30, to review data on the extent to which veterans indicate their knowledge of these and other benefits.

Exhibit 4-18.								
Feelings of Veterans About Headstones and Markers								
Strongly Disagree/								
The headstone or marker benefit makes me feel	Agree/ Agree	Neither	Strongly Disagree	Do not know	Total			
That the country appreciates the service of veterans to our nation	87.3%	6.2%	3.1%	3.4%	100.0%			
That the country appreciates all veterans, including those who served during peacetime	84.2%	7.9%	4.7%	3.2%	100.0%			
That I will be remembered	72.8%	16.6%	6.1%	4.5%	100.0%			
That the country understands that veterans have earned these benefits	80.2%	9.3%	6.7%	3.8%	100.0%			
*Sample size for analysis, n=13,174 - 14,	249.							

Source: 2008 Veterans Burial Benefits Survey

b. What Additional Symbolic Expressions can VA Provide?

The most practical method for answering the question of additional symbolic expressions was to ask for volunteers to participate in a conjoint analysis task and rate a set of alternative additional symbolic expressions. Conjoint analysis is a statistical technique that was developed by Paul Green at the Wharton School of the University of Pennsylvania beginning in the 1970s. The motivation in developing it stemmed from the realization that individuals rarely if ever make decisions about events or objects by considering only one characteristic or attribute about that object or event. More often individuals make judgments involving a set of trade-offs. For example, a typical trade-off choice in selecting lunch may involve three dimensions: calories, cost, and personal taste. Conjoint analysis permits the estimation of the relative importance of the various dimensions (price, healthfulness, personal preference in the example above) and the characteristics or attributes within each dimension.

The application of this analytical technique was a "proof of concept" exercise in this evaluation, limited to fewer than 10 participants, to see whether such a method could yield results useful to VA as well as to develop pilot data on additional symbolic expressions. The data and discussion are provided in the appendix volume.

With eight participants involved in the task, inferences and conclusions cannot be made. However, the concept of using conjoint analysis in analyzing the various trade-offs involved in refining, modifying, or adding to the VABBP was supported. Application of a more rigorous sampling methodology, with larger demographically representative samples in support of conjoint analysis is something to be actively explored in future studies.

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⁶ This brief discussion draws on: Curry, Joseph. (1996). Understanding Conjoint Analysis in 15 Minutes, *Quirks Marketing Review*, 1996, and SPSS Version 16 Algorithms, SPSS Inc, 2008.

c. What is the Impact of Policy Changes to Provide Additional Symbolic Expressions of Remembrance?

Veterans were asked (survey question 34): "how important are each of the following aspects of the headstone or marker that are not currently available?" Exhibit 4-19 below displays the results. The most important change indicated by veterans would be to expand the option to place military symbols on the markers, as 54 percent of the respondents indicated that it was "important" or "very important". The second most important change requested (by 47% of all respondents) was to increase the area for a personal inscription. Based on these results, VA needs to consider supplying these two additional features to headstones and markers.

Exhibit 4-19. Importance of Various Symbolic Expressions of Remembrance						
Aspects of Headstones and Markers	Very Important/ Important	Not Very Important/Not at All Important	Do Not Know	Total		
Different shaped headstones	36.1%	49.6%	14.3%	100.0%		
Different materials	35.4%	50.7%	13.9%	100.0%		
Larger area for personal inscription	46.8%	40.9%	12.3%	100.0%		
Option to place military symbols on the marker	54.1%	35.2%	10.7%	100.0%		
Option to place additional symbols on the marker	38.9%	47.8%	13.3%	100.0%		
*Sample size for analysis, n=13,180 -	13,641.					

Source: 2008 Veterans Burial Benefits Survey

As the data collection for this evaluation was being made ready, Congress passed Public Law 110-157, signed on December 26, 2007, which allows VA to

"furnish, upon request, a <u>medallion</u> or other device of a design determined by the Secretary to signify the deceased's status as a veteran, to be attached to a headstone or marker furnished at private expense."

This benefit will be available in lieu of a Government furnished headstone or marker, for veterans in privately marked graves who died on or after Nov. 1, 1990.

VA states that the medallion will be ready in 2009.

d. Findings and Recommendations

This section examined the adequacy and impact of various symbolic expressions of remembrance. The symbolic expressions, especially those connected most directly to the concept of "Country", such as the U.S. flag, or the Armed Forces, such as military honors, are very important to veterans and should be maintained. Any changes desired by veterans or their family members are small.

The following recommendations are based on the findings described above. They are consistent with the legislative intent of the VABBP, and are designed to improve program outcomes in service to veterans and their families.

- Recommendation #11: Provide two additional memorialization benefits that veterans asked for in the survey, that include: 1) room for military insignia on the headstone or marker, and 2) additional room for appropriate personal inscriptions on the headstone or marker.
- Recommendation #12: Officially request that DoD offer empty shell casings following
 the military honors ceremony to next of kin as a standard protocol. Next of kin
 participating in focus group sessions at several sites nationally voiced this request as a
 symbol of remembrance.
- Recommendation #13: Conduct a conjoint analysis study (i.e., decision-making task) with a large sample on the value of new symbolic expressions that may be offered to further build on the pilot data gathered via conjoint analysis for this study⁷..

C. Impact of Presidential Memorial Certificates

A PMC is an engraved paper certificate, bearing the current President's signature, to honor the memory of honorably discharged deceased veterans. Eligible recipients include the deceased veteran's next of kin and other loved ones. The PMC was started by President Kennedy in March of 1962. Since that time, 11.9 million PMCs have been distributed.

a. What is the Impact of the Current Presidential Memorial Certificate on Perceptions of Veterans and their Loved Ones?

Veterans were asked the following question on the survey (Question 32):

"A Presidential Memorial Certificate is a burial benefit available to families of veterans, regardless or where they are buried. Please indicate your level of agreement with the following statements."

Exhibit 4-20 below displays the results. As shown in the exhibit, 80 percent of veterans indicated that the PMC benefit makes them feel that the country appreciates the service of veterans to our nation. Since many did not know about the PMC before taking the survey, it is probable that the veterans were responding to the "idea" of the PMC benefit as described in the question, and less to the actual knowledge about the benefit itself.

In addition, the focus group and interview data reveal:

- Of the 37 veteran next of kin participants, only one knew about the Presidential Memorial Certificate benefit.
- Of 29 funeral directors, only two knew about the PMC benefit.
- Five out of every six veterans had never heard of the PMC.

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⁷ See appendix for the pilot data gathered via conjoint analysis.

Exhibit 4-20. Feelings of Veterans About the Presidential Memorial Certificate							
The Presidential Memorial Certificate benefit makes me feel	Strongly Agree/ Agree	Neither	Disagree/ Strongly Disagree	Do not know	Total		
That the country appreciates the service of veterans to our nation	80.0%	10.2%	3.9%	5.9%	100.00%		
That the country appreciates all veterans, including those who served during peacetime	77.6%	11.6%	5.2%	5.6%	100.00%		
That I will be remembered	67.0%	19.4%	7.1%	6.5%	100.00%		
That the country understands that veterans have earned these benefits	75.3%	12.2%	6.6%	5.9%	100.00%		
*Sample size for analysis, n=13,014-14,086.	I.		I.		1		

Source: 2008 Veterans Burial Benefits Survey

b. What is the Current System of Generating Presidential Memorial Certificates?

When the Veterans Benefits Administration (VBA) receives a notification of the death of a veteran (typically from the funeral home conducting burial services), VBA will automatically issue the request for the PMC and have it sent to the person who is making the arrangements with the funeral home.

c. New System of Generating Presidential Memorial Certificates: Is It Necessary?

There are several possible reasons for changing the system of generating PMCs:

- If the current system is error-prone, a new system can be designed in order to minimize the number of PMCs issued with errors. Data show that the current system does not generate PMCs with mistakes often. For example of the 400,000 PMCs issued recently on an annual basis, the number of those with errors is less than 100. This is an acceptable level of performance.
- A new system could offer additional functionality that the current system does not offer. For example, because the constraints on PMCs are fewer and less stringent than for other benefits, creating a "self-service" version of the PMC application might result in more efficient service and in faster deliver of PMCs.

d. What Would be the Impact of Introducing New Processes to Increase the Accuracy of Information Provided on Presidential Memorial Certificates?

Given the extremely low error rate currently evidenced in the PMC program, the introduction of new processes targeting increased accuracy of information is not required.

e. What is the Impact of Policy Changes to Provide Additional Symbolic Expressions?

The impact of policy changes to provide additional symbolic expressions described in the preceding sections include:

- Changes would be required in two areas: the forms requesting headstones and markers would have to be modified to include options for the additional symbolic expressions such as space for military insignia, and space for a personal inscription.
- Assuming that the customization of headstones and markers is at least partially automated, the incremental cost for personal inscriptions and/or military insignia is minimal, after the automation is reconfigured to support the new benefits.
- Results from a conjoint analysis (see Appendix 7) in this evaluation revealed preferences for a bronze letter "V", and an attractive storage case in which to store the flag. Individual retail prices for storage cases range from \$50 to \$300 or higher, depending on the type of wood and features. Providing an attractive storage case for every flag issued would cost in the range of about \$20/per case⁸. This would increase the cost by \$2,000,000 for every 100,000 flags issued. A bronze letter "V" would cost in the same range⁹, about \$26. This would increase the cost at a rate of \$2,600,000 for every 100,000 bronze letters issued.

f. Findings and Recommendations

This section examined the adequacy and impact of the PMC benefit and the cost implications of supplying two additional symbolic expressions of appreciation to veteran family members. Relative to the size of VA annual budget (about \$84 billion), the additional cost of slightly more that \$5.5 million represents an increase of less than 1/100th of one percent.

Based on the findings, the following recommendations are made:

- Recommendation #14: Conduct an outreach campaign to better promote the PMC among veterans, veteran family members, and funeral directors.
- Recommendation #15: Develop an Internet Web-based tool so that next of kin and friends can apply on-line for a PMC, which would raise the visibility and value of the PMC. Creating this application is an investment for the future, as the demographics of the veteran population changes to comprise more of those who are comfortable with the Web.

The next chapter, Chapter 5, examines several monetary burial benefits (e.g., burial allowances, feasibility of offering veterans a cash payment in lieu of burial in a national cemetery).

⁸ The cost of such cases was pulled from the World Wide Web on 9 May 2008 from http://www.trophycentral.com/displaycases2.html. The Web site displays retail prices for individuals. Assuming a standard retail markup of 60%, and the reduced cost that VA could obtain from volume discounts, suggests the figure of \$20.

⁹ The retail cost of one 6 inch bronze letter "V" one-fourth of one inch thick is \$65 (See http://www.cut-metal-letters.com/B1-8-Price-SAT%20BRONZE-R.pdf pulled on 9 May 2009). Using a similar retail markup figure as in the example of the flag display cases, the wholesale cost would be \$26 / letter.

This chapter examines several burial benefits available to veterans from VA. Included is the benefit of burial in a national cemetery available to all honorably discharged veterans. The feasibility of offering veterans a cash payment in lieu of burial in a national cemetery is assessed. VA also offers monetary burial benefits in the form of allowances designed to defray a portion of eligible veterans' burial and burial plot costs. The impact of a financial means test on the eligibility of the burial allowances is provided in this chapter. Also, a comparison of the burial allowances with actual funeral, burial and burial plot costs is conducted to determine the adequacy of the allowances. The results of these analyses and recommendations derived from the findings are presented below.

A. Feasibility of Cash Payment

The National Cemetery Expansion Act of 2003 authorized VA to open new national cemeteries within four years after the enactment of the Act to serve veterans in six areas of the U.S. where large numbers of unserved veterans reside. The cost to construct the six new cemeteries is approximately \$156 million as well as an additional \$25 million per year in operating costs¹. Going ahead, VA can continue to augment burial capacity by constructing and maintaining new national cemeteries in areas that meet VA's standard. (This standard requires new national cemeteries in areas where the unserved veteran population is at least 170,000 within a 75-mile radius.) Alternatively, VA could choose to compensate veterans and their families by implementing a cash payment program made on behalf of veterans not served by a national or state veterans cemetery at the time of their death. This section will compare these alternatives and address the following research questions:

- Research Question #1 What burial services could VA provide if it opened no new national cemeteries or funded state cemeteries?
- Research Question #2 For survey data on those who live beyond a 75-mile service standard, would they accept cash payments?
- Research Question #3 What is veterans' acceptance of cremation only burial (as this is a less costly option with significance for a cost analysis)?
- Research Question #4 What is the feasibility of offering a cash payment in lieu of burial in national or state veterans cemetery where they are not available?
- Research Question #5 –What are the comparative costs of building new cemeteries versus implementing an alternative cash payment program?

Each of these research questions, associated with feasibility of cash payment, is addressed below.

a. What Burial Services Could VA Provide if it Opened No New National Cemeteries or Funded State Cemeteries?

In the scenario that VA chooses not to open new national cemeteries or fund state cemeteries, it could offer a suite of support services to help veterans and their families meet their funeral

¹ VA, Volume 3 Construction Activities, 2008 Congressional Submission, pages 2-43 to 2-75.

needs in addition to providing burial allowances, headstones and markers, flags and other related services. Some possible services are listed below:

- A web-based database with listings of funeral homes and cemeteries across the country to enable information seekers to locate such facilities in their desired areas. In conjunction, an extended service hour telephone helpline that serves those who cannot access the Internet.
- An extended service hour telephonic helpline that could provide information to veterans and their families about advantages of pre-planning veteran funerals, VA burial benefits, eligibility criteria for burial benefits, and need for applications and supporting documentation. This service could be expanded to include the provision of technical assistance on funeral arrangements and burial arrangements. The same information could also be made available in an easy to understand manner and printable format on the VA website for ready access.

b. For Survey Data on Those Who Live Beyond a 75-Mile Service Standard, Would They Accept Cash Payments?

Acceptance of cash payments in lieu of burial in a national or state cemetery depends on factors such as "Gross Family Income", "Likelihood of Choosing a National or State Veterans Cemetery", and "Burial Preference". Also, there is no reason to believe that acceptance in the population residing outside the 75-mile service standard will be different from the population of veterans residing within the 75-mile service standard. Based on responses from the 2008 Veterans Burial Benefits Survey (survey question 22) approximately 72 percent of respondents strongly agree or agree to accept private cemeteries if their families receive help to defray additional costs. The extent to which a hypothetical cash payment would defray burial costs was not explicitly presented to respondents. Exhibit 5-1 below shows the acceptance of a cash payment in lieu of burial in a national or state veterans cemetery across different income groups. Overall, the majority of veterans (72 percent) would accept a cash payment. Acceptance is highest among veterans with gross family income less than \$75,000 and only somewhat lower among veterans whose gross family income is greater than \$75,000.

Exhibit 5-1. Acceptance of Private Cemetery (in Lieu of a National or State Cemetery) if Family Could Receive Help to Defray Additional Cost by Gross Family Income							
	Strongly	Neither Agree	Disagree/ Strongly				
Gross Family Income	Agree/ Agree	nor Disagree	Disagree	Total			
Less than \$10,000	70.9%	11.9%	17.2%	100%			
\$10,001 to \$20,000	75.2%	10.0%	14.8%	100%			
\$20,001 to \$30,000	76.0%	10.7%	13.3%	100%			
\$30,001 to \$40,000	75.6%	11.0%	13.4%	100%			
\$40,001 to \$50,000	71.6%	12.9%	15.5%	100%			
\$50,001 to \$75,000	71.7%	12.9%	15.4%	100%			
\$75,001 to \$100,000	68.7%	14.7%	16.6%	100%			
More than \$100,000	64.5%	16.7%	18.8%	100%			
Total	72.0%	12.6%	15.4%	100%			
Sample size for analysis, n=12,030. Chi-square value 284721, 28 df, p value=0.000.							

Source: 2008 Veterans Burial Benefits Survey

Exhibit 5-2 below shows the acceptance of a cash payment in lieu of burial in a national or state veterans cemetery analyzed by respondents' likelihood of choosing a national or state veterans cemetery, which is an important veteran subgroup. Among veterans who are "Very likely" to choose a national or state cemetery, 58 percent reported they would accept a cash payment. While this proportion is much lower than for all other veterans surveyed, it still indicates that acceptance of a cash payment program is high among all veterans.

Exhibit 5-2. Acceptance of Private Cemetery (in Lieu of a National or State Cemetery) if Family Could Receive Help to Defray Additional Cost By Choice of National or State Cemetery							
Choice of National Strongly Neither Agree Disagree/ Strongly							
or State Cemetery	Agree/ Agree	nor Disagree	Disagree	Total			
Very likely	58.3%	12.5%	29.2%	100%			
Somewhat likely	81.5%	10.0%	8.5%	100%			
Neither likely nor unlikely	81.0%	12.8%	6.2%	100%			
Somewhat unlikely	81.5%	10.6%	7.9%	100%			
Very unlikely	69.2%	15.5%	15.3%	100%			
Total	71.6%	12.7%	15.7%	100%			
Sample size for analysis, n=13,203. Chi-square value 1526461, 16 df, p value=0.000.							

Source: 2008 Veterans Burial Benefits Survey

Exhibit 5-3 below shows the acceptance of a cash payment in lieu of burial in a national or state veterans cemetery by respondents' burial preference. Acceptance varies significantly by burial type, with the highest level of acceptance among veterans who prefer in-ground casket burial. The lowest level of acceptance is among veterans whose burial preference is "Something else".

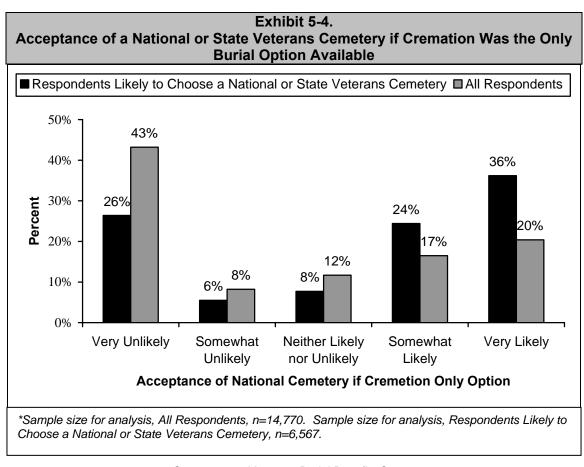
Exhibit 5-3.							
Acceptance of Private Cemetery (in Lieu of a National or State Cemetery) if Family Could							
Receive He	Ip to Defray Add	litional Cost By I	Burial Preference				
	Strongly	Neither Agree	Disagree/ Strongly				
Burial Preference	Agree/ Agree	nor Disagree	Disagree	Total			
In-ground casket burial	78.0%	10.0%	12.0%	100%			
Cremation, in-ground	70.3%	13.0%	16.7%	100%			
burial	70.570	13.070	10.7 76	10076			
Cremation, columbarium	63.6%	15.3%	21.1%	100%			
Mausoleum	77.5%	11.4%	11.1%	100%			
Something else	42.1%	23.6%	34.3%	100%			
Don't know	70.4%	18.3%	11.3%	100%			
Total	71.9%	12.7%	15.4%	100%			
Sample size for analysis, n=12,88	37. Chi-square value	1208909, 20 df, p val	ue=0.000.				

Source: 2008 Veterans Burial Benefits Survey

The key finding from these analyses is the majority of veterans (72 percent) report they would accept a cash payment for burial in a national or state veterans cemetery if that option was available. The veterans least likely to accept a cash payment are those who report they are very likely to choose burial in a national cemetery. Still, more than half (58 percent) of these veterans would accept a cash payment.

c. What Is Veterans' Acceptance of Cremation Only Burial (as this is a Less Costly Option with Significance for a Cost Analysis)?

Veterans were asked on the 2008 Veterans Burial Benefits Survey (survey question 16) about their willingness to accept cremation if it were the only burial option available at a national or state veterans cemetery. Exhibit 5-4 below presents the results for both all veterans, and for veterans who reported they are likely (somewhat likely or very likely) to choose burial in a national or state veterans cemetery. Thirty-seven percent of all veterans reported they would likely (somewhat likely or very likely) accept cremation. In contrast, acceptance is much greater among veterans who are likely to choose burial in a national cemetery (60 percent). This finding is important since 21 of the 86 national cemeteries open as of September 30, 2007 can only accept cremation². The survey findings show that the majority of veterans would feel served by a national cemetery if the only option available was cremation.



Source: 2008 Veterans Burial Benefits Survey

d. What is the Feasibility of Offering a Cash Payment in Lieu of Burial in a National or State Veterans Cemetery Where They Are Not Available?

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² VA, Volume III: Benefits and Burial Programs and Departmental Administration, Congressional Submission, FY 2009. p. 1B-20 and 1B-24.

This section examines the question of whether it would be feasible to provide veterans who are not served by a national cemetery with a cash payment in lieu of building new cemeteries. The 75-mile service standard has to been used to determine the number of veterans who are unserved. Between 2005 and 2009, VA plans to have built eleven new national cemeteries at a cost of more than \$300 million³.

1. What would be the intent, eligibility criteria, and timing of a cash payment?

The *intent* of a cash payment program would be to defray the cost of a plot or columbarium niche. By not constructing new national cemeteries, veterans would lose the benefit of a nocost burial plot or columbarium niche for their remains. Currently, VA will pay a \$300 plot allowance when a veteran is buried in a cemetery not under U.S. government jurisdiction if: the veteran was discharged from active duty because of disability incurred or aggravated in the line of duty; the veteran was receiving compensation or pension or would have been if the veteran was not receiving military retired pay; or the veteran died in a VA facility.⁴. The plot allowance was initiated in 1973 at an amount of \$150. The allowance, at that time, was approximately 54 percent of the average cost of the burial plot. In 2007, the average cost of a burial plot was determined to be \$2,133 and 54 percent of that amount is approximately \$1,150. Chapter 5, Part C provides more information on the plot allowance and the cost of burial plots. The average cost of a columbaria niche in 2007 was estimated to be \$670. For purposes of analysis, it was assumed that the intent of the cash payment could be the same as the plot allowance. The cash payment would need to be adjusted each year to reflect change in plot and columbarium niche costs to ensure the benefit does not erode over time.

Eligibility for the cash payment would be made on a veteran's behalf to the next of kin or others. The current VA 75-mile service standard would determine eligibility. In other words, veterans who live more than 75 miles from the nearest open national or state veterans cemetery are not served and therefore would be eligible for the cash payment. Unlike the current plot allowance, the cash payment program would have no restrictions such as from income or disability other than the eligibility requirement.

Exhibit 5-5 below shows the total number of veteran deaths in unserved areas for 2008 – 2030 (column F) needed to calculate the possible benefit costs. The number of unserved veterans was based on the GIS analysis conducted as part of Chapter 3, Part A. These data indicate that in the absence of new cemeteries (beyond those that will be completed by 2009) the percent of eligible veterans unserved by a national or state veterans cemetery will reach 24 percent by 2030.

³ Cemeteries include Great Lakes, Georgia, National Cemetery of the Alleghenies, Sacramento Valley, South Florida and under construction, Columbia/Greensville, Sarasota, Jacksonville, Southeastern Pennsylvania, Birmingham and Bakersfield. Costs for the first constructed cemeteries provided by VA. Costs for the cemeteries under construction

from Volume 3: Construction Activities, 2008 Congressional Submission. p. 2-43 through 2-75.

⁴ Eligible veterans include those who were "discharged from active duty because of disability incurred or aggravated in the line of duty"; "in receipt of compensation or pension or would have been except for receiving military retired pay: or died in a VA facility" Federal Benefits for Veterans and Dependents, Department of Veterans Affairs, p. 50.

Exhibit 5-5 ⁵ . Number of Veterans Eligible for Cash Payment Program - 2008 Through 2030						
Year	Total Veterans*	Total Veterans Un- served**	% Un- served	Estimated Number of Veteran Deaths	Estimated Number of Eligible Veteran Deaths in Un-served Areas	
(A)	(B)	(C)	(D)	(E)	(F)	
2008	23,442,489	3,821,126	16%	657,651	107,197	
2009	23,066,965	2,768,036	12%	656,098	78,732	
2010	22,658,145	2,688,477	12%	652,975	77,478	
2011	22,234,242	2,724,674	12%	648,354	79,452	
2012	21,806,449	2,755,638	13%	642,370	81,175	
2013	21,376,954	2,783,682	13%	635,159	82,710	
2014	20,956,685	2,794,939	13%	626,880	83,605	
2015	20,544,335	2,786,603	14%	617,709	83,785	
2016	20,141,108	2,891,407	14%	607,856	87,262	
2017	19,749,227	2,868,422	15%	597,540	86,788	
2018	19,369,044	2,845,382	15%	586,976	86,229	
2019	18,999,855	2,820,079	15%	576,337	85,544	
2020	18,641,197	2,791,692	15%	565,771	84,729	
2021	18,293,249	2,864,528	16%	555,435	86,975	
2022	17,957,033	2,929,642	16%	545,436	88,986	
2023	17,630,339	2,991,637	17%	535,848	90,926	
2024	17,311,262	3,047,307	18%	526,704	92,716	
2025	16,998,548	3,093,193	18%	517,987	94,257	
2026	16,694,466	3,283,289	20%	509,677	100,238	
2027	16,399,090	3,465,689	21%	501,786	106,045	
2028	16,111,016	3,560,503	22%	494,277	109,234	
2029	15,829,128	3,644,346	23%	487,046	112,133	
2030	15,555,420	3,726,261	24%	480,021	114,988	

Source: Column B – VetPop 2007; Column C – (2008 and 2009 from NCA Performance Standard Targets), (2010-2030 from ICF, GIS Analysis); Column D – Column C / Column B; Column E – VetPop; Column F – Column E * Column D

The timing of a cash payment would correspond to a veteran's death.

Exhibit 5-6 below presents an estimate of VA's financial obligation each year with respect to the above-defined scenario. Additionally, the imposed assumptions and conditions are:

 Cash payment program starts in 2010 after the completion of six proposed national cemeteries in 2008 or 2009.

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⁵ Number of veterans was obtained from VetPop 2007. These counts differ from those presented in Chapter 3 of this report because they include veterans in the 50 states, the District of Columbia, Puerto Rico, Guam, Samoa, Northern Marianas Islands, and the Virgin Islands, whereas the data in Chapter 3 are based on the 50 states, the District of Columbia, and Puerto Rico. Veterans from island territories are included in the exhibit above because they would be eligible for a cash payment. In addition, the number of unserved veterans was computed based on the assumption that no new cemeteries would be constructed after 2009, which is a different assumption from some of the analyses conducted in Chapter 3. Finally, the GIS analysis conducted in Chapter 3 are based on data from VetPop2004 which was the VetPop data source available when the GIS analyses began in March of 2007 (Vet Pop 2007 was released in October of 2007), whereas, the analyses presented above in Chapter 5 are based on data from VetPop2007.

- Individual cash payments for burial plots and columbarium niches are adjusted to be 54 percent of private sector burial plot cost and columbarium niche cost, respectively.
- Percent of veteran families that will accept a cash payment are set at 100 percent to project the maximum financial obligation VA would need to satisfy.
- Included in the cash outlay is an estimate of the cost to administer the cash payment program⁶.

F	Exhibit 5-6. Potential Financial Obligation for Cash Payment Program - 2010 through 2030							
Year	Number of Veteran Deaths in Un-served Area	Individual Cash Payment for Burial Plot	Individual Cash Payment for Columbarium Niche	Percent Accepting Cash Payment	Projected Benefit Cash Outlay (\$000)			
(A)	(B)	(C)	(D)	(E)	(F)			
2010	77,478	\$1,220	\$381	100%	\$86,965			
2011	79,452	\$1,245	\$389	100%	\$90,282			
2012	81,175	\$1,269	\$397	100%	\$93,524			
2013	82,710	\$1,295	\$405	100%	\$96,982			
2014	83,605	\$1,321	\$413	100%	\$99,971			
2015	83,785	\$1,347	\$421	100%	\$102,087			
2016	87,262	\$1,374	\$429	100%	\$108,440			
2017	86,788	\$1,402	\$438	100%	\$109,832			
2018	86,229	\$1,430	\$447	100%	\$111,145			
2019	85,544	\$1,458	\$456	100%	\$112,126			
2020	84,729	\$1,487	\$465	100%	\$112,637			
2021	86,975	\$1,517	\$474	100%	\$117,867			
2022	88,986	\$1,547	\$483	100%	\$122,933			
2023	90,926	\$1,578	\$493	100%	\$127,174			
2024	92,716	\$1,610	\$503	100%	\$131,961			
2025	94,257	\$1,642	\$513	100%	\$136,816			
2026	100,238	\$1,675	\$523	100%	\$147,851			
2027	106,045	\$1,708	\$534	100%	\$159,480			
2028	109,234	\$1,743	\$544	100%	\$167,572			
2029	112,133	\$1,778	\$555	100%	\$175,436			
2030	114,988	\$1,813	\$566	100%	\$183,499			
TOTAL	1,915,256				\$2,594,581			

Source: Column B – From Column F, Exhibit 5-5 (Number of Veterans Eligible for Cash Payment Program - 2008 Through 2030), Column F; Column C – 54% of the current U.S. burial plot cost (2007) escalated using a CPI multiplier (all items); Column – D - 54% of the current U.S private sector columbarium cost escalated using CPI (all items); For Columns C and D, see discussion in text. Column F – Calculation of cash outlay based on B, C, D, and data available from VA on burial preferences showing the ratio of veterans who are likely to select casket versus cremation.

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⁶ The cost was estimated to be 3.8 percent of total cash outlays based on findings from ORC Macro, Economic Systems, Inc. and Hay Group's Evaluation of the VA Pension and Parent's DIC Programs, 2004. P. 126.

Under this scenario, VA's obligations on behalf of veterans who lived more than 75 miles from a national or state veterans cemetery would total \$2.6 billion from 2010 to 2030 or nearly \$130 million per year on average. In the next section, the percent who will accept a cash payment is altered creating additional scenarios.

2. What does the cost-benefit analysis reveal?

This section compares the cost of a cash payment program with the cost of constructing new cemeteries. A number of "disbenefits" (i.e., negative consequences or drawbacks) of not constructing new national cemeteries are also considered in the analysis.

What are the comparative costs of building new cemeteries versus implementing an alternative cash payment program?

In this section, VA's obligations under the hypothetical cash payment program are compared with the cost (construction and operational) of new cemeteries that would be required under VA's current 75 mile, 170,000 served veteran standard. More specifically, in this section, costs of two future alternatives are compared, one in which VA constructs new national cemeteries and the other in which VA does not construct new national cemeteries, and instead implements a cash payment program. As noted above, a significant number of new national cemeteries have been or will be completed between 2005 and 2009. These new national cemeteries were taken into consideration along with an examination of the closing dates of existing national cemeteries and information from the GIS analysis (Chapter 3 of this report), when making the decision to assume construction of one national cemetery between 2010 and 2030. The approximate cost of the new cemetery was determined by averaging the estimated price of six new cemeteries (Columbia, Sarasota, Jacksonville, Southeastern PA, Birmingham, and Bakersfield) currently under construction. The calculation of the total cost included Construction Costs, Recurring Operations Costs, and Non-Recurring Operation Costs. The present value of the cost of the cemetery was computed and totaled \$77,988,420.

Exhibit 5-7 compares the present value of the cost of the new cemetery with the present value of VA's obligations under a hypothetical cash payment program. For the cash payment program, four scenarios are presented. The first assumes that 100 percent of those eligible for the program would participate. This scenario represents the maximum obligations that would be paid. The second scenario assumes 72 percent of those eligible would participate, based on the findings presented above regarding acceptance of a cash payment in lieu of burial in a national or state veterans cemetery. The third scenario assumes 50 percent of those eligible would participate. The final scenario is presented to illustrate a rate of participation (5.2 percent) in the hypothetical cash program that would be equivalent to the cost of a new cemetery. It is important to note that this level of participation is only slightly lower than the current rate of use of the plot allowance. (In 2007, VA's workload for the plot allowance was 50,310 cases, which represented approximately 8 percent of the total number of veteran deaths in that year⁹.) These cost analyses indicate that it is very likely that the cost of a hypothetical

⁷ VA, Volume 3 Construction Activities, 2008 Congressional Submission. Pages 2-43 to 2-75.

⁸ Net Present value measures the cost outlays of the project in "today's dollars". Future cash outlays are discounted using a discount rate. In this case, cash outlays are discounted by 4.9 percent annually based on the year in which the costs will be incurred. The discount rate was taken from OMB Circular No. A-94.

⁹ VA, Volume III: Benefits and Burial Programs and Departmental Administration, Congressional Submission, FY 2009. p. 1B-20 and 1B-24.

cash payment program would exceed the cost of constructing a new cemetery. Based on the evaluation survey results, the level of participation in the cash payment program would not only exceed 8 percent but could be as high as 72 percent.

Exhibit 5-7. Comparison of the Costs to Construct One New National Cemetery with the Costs of a Hypothetical Cash Payment Program				
	Cost in 2008 Dollars (\$000)			
Cost of One New National Cemeteries (Constructed in 2015)*	\$77,998			
Scenario 1: Cash Payment accepted by 100% of eligible veterans	\$1,502,783**			
Scenario 2: Cash Payment accepted by <u>72%</u> of eligible veterans	\$1,082,004**			
Scenario 3: Cash Payment accepted by 50% of eligible veterans	\$751,391**			
Scenario 4: Cash Payment accepted by <u>5.2%</u> of eligible veterans	\$77,994**			

Source:

Since participation in a hypothetical cash payment program can be expected to approach 72 percent based on survey data from question 22, the obligations from a cash payment program would significantly exceed the current burial plot obligations.

Non-monetary "disbenefits". Not captured in the costs of the cash payment program outlined above are non-monetary "disbenefits" (i.e., negative consequences) that would result from the cessation of new national cemetery construction. There are several disbenefits linked to a program that obviates the need for constructing new national or state cemeteries and seeks to compensate the unavailability of burial plots and columbarium niches through a cash payment to unserved veterans. Disbenefits can be understood as unintended consequences that would follow the implementation of the cash payment program. Some disbenefits that should be considered while comparing program viability are:

- National cemeteries are national shrines that are sources of inspiration similar to other prominent national monuments. They are memorials that honor deceased veterans and instill a strong sense of remembrance and sacrifice among the populace. Stagnation in the number of national cemeteries translates into fewer sources of inspiration and a general decline in the interest towards our veterans' contributions and sacrifices. In this regard, the cessation of new national cemetery construction could negatively impact not only the military and their next of kin, but all citizens of the United States.
- VA seeks to serve all veterans and building no new cemeteries which may result in erosion of benefits for its target population. Data from the 2008 Veterans Burial Benefits Survey indicates that approximately 43 percent¹⁰ of veterans are likely (somewhat likely and very likely) to choose a national or state veterans cemetery. For this population

^{*}Cost includes construction costs, recurring operating costs, and non-recurring operation costs. Construction cost based on the average cost to construct the 6 new national cemeteries in 2008. NPV costs have been used to reflect present day dollar values.

^{**}Includes the outlay to next of kin who would accept the cash payment plus the cost in additional workload to administer the cash payment program.

¹⁰ See Appendix 5xiii for calculation and methodology details.

- segment that will be adversely affected, a financial compensation may be, at best, a less preferable alternative.
- VA benefits are part of a comprehensive benefits package that has already been promised to personnel currently serving in the military. Burial benefits are an important part of the overall military benefits package and play a symbolic role in defining the nation's responsibilities towards its veterans. This benefit may have a positive influence on potential recruits and for many joining the military is seen as more than just a job with monetary benefits. A cash payment program that takes away an honorable place of burial at a national cemetery jeopardizes to some extent the uniqueness and appeal of military careers.

While difficult to quantify, these disbenefits affect veterans and those associated with the military as well as the general population.

e. Findings and Recommendations

This section examined the feasibility of offering financial compensation to veterans, in lieu of continued construction of new national cemeteries or funding of state veteran cemeteries. The study found high acceptance (72 percent) of cash payments among veterans whose perceptions were captured in the 2008 Burial Benefits Survey. The feasibility of a cash payment program was examined by defining the intent, eligibility criteria, and timing of the payments. The costs associated with such a program (cash outlays and program administration) were compared with those of new cemetery construction. It was found that under the current standard VA would need to construct and maintain one new national cemetery in 2015 at a NPV cost of \$77,998,000. The fiscal cost for one cemetery was far exceeded by the total cost of the cash payment program under three different scenarios. It was determined that the point at which the cost of new cemetery construction and the cost of the cash payment program are equal assumes only 5 percent of those eligible for the program would participate. This level of participation is not realistic. In conclusion, VA should continue to build and maintain national cemeteries and fund state veteran cemeteries for monetary as well as non-monetary reasons.

Based on these findings, the following is recommended:

 Recommendation #16: Continue to build and maintain national cemeteries and fund state veteran cemeteries rather than adopt an alternative benefit using cash payments.

B. Impact of a Financial Means Test on Eligibility for Burial Allowance

The Department of Veterans Affairs (VA) offers cash burial benefits to the families of certain eligible veterans to help defray funeral expenses that are administered by the Veterans Benefits Administration. These benefits include a service-connected burial benefit – currently \$2,000 – for those honorably discharged veterans whose deaths were caused by disabilities incurred or aggravated during times of active duty service. There is also a non-service connected burial benefit of \$300. In addition, there is also a plot allowance of \$300 that is provided to the families of all other eligible veterans (see eligibility requirements contained in regulations in Appendices). This analysis examines the feasibility of instituting a financial means test for eligibility for these burial benefits. This section summarizes existing means tests and makes recommendations for income and wealth thresholds to be analyzed.

a. What Other Government Means Tests were Reviewed? Discussion of Findings from the Professional Literature.

VA currently has three programs that are subject to a financial means test: the VA Pension program, the VA Death Pension for Survivors, and the VA Health Insurance. Each program has its own distinct requirements.

The VA Disability Pension is a benefit paid to low income veterans who are permanently and totally disabled, or are age 65 and older, if they have 90 days or more of active military service, at least one day of which was during a period of war. A *countable income* test is applied. Countable income includes all wage income, disability and retirement payments, interest and dividends and net income from farming or business received by a veteran and his or her dependents. The countable income threshold varies by Maximum Annual Pension Rate Category (MAPR). Net worth (wealth) is not subject to a separate threshold test, but it cannot be excessive. Veterans with a household net worth over \$80,000 will be further reviewed to assess eligibility for this benefit. VA also considers the claimant's income, liquidity of property, life expectancy and number of dependents in determining if net worth is "excessive." Exhibit 5-8 lists the threshold amounts as of December 1, 2007.

Exhibit 5-8.				
Disability Pension Rate Table as of December 1, 2007 Maximum Annual Pension Rate Category Amount				
If you are a veteran	Your yearly income must be less than			
Without Spouse or Child	\$11,181			
To be deducted, medical expenses must exceed 5%	\$559			
of Maximum Annual Pension Rate or				
With one Dependent	\$14,643			
To be deducted, medical expenses must exceed 5%	\$732			
of Maximum Annual Pension Rate or				
Housebound without Dependents	\$13,664			
Housebound with One Dependent	\$17,126			
In need of Aid and Attendance benefits without	\$18,654			
Dependents				
In need of Aid and Attendance benefits with one	\$22,113			
Dependent				
Two Vets Married to Each Another	\$14,643			
Add for Early War Veteran to any category above	\$2,538			
Add for Each Additional Child to any category above	\$1,909			
Child Earned Income Exclusion, Effective 1/1/2008	\$8,950			

Source: Department of Veteran Affairs (Payment year: 2008): http://www.vba.va.gov/bln/21/Rates/pen01.htm

The VA Death Pension for Survivors is paid to the unmarried surviving spouses of deceased wartime veterans as well as some of their unmarried children who meet specific criteria if their household's countable income is below the Maximum Annual Pension Rate (MAPR) for their family situation. Countable income includes income received from most sources including retirement income and a portion of children's income but excludes medical expenses under

¹¹ 38 CFR Book B section 3.275

certain conditions. Net worth is considered when determining eligibility, though applicants do not have to meet an explicit net worth threshold test. Exhibit 5-9 lists the MAPR categories as of December 1, 2007.

Exhibit 5-9. Death Pension MAPR Table as of December 1, 2007				
Maximum Annual Pension Rate Category	Amount			
Maximum Annual Pension Rate Without Dependent Child	\$7,498			
To be deducted, medical expenses must exceed 5% of MAPR	\$375			
or				
Maximum Annual Pension Rate APR With One Dependent Child	\$9,815			
To be deducted, medical expenses must exceed 5% of MAPR	\$490			
or				
Housebound Without Dependents	\$9,164			
Housebound With One Dependents	\$11,478			
A&A (Aid and Attendance) Without Dependents	\$11,985			
A&A Without Dependents (Spanish-American War Veteran's	\$12,758			
Surviving Spouse)				
A&A With One Dependent	\$14,298			
A&A With One Dependent (Spanish-American War Veteran's	\$15,071			
Surviving Spouse)				
SBP/MIW (Survivor Benefit Plan/Minimum Income Widow)	\$7,498			
Annuity Limitation				
Add for Each Additional Child	\$1,909			
Maximum Annual Pension Rate for Child Alone	\$1,909			
Child Earned Income Exclusion, effective 1/1/2008	\$8,950			

Source: Department of Veteran Affairs (Payment year: 2008): http://www.vba.va.gov/bln/21/Rates/pen02.htm

VA provides medical care to veterans on a priority basis. There are eight priority enrollment groups based on such characteristics as the level of service-connected disability rating, other service-related injury or illness, and the veteran's employability. Priority group 5 includes those veterans whose income and wealth fall below the VA Means Test Thresholds. Exhibit 5-10 includes current thresholds of those veterans whose income or assets are above the VA Means Test Thresholds but below the Geographic Means Test Thresholds and who agree to pay a copayment. Priority group 8 includes veterans whose income or wealth are above the Geographic Means Test Thresholds and who agree to pay a copayment.

Exhibit 5-10. VA Medical Care Means Test Thresholds, 2008						
Veteran with:	Free VA Health Care (0% service- connected connected prescriptions and travel benefits (maximum allowable rate) Free VA connected pension rate from previous year)					
No Dependents	\$11,181 or less	\$28,429 or less	\$546			
1 Dependent	\$14,653 or less	\$34,117 or less	\$716			
2 Dependents	\$16,552 or less	\$36,026 or less	\$809			
3 Dependents	\$18,461 or less	\$37,935 or less	\$902			
4 Dependents	\$20,370 or less	\$39,844 or less	\$966			
For each additional	\$1,909	\$1,909	5% of maximum			
dependent add:			allowable pension rate			
Medicare Deductible:	\$1,024	Net Worth Threshold:	\$80,000			

Source: Department of Veteran Affairs (2008): http://www.va.gov/healtheligibility/Library/pubs/VAIncomeThresholds/VAIncomeThresholds.pdf

As part of the application process for these medical benefits, VA verifies each veteran's gross household income – any income (earned or unearned) that the veteran, his or her spouse and dependents receive – through collection of data for financial assessment. This financial information is verified with the Internal Revenue Service (IRS) and Social Security Administration (SSA). Household income includes:

- Social Security payments
- Retirement pay
- Unemployment insurance
- Interest and dividends
- Workers' compensation
- Black lung benefits
- Any other gross household income.

Income and Asset net worth includes:

- Market value of property that is not the primary residence
- Stocks, Bonds, Notes
- Individual retirement accounts
- Bank deposits, savings accounts
- Cash.

After verification against IRS and SSA, the financial assessment is then compared against the VA National Means Test Threshold and Geographic Means Test (GMT). If veterans come in

lower than the VA National Means Test Threshold they will be provided all benefits. If the veteran comes in over the VA National Means Test Threshold but lower than the GMT they are eligible for 80 percent reduction of inpatient copayment.

Discussion of Findings from the Professional Literature

Means Testing. Besley (1990) suggests a framework for comparing means testing and universal provisions in poverty alleviation schemes. It is accepted that there is a trade off between providing a universal provision to individuals who do not need the benefit and increased costs of means testing to the government and claimants. The study develops a framework for the alleviation of poverty under means tested and universal provisions systems. It then compares the two systems against each other by examining the critical cost ratio and then implementing computer simulations. Means testing was favored over universal provisions based upon the critical cost ratio; it was further supported by the outcome of the computer simulations. The results are suggestive rather than conclusive due to the simplicity of the model. Further extensions for the paper recommend implementing situations where computer-simulated agents have some information which is hidden or misperceived. It is assumed that this will change the incentive structure of participants, as some applicants who apply will be denied benefits and others who are eligible for benefits will not apply.

Morgan (1993) examines the suggested move from categorical benefits for the elderly to means tested benefits by focusing on the reliability of income measurement. Two main reasons are presented for why income measurements may be distorted among the elderly. First, differences in wealth among the elderly are not taken into account unless that wealth is creating income. Therefore, differences in methods of saving, such as purchasing a home or investing in businesses can create great differences in countable income. The second reason is that differences in leisure and free time may allow for more efficient use of money. The concluding suggestion is that means tests among the elderly should be resisted until improvements for measurement of means can be found. This study has direct application to VA with its many older veterans.

GAO (2001) examined 11 federally funded programs that implement financial eligibility rules. Though there were vast differences across the programs, the most significant problems relating to financial eligibility rules were associated with household composition, income limits, and countable and excludable income. These problems are multiplied due to requirement variations between programs. Many states have condensed paperwork for financial eligibility rules into single forms or in databases. The report recommends Congressionally authorized demonstration programs and coordination of the eligibility determination process for meanstested programs.

GAO (2005) examined the proportion of eligible individuals who are also enrolled in one of twelve federally funded means-tested programs. The report found between 50 percent and more than 70 percent of eligible individuals were also enrolled in other entitlement programs. Furthermore, the type of benefit, ease of access, misperceptions about the program requirements and eligibility verification affect access to the programs.

Paperwork. Carr and Molaison (2005) examine changes in participation rates in the Summer Food Service Program (SFSP) and a pilot program called the Simplified Summer Food Program. The Simplified Summer Food Program implements legislation that simplified the financial and administrative requirements of the SFSP. The reduction of paperwork was correlated with an increase in participation by organizations and individuals who sponsored the

program. A follow up survey found that the sponsor believed the greatest barrier to participation in the SFSP program was the cost of time completing paperwork. This finding also has significant relevance to VA benefit programs and any consideration of proposed changes.

b. What Financial Means Thresholds Were Tested for the VA Burial Benefits Program?

To determine what threshold levels should be tested, veteran population income data had to be analyzed. Currently, the best way to assess the income of wealth of veterans is to use the 2001 National Survey of Veterans (NSV).

Description of NSV (summary of statistics). The 2001 National Survey of Veterans (NSV) collected information from selected veterans using computer-assisted telephone interviewing (CATI) technology from February 12, 2001 until November 12, 2001. A total of 20,048 interviews were conducted of which 12,956 were from a randomly digit dialing (RDD) system and 7,092 from a sample list of veterans enrolled in VA healthcare or who receiving compensation or pension from VA. Survey data was weighted to represent the whole non-institutionalized veteran population.

Close to one-half of veterans indicated that they did not thoroughly understand their available burial benefits. The average age of veterans of the 2000 veteran population was 58 years old. One-half of the veterans reported serving in the Army and the largest percentage was from the Vietnam era. Over one-half of the veterans stated that they were aware of their entitlement to be buried in a national or state veterans cemetery, though relatively few veterans indicated their intention to be buried in a veteran cemetery.

The 2001 NSV contains 16,383 observations from veterans who have served on active duty. Of those, 12,253 answered questions about their total household income. Exhibit 5-11 lists the mean and median reported household income amounts as well as the 25th and 75th percentiles. All dollar figures are reported from 2000 and in this report, are still in 2000 dollars unless otherwise noted.

Exhibit 5-11.				
Veteran-Reported Eligible Family Income				
Measure Income Value Number of Veterans at or Below Income Threshold				
Mean	\$51,059	7,947		
Median \$40,000 6,428				
25 th Percentile	\$24,000	3,260		
75 th Percentile	\$65,000	9,350		

Source: 2001 National Survey of Veterans (NSV)

A smaller number (10,105) answered questions about their household's net worth. The mean net worth for all those who reported is \$193,922; however, the median net worth is only \$20,000. About one-third reported a net worth of zero. Almost 70 percent of those who reported have a net worth less than \$80,000.

For this evaluation, the analysis of a means test similar in structure to that used for the pension program - a financial means test that contains an explicit income level threshold and a "reasonableness" net worth test. The burial benefit represents a substantially smaller cost to VA

per eligible veteran than the pension plan. Since VA does not find it cost-effective to have explicit net worth thresholds for the pension plan (as evidenced by their absence), it is unlikely that it would be cost-effective for the burial benefit. Also, it is very unlikely that veterans' families who would be eligible based on income would be deemed ineligible based on a net worth evaluation. According to a study conducted by the Hay Group in 2004, "claims are seldom denied due to excessive net worth. Specifically, according to administrative records, net worth among pensioners is low or nonexistent, suggesting that few applicants have a net worth that requires review." 12

Three specific income thresholds were analyzed – the median, the mean and the 75th percentile income values (\$40,000, \$51,059, and \$65,000).

c. What Were the Results of the Financial Means Test?

1. What is the number of people affected at each of the three thresholds?

As introduced in the previous section, cross-sectional data from the 2001 National Survey of Veterans was used to create best-estimated ratios of the number of eligible veterans who would file claims for the various burial allowances. The participation rates were set to include all eligible veterans (equivalent to no income threshold) as well as at income thresholds at the median (\$40,000), mean (\$51,059) and 75th quartile (\$65,000) of total reported household income. These participation rates were applied to the longitudinal death tables provided in the Veteran Population Models to determine the expected annual number of veterans from the total population who are eligible for the benefits. The study evaluated the ten-year period from 2008 until 2017.

Exhibit 5-12 shows the eligible populations from the NSV data at each of the threshold levels as well as the eligibility ratios. Note that the median and 75th quartile rates are slightly higher than would be expected because the thresholds include any veterans at or below the income level.

Exhibit 5-12. Eligibility Rates by Income Levels					
Median Mean 75 th Percentile None stan, 100					
Eligible Population	6,428	7,947	9,350	12,253	
Total Population 12,253 12,253 12,253 12,253					
Eligibility Ratios	52.46%	64.86%	76.31%	100.00%	

Source: 2001 National Survey of Veterans (NSV)

The Veteran Population Model 2007 is a combination of data from the Department of Veteran Affairs (VA), Department of Defense (DoD), and Bureau of the Census. The VetPop2007 provides estimates of how many veterans are expected to die in each of the years from April 1, 2000 through September 30, 2030. The 2001 NSV data and VetPop population estimations were used jointly to calculate estimates for the total number of families that will be eligible for the burial benefit per year. Exhibit 5-13 shows the expected number of participants at each income threshold over the next 10 years. During this time period, total expected participation

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¹² VA Pension Final Report, ORC Macro Economic Systems, Inc. Hay Group, December 22, 2004, p. 115.

without any financial means testing is 4,743,683. With threshold levels set at the median, expected participation is 2,488,266; at the mean it is 3,076,639; and at the 75th quartile it is 3,619,803.

	Exhibit 5-13. Number of Eligible Veterans by Year and Income Threshold					
Year	Expected Deaths	Median \$40,000	Mean \$51,059	75 th Percentile \$65,000	No Means Testing ∞	
2008	657,651	258,035	319,011	375,330	491,863	
2009	656,098	257,425	318,257	374,444	490,702	
2010	652,975	256,200	316,742	372,662	488,366	
2011	648,354	254,387	314,501	370,024	484,910	
2012	642,370	252,039	311,598	366,609	480,434	
2013	635,159	249,210	308,100	362,494	475,042	
2014	626,880	245,961	304,084	357,769	468,849	
2015	617,709	242,363	299,636	352,535	461,991	
2016	607,856	238,497	294,856	346,912	454,621	
2017	597,540	234,450	289,852	341,024	446,906	
Total	6,342,591	2,488,266	3,076,639	3,619,803	4,743,683	

Source: 2001 National Survey of Veterans (NSV)¹³

Exhibit 5-14 shows the total number of families who would lose eligibility for the burial benefit if financial means testing was applied at the various income thresholds. At the median (\$40,000), an estimate of 2,255,118 veterans' families would lose the benefit; at the mean (\$51,059), an estimated 1,667,045 would lose it; and at the 75th Quartile (\$65,000), an estimated 1,123,881 would become ineligible.

Exhibit 5-14. Number of Families that Lose Eligibility by Income Threshold, 2008 - 2017						
Median Mean 75 th Percentile \$40,000 \$51,059 \$65,000						
Ineligible Next of Kin Families 2,255,118 1,667,045 1,123,881						

Source: 2001 National Survey of Veterans (NSV)

Burial benefits (paid as a reimbursement of burial costs) are paid at three amounts - \$300 for the basic burial allowance for Non-Service Connected veterans, an additional \$300 as a plot allowance for veterans who are not buried in a veteran's cemetery, and \$2,000 for service-connected death burial allowance. This analysis excluded consideration of the transportation amounts. In order to accurately estimate the cost savings from implementing a financial means test, it was necessary to determine the percentage of claims that were paid in each of those categories. These data were available in the VA's submission to the President's Budgets for 1994 – 2009. Exhibit 5-15 lists the number of deaths as estimated by VetPop and the number

¹³ Best-estimate Ratios using NSV Data and VBA Net-Worth Data. (See Appendix: Other Evaluation Data)

of claims paid by type of claim for each year from 1994 – 2009. Note that the total number of different burial claim types paid is substantially less than the total number of eligible deaths. This indicates that substantial numbers of eligible families are not receiving this benefit; however, data do not show the number of claims filed. It also means that estimates of eligible families need to be adjusted downward to better match the actual rate of families receiving burial benefits as the study's initial estimates assume all eligible next of kin receive the benefits.

Exhibit 5-15.						
	Number of Burial Benefits by Year and Type					
				Service-Connected	Total	
	Number of	Burial	Burial Plot	Death Burial	Claims	
Year	Eligible Deaths	Allowance	Allowance	Allowance	Paid	
1994	347,109	95,124	85,287	8,604	103,728	
1995	358,883	93,921	84,617	10,040	103,961	
1996	368,642	90,775	80,715	9,262	100,037	
1997	378,466	88,023	77,971	9,724	97,747	
1998	387,581	83,948	73,344	9,293	93,241	
1999	397,794	86,405	75,061	9,901	96,306	
2000	404,642	81,190	68,422	9,445	90,635	
2001	413,737	79,989	65,777	8,740	88,729	
2002	420,801	82,798	67,027	11,978	94,776	
2003	491,164	77,608	63,522	13,019	90,627	
2004	498,423	75,731	62,152	13,323	89,054	
2005	476,342	81,254	63,769	13,578	94,832	
2006	482,402	62,474	50,330	13,020	75,494	
2007	490,074	67,219	50,310	14,200	81,419	
2008*	492,863	82,111	67,583	14,732	96,843	
2009*	495,534	84,038	69,169	15,336	99,374	
*Projected	d	_		<u> </u>		

Source: Department of Veteran Affairs: President's Budget Documentation, 1995-2009

The amount of money paid to next of kin for burial benefit increased towards the end of 2001. This may have affected the number of claims filed and/or the rate of families receiving burial benefits. Therefore, the number of claims paid to eligible families over the period of 2002-2007 were averaged to determine the number of expected claims as a percentage of the total expected deaths (17.8 percent). Exhibit 5-16 shows the new expected number of claims at each of the threshold numbers as well as the number of claims expected to be denied during 2008-2017 if the various thresholds are implemented. During this time period, the expected total number of claims to be paid without any financial means testing is 846,163. With threshold levels set at the median, expected eligible claims are 443,902; at the mean they are 548,801; and at the 75th quartile they are 645,689.

Exhibit 5-16.					
Adjusted Total Expected Claims, 2008 – 2017					
Median Mean 75 th Percentile None					
\$40,000 \$51,059 \$65,000 ∞					
Expected Eligible Claims	443,902	548,801	645,689	846,163	
Expected Ineligible Claims	402,261	297,362	200,474	0	

Source: 2001 National Survey of Veterans (NSV)

2. What are the estimated administrative costs to VA?

VA provided a breakdown of the estimated amount of time it takes VBA to perform an income eligibility determination as well as the normal pay grade of the person who would perform each step. Exhibit 5-17 lists the work categories, the pay grade and the amount of time per claim. These calculations assume an effective workday of 8.0 hours. The table also lists the 2008 average hourly pay rate for each of these pay grades. A fringe benefit rate of 39.3 percent was applied to the direct rate to get the total hourly labor cost by pay grade. These costs are in current dollars.

Exhibit 5-17. VBA Income Eligibility Determination Costs						
Pay Hours Hourly Direct Total Hourly Category grade Per Case Labor Rate Labor Cost Cost						
Develop eligibility	GS-10	0.50	\$27.42	\$38.20	\$19.10	
Work eligibility determination	GS-10	0.88	\$27.42	\$38.20	\$33.61	
Authorize eligibility	GS-11	0.33	\$30.13	\$41.97	\$13.85	
Per claim Cost					\$66.56	

Source: VBA Net-Worth, Personal Communication (2008)

The total amount of time to process one income determination is 1.71 hours. Assuming the rate of claims paid as a percentage of deaths remains at the 2002-2007 level, an average of 64,589 claims are expected to be processed each year at the highest threshold level for a total of approximately 103,956 hours per year to process claims. This breaks down to 16 GS-10s to develop eligibility, 28 GS-10s to work eligibility determination and 11 GS-11s to authorize eligibility. Exhibit 5-18 lists the number of additional staff needed for each task at each of the proposed threshold levels.

Exhibit 5-18. Number of Additional Administrative Staff						
Median Mean 75 th Percentile \$40,000 \$51,059 \$65,000						
Develop Eligibility	11	14	16			
Work eligibility determination	19	24	28			
Authorize eligibility	8	9	11			

Source: VBA Net-Worth, Personal Communication (2008)

¹⁴ Fringe rate for use during FY08. http://www.defenselink.mil/comptroller/rates/fy2008/2008 d.pdf

There are currently 58 VBA offices in the United States and Puerto Rico. Assuming the additional staff can be spread out over these locations, there would not be the need to add additional offices. In addition, it is believed that VA can modify the existing VA Form 10-10EZ to collect the necessary financial data. Exhibit 5-19 lists the total expected administrative costs for the next ten years at each of the threshold levels. These costs are in current dollars.

Exhibit 5-19. Total Expected VA Administrative Costs, 2008 - 2017			
Median Mean 75 th Percentile \$40,000 \$51,059 \$65,000			
\$30,821,200	\$38,050,820	\$44,564,249	

Source: VBA Net-Worth, Personal Communication (2008)

3. What are the estimated cost savings?

Actual claims paid by burial allowance type (see Exhibit 5-15) as a percentage of total deaths as projected by the VetPop models for 2002-2007 are presented below. The year 2002 was the start point as the value of the burial benefits increased towards the end of 2001, and there appears to be some difference in the claim rates beginning in 2002. Exhibit 5-20 lists these percentages by year and then shows the average percentage from 2002-2007.

Exhibit 5-20. Actual Claims as Percent of Projected Total Deaths					
Year	Total	Burial	Burial Plot	Service-Connected	
	Deaths	Allowance	Allowance	Death Burial Allowance	
2002	482,402	17.16%	13.89%	2.48%	
2003	490,074	15.84%	12.96%	2.66%	
2004	492,863	15.37%	12.61%	2.70%	
2005	495,534	16.40%	12.87%	2.74%	
2006	497,241	12.56%	10.12%	2.62%	
2007	491,833	13.67%	10.23%	2.89%	
Average	491,658	15.16%	12.11%	2.68%	

Source: VetPop Models, 2000 and 2007 and VBA Claims Records, 1994-2009

Exhibit 5-21 shows the total number of claims expected to be paid from 2008–2017 if the \$40,000 threshold is adopted and there is no change in the take-rates. This is calculated by applying the average take rates from 2002–2007 to the projected deaths for each of the years in the projection period (2008–2017). The exhibit also displays the total value of those claims over the projection period by type of claim.

Exhibit 5-21.					
Total Exped	Total Expected Claims Paid if Median (\$40,000) Threshold Adopted				
	Total			Service-	
	Eligible	Burial	Burial Plot	Connected Death	
Year	Deaths	Allowance	Allowance	Burial Allowance	
2008	258,035	39,107	31,237	6,921	
2009	257,425	39,014	31,163	6,904	
2010	256,200	38,829	31,015	6,871	
2011	254,387	38,554	30,795	6,823	
2012	252,039	38,198	30,511	6,760	
2013	249,210	37,769	30,168	6,684	
2014	245,961	37,277	29,775	6,597	
2015	242,363	36,732	29,340	6,500	
2016	238,497	36,146	28,872	6,397	
2017	234,450	35,532	28,382	6,288	
Total Claims Paid		377,159	301,257	66,744	
Total Value of Claims	_	\$113,147,595	\$90,377,061	\$133,487,390	

Source: VetPop Models, 2000 and 2007, and VBA Claims Records, 1994-2009

Exhibit 5-22 shows data if the mean (\$51,059) is adopted as the income threshold.

Exhibit 5-22. Total Expected Claims Paid if Mean (\$51,059) Threshold Adopted				
	Total Eligible	Burial	Burial Plot	Service- Connected Death
Year	Deaths	Allowance	Allowance	Burial Allowance
2008	319,011	48,348	38,618	8,556
2009	318,257	48,234	38,527	8,536
2010	316,742	48,004	38,344	8,495
2011	314,501	47,665	38,072	8,435
2012	311,598	47,225	37,721	8,357
2013	308,100	46,695	37,298	8,263
2014	304,084	46,086	36,811	8,156
2015	299,636	45,412	36,273	8,036
2016	294,856	44,687	35,694	7,908
2017	289,852	43,929	35,088	7,774
Total Claims Paid	_	466,285	372,447	82,516
Total Value of Claims		\$139,885,492	\$111,734,054	\$165,031,781

Source: VetPop Models, 2000 and 2007, and VBA Claims Records), 1994-2009

Exhibit 5-23 shows the total claims if the \$65,000 threshold is adopted.

Exhibit 5-23.					
Total Expected	Total Expected Claims Paid if 75 th Percentile (\$65,000) Threshold Adopted				
	Total			Service-	
	Eligible	Burial	Burial Plot	Connected Death	
Year	Deaths	Allowance	Allowance	Burial Allowance	
2008	375,330	56,884	45,436	10,066	
2009	374,444	56,749	45,329	10,043	
2010	372,662	56,479	45,113	9,995	
2011	370,024	56,080	44,794	9,924	
2012	366,609	55,562	44,380	9,833	
2013	362,494	54,938	43,882	9,722	
2014	357,769	54,222	43,310	9,595	
2015	352,535	53,429	42,677	9,455	
2016	346,912	52,577	41,996	9,304	
2017	341,024	51,684	41,283	9,146	
Total Claims Paid		548,605	438,200	97,084	
Total Value of Claims		\$164,581,521	\$131,460,099	\$194,167,253	

Source: VetPop Models, 2000 and 2007 and VBA Claims Records, 1994-2009

Exhibit 5-24 shows the number of claims that are expected to be filed during the projection period if no income threshold is adopted.

Exhibit 5-24. Total Expected Claims Paid If No Threshold is Adopted				
Year	Total Eligible Deaths	Burial Allowance	Burial Plot Allowance	Service- Connected Death Burial Allowance
2008	491,863	74,545	59,543	13,192
2009	490,702	74,369	59,403	13,161
2010	488,366	74,015	59,120	13,098
2011	484,910	73,491	58,701	13,005
2012	480,434	72,813	58,160	12,885
2013	475,042	71,996	57,507	12,741
2014	468,849	71,057	56,757	12,575
2015	461,991	70,018	55,927	12,391
2016	454,621	68,901	55,035	12,193
2017	446,906	67,732	54,101	11,986
Total Claims Paid		718,937	574,253	127,226
Total Value of Claim		\$215,681,003	\$172,276,000	\$254,452,550

Source: VetPop Models and VBA Claims Records, 1994-1997.

The cost of implementing a financial means test needs to include the cost to next of kin of the additional burden imposed by the application process, which is considered as a factor by OMB. Currently, families complete VA Form 21-530, which has an estimated time value of 20 minutes. Assuming that the form would look similar to VA Form 10-10EZ, the estimated time burden

would be 45 minutes. So each family would need to spend approximately 25 extra minutes to file a claim. The average family income was converted into an hourly wage number and a calculation was made of the total additional cost to families of applying assuming only eligible families apply and that take rates remain constant. The same costs were then calculated assuming that either 10 percent more families applied or 10 percent fewer families applied. Exhibit 5-25 lists the total costs for the projection period at each of the threshold levels. If no financial means test is implemented, there would be no increase in the cost to families applying for burial benefits.

Exhibit 5-25. Additional Total Cost to Families of Applying, 2008 - 2017					
Median Mean 75 th Percentile \$40,000 \$51,059 \$65,000					
Only Eligible Apply	\$4,703,106	\$5,814,497	\$6,841,015		
Ten Percent More Apply	\$5,173,417	\$6,395,947	\$7,525,116		
Ten Percent Fewer Apply	\$4,232,796	\$5,233,047	\$6,156,913		

Source: 2001 National Survey of Veterans (NSV)

Exhibits 5-26 and 5-27 show dollar values converted from 2000 dollars to current (2008) dollars using an inflation factor of 1.25203¹⁵. The threshold values listed in the headings of the following exhibits have also been converted.

Exhibit 5-26 lists the costs of the burial allowance program at each of the threshold levels as well as if no threshold is implemented. It includes the total expected claims paid, expected additional administrative costs and expected additional burden to families.

Exhibit 5-26. Expected Total Costs by Threshold Levels, 2008 – 2017 (Current Dollars Adjusted for Inflation)				
	Median	Mean	75 th Percentile	None
Cost Categories	\$50,081	\$63,297	\$81,382	∞
Expected Total Benefit Paid	\$421,949,193	\$521,659,962	\$613,756,215	\$804,316,032
Expected Additional Administrative Cost	\$30,821,200	\$38,050,820	\$44,564,249	\$0
Expected Additional Burden to Families	\$5,888,403	\$7,279,925	\$8,565,156	\$0
Total Cost	\$458,658,823	\$566,990,706	\$666,885,620	\$804,316,032

Source: VetPop Models, 2000 and 2007 and VBA Claims Records, 1994 - 2009

Exhibit 5-27 lists the total expected cost savings at each of the threshold levels over the projection period. It also displays the average annual savings as well as the average annual reduction in benefits paid to families. **Note that at all threshold levels, families lose more in benefits than the government saves.** This deadweight loss is caused by the large

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¹⁵ Calculated using the Consumer Price Index (CPI).

administrative cost to VA and the additional burden of providing income documentation to the benefit applicants.

As would be expected, the greatest savings to the government would be realized if the threshold was set at the lowest proposed level, \$50,081 in 2008 dollars. The government would save over 34.5 million dollars per year if claims paid rates stayed constant. However, veterans and their families would lose over 38.2 million dollars per year in burial benefits as the number of ineligible families increased. At the highest threshold level (\$81,382) VA would save over 13.7 million dollars per year and families would lose 19.1 million dollars in benefits.

Exhibit 5-27. Expected Cost Savings by Threshold Level, 2008 – 2017 (Current Dollars Adjusted for Inflation)				
Total Savings to Average VA Reduction in Threshold Level the Government Annual Savings Benefits to Families				
Median (\$50,081)	\$345,657,209	\$34,565,721	\$38,236,684	
Mean (\$63,297)	\$237,325,326	\$23,732,533	\$28,265,607	
75 th Percentile (\$81,382)	\$137,430,413	\$13,743,041	\$19,055,982	

Source: VetPop Models, 2000 and 2007 and VBA Claims Records, 1994-2009

Key assumptions and limitations regarding these data need to be presented. These costs savings assume that applicants are equally distributed throughout the various income levels. In fact, it is likely that the applicant rates are higher for lower income families. The savings listed in Exhibit 5-27 are likely overstated.

3. What is the estimated decrease in the number of people applying due to amount of paperwork or nature of information being requested?

There is little quantitative research available on the impact of increased paperwork of application rates. In general, the more paperwork required for a benefit, the lower the application rate. The more time an applicant has to spend applying for a benefit, the lower the effective net value of the benefit. Carr and Molaison (2005) support this hypothesis. This study found that application rates for a summer feeding program were negatively related to the amount of paperwork required to participate.

The VA Burial program perhaps provides some additional evidence that application rates vary based on the expected benefit. In September 2001, VA increased the burial payments – the non-service connected burial benefit and plot allowances increased from \$150 to \$300. The service-connected burial benefit increased from \$1,500 to \$2,000. Families who apply for the service-connected benefit have to check a box on the form indicating that they believe the veteran's death was service related. Their application then goes through an additional verification process if there is not sufficient evidence in the veteran's file to support the claim. Exhibit 5-28 shows the number of claims for service-connected death burial benefits as a percentage of the total number of burial claims paid by year from 1994–2007. The percentage claiming service-connected benefits increases substantially beginning in 2002, the first full year of the higher benefit.

Exhibit 5-28. Service-Connected Death Burial Benefits as a Percentage of Total Burial Benefits		
Year	Percentage	
1994	8.29%	
1995	9.66%	
1996	9.26%	
1997	9.95%	
1998	9.97%	
1999	10.28%	
2000	10.42%	
2001 (increase in benefits)	9.85%	
2002	12.64%	
2003	14.37%	
2004	14.96%	
2005	14.32%	
2006	17.25%	
2007	17.44%	

Source: VBA, Service-Connected Death Burial Allowance Records, 1994-2007

However, full information on other changes or trends during this time that might have led to this increase in claims paid is not available. For example, information on the number of claims filed by type or year, the number of claims denied or any policy shifts that might have affected these numbers would be required to be collected and analyzed. Without this type of data, it is not possible to do more than identify the possible impact that moving to a means-tested program would have on application rates.

d. Findings and Recommendations

Financial means testing of burial benefits has the potential to save over 34.5 million dollars per year if claims paid rates stayed constant and if the income threshold was set at the median household income level. However, this would mean that potentially half of the families of veterans would lose this benefit. These families would lose 38.2 million dollars per year in benefits on average over the period of 2008–2017. Any savings to the government shown in Exhibit 5-27 are overshadowed by the deadweight loss due to paperwork and administrative processing costs shown in Exhibit 5-19. It's also possible that the cost savings is overstated in this analysis as families who are below the income thresholds tested are probably more likely to apply for the benefits than wealthier families. Additional information about the financial status of applicants would be needed to address this issue. These estimates, therefore, must be regarded as preliminary.

Data does not currently exist to accurately calculate the number of families who would no longer apply for the burial benefit if a financial means test was implemented. Economic theory and preliminary studies indicate that increases in the administrative burden will decrease the number of applicants. VA would need to have available detailed historical information on the number of claims filed and the number of claims paid by burial benefit type to more thoroughly answer this question.

• **Recommendation #17**: Do not implement a financial means test at the current time, since existing data do not support VA moving forward with implementation.

C. Assessment of Burial Allowance

The Department of Veterans Affairs (VA) provides a variety of financial funeral and burial benefits to an eligible veteran. Specifically, financial support is available to offset funeral, burial and plot costs through the following burial and plot allowances:

- Service-connected (SC) burial allowance Payment of up to \$2,000 by VA to offset funeral and burial costs of veterans who die from a service-connected disability.
- Non-service connected (NSC) burial allowance Payment of up to \$300 by VA to offset funeral and burial costs of eligible veterans whose death was not service connected.
- Plot allowance Payment up to \$300 to cover the cost of a burial plot of eligible veterans who are not buried in a national cemetery or other cemetery under the jurisdiction of the United States.

Individuals may be eligible for the allowances under the following circumstances¹⁶:

- Payment for a veteran's burial or funeral has been made <u>and;</u>
- There has been no reimbursement by another government agency or some other source and;
- The veteran was discharged under conditions other than dishonorable.

One of the following conditions must also be met:

- The veteran died because of a service-related disability (SC burial allowance)
- The veteran was receiving VA pension or compensation at the time of death
- The veteran was entitled to VA pension or compensation
- The veteran died in a VA hospital, in a nursing home under VA contract, or while in an approved state nursing home.

In FY 2007, VA's burial and plot allowance obligations totaled \$24 million, \$30 million and \$15 million for the SC burial allowance, NSC burial allowance and plot allowance, respectively¹⁷.

Research Questions. The following research questions are addressed in this section of the evaluation of the Burial Benefits Program:

- Research Question #1 What is the comparison of the VA burial allowances to legislative intent?
- Research Question #2 What is the comparison of the VA burial allowances to the average cost of burial in the private sector?
- Research Question #3 How do other Government burial benefits affect the VA burial allowance?

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¹⁶ VA Burial and Plot-Interment Allowances FAQ accessed from http://www.vba.va.gov/benefit_facts/Burial_and_Memorial/English/Burialeg_0406.doc ¹⁷ 2008 VA Congressional Submission, p. 2A-2.

Each of these research questions and their respective findings are presented below. The recommendations for the burial allowances are summarized at the end of this section.

a. What is the Comparison of the VA Burial Allowance to Legislative Intent?

Prior to 1973, there was no distinction in the burial allowance for service-connected or non-service connected veteran deaths. When initiated in 1917, the burial allowance totaled \$100. The allowance was later reduced to \$75 in 1933, increased to \$150 in 1946 and increased again in 1958 to \$250. In 1973, separate allowances for NSC and SC veteran deaths were established. The NSC allowance remained at \$250 and the SC allowance was set at \$800. The intent of the SC allowance was to match the amount provided to Federal employees who die while on official duty.

The SC burial allowance was increased three times: in 1978, 1988 and 2001. In 2001, SC burial allowance was increased to \$2,000, where it currently remains. The NSC burial allowance was increased only once between 1973 and 2007. In 1978, the NSC burial allowance was increased to \$300, where it currently remains.

The plot allowance was initiated in 1973 and set at \$150. In 2001, the allowance was increased to \$300.

1. What was the original legislative intent of the burial allowance?

The burial allowance for veterans was initiated (1917) to prevent the potters field burial of veterans. In 1923, the allowance was issued on behalf of veterans without sufficient assets for their burial. In 1936, assets of the veteran were no longer considered in providing the burial allowance. Increases in the allowance over time were justified to account for increases in the cost of living and/or funeral and burial costs.

The plot allowance appears to have resulted from the acknowledgment that "even the most ambitious proposals before Congress do not envision a national cemetery readily accessible to each and every veteran in the United States...As such, a burial plot allowance for veterans not buried in national cemeteries is clearly in order." The plot allowance was seen as "relatively modest" and as an initial step to addressing the issue of providing nationals cemeteries in close proximity to all veterans.

2. What is the comparison of the legislative intent with the current burial allowance?

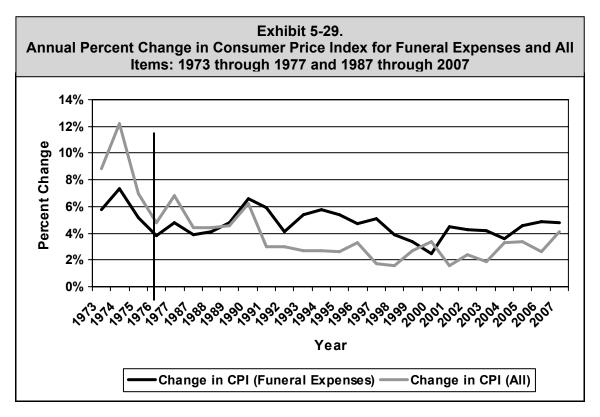
The intent of the burial and plot allowances are to provide financial assistance to be used on behalf of veterans to offset their burial, funeral and plot costs. It does not appear that the original intent of the burial and plot allowances was to cover the entire burial, funeral or plot cost of a veteran. Nevertheless, actual funeral/burial costs appear to be considered when increases in the allowances are necessary. This indicates that a comparison of the burial and plot allowances to the average cost of a funeral and burial plot over time is meaningful and would provide a measure of the relative value of the benefit. These analyses are provided below.

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¹⁸ S. REP. 93-55, S. Rep. No. 55, 93RD Cong., 1ST Sess. 1973, 1973 <u>U.S.C.C.A.N. 1401-1434</u>, 1973 WL 12579 (Leg.Hist.)

b. What is the Comparison of the VA Burial Allowance to the Average Cost of Burial in the Private Sector?

The Bureau of Labor Statistics developed a Consumer Price Index (CPI) for funeral expenses, initially published for 1973 and 1977, and then reestablished in 1987. Exhibit 5-29 plots the percent change in CPI for funeral expenses along with the percent change in CPI for all items. Since 1990, the annual percent change in funeral expenses exceeded the annual percent change in all prices each year except for 2000. Funeral expenses have more than doubled (112 percent increase) since 1990, while all prices increased by 60 percent.



Source: U.S. Department of Labor, Bureau of Labor Statistics.

1. What are the burial cost components and average burial costs in the private sector?

The National Funeral Directors Association periodically collects data on funeral costs from its nearly 3,400 members. The 2004 findings from their Member General Price List Survey, the latest available, are presented in Exhibit 5-30. The overall median cost of a funeral in 2004 was \$4,162. The cost rises to \$5,812 with the inclusion of the cost to dispose of the remains (burial) and \$7,912 when the cost of a metal casket is included. Adjusting for inflation, the total cost in 2007 is approximately \$8,555.

Exhibit 5-30. Median Funeral Costs at Private Cemeteries by Item				
	2004*	2007**		
Funeral Items				
Non-declinable basic services fee	\$1,460	\$1,579		
Removal/transfer of remains to funeral home	\$195	\$211		
Embalming	\$498	\$538		
Other preparation of the body	\$175	\$189		
Use of facilities/staff for viewing	\$339	\$367		
Use of facilities/staff for funeral ceremony	\$395	\$427		
Use of facilities/staff for memorial service	\$395	\$427		
Use of equipment/staff for grave side service	\$285	\$308		
Hearse	\$225	\$243		
Service car/van	\$100	\$108		
Basic memorial printed package	\$95	\$103		
Disposition of Remains				
Immediate burial when purchaser provides casket	\$1,650	\$1,784		
Direct cremation when purchaser provides	\$1,495	\$1,616		
container				
Caskets				
(Average charge for most frequently purchased item))			
Metal burial casket	\$2,100	\$2,271		
Wood burial casket	\$2,649	\$2,864		
Cremation casket	\$800	\$865		
Vault				
(Average charge for most frequently purchased	\$998	\$1,079		
item)				
TOTAL				
(Funeral items, disposition of remains, and metal casket)	\$7,912	\$8,555		

Source:

*National Funeral Directors Association (NFDA): 2005 Member General Price List Survey
**NFDA 2004 data, adjusted for inflation using Chained CPI

The cost of a burial plot is not included in the costs listed above. For this study the cost of a burial plot in a private cemetery was obtained from Grave Solutions. Grave Solutions facilitates a "resale program for the sale of cemetery property which private individuals no longer have a

need for."¹⁹ Included are cemetery plots. Prices from the 3,631 listings on the website in May 2007 were obtained. Listings were included from each of the 50 states. The average cost from these listings was \$2,133 for a burial plot in a private cemetery.

In section 2 below, the funeral, burial and plot costs in the private sector are compared with the burial and plot allowances currently offered by VA.

2. How do current burial costs compare with the VA burial allowance?

As presented above, funeral expenses have increased at a rate higher than the increase in overall prices. This section will examine the impact of this trend on the relative importance of the burial and plot allowances. Each allowance is assessed separately.

Service-Connected Burial Allowance. Exhibit 5-31 compares the service-connected burial allowance with the average cost of an adult funeral. Data are provided for each year the allowance was increased, along with the current year. In 1973, the first year the service-connected burial allowance was available, the allowance was approximately 72 percent of the average cost of an adult funeral. Despite an increase of \$1,200 since 1973, the allowance, by 2007, was only 23 percent of the average cost of an adult funeral. Returning the allowance to a level comparable to 1973 (72 percent of average funeral cost) would require an increase of \$4,160. The new allowance would total \$6,160 (see Exhibit 5-31).

Exhib Service-Connected Burial Allowance, A Allowance to Original Perce			•	_	l Burial
	1973	1978	1988	2001	2007
Actual SC Burial Allowance Amount *	\$800	\$1,100	\$1,500	\$2,000	\$2,000
Average Cost of an Adult Funeral **	\$1,116	\$1,522	\$3,228	\$7,468	\$8,555
SC Burial Allowance as Percent of					
Average Cost	72%	72%	46%	27%	23%
SC Burial Allowance Adjusted to Approximately 72 Percent of the Average Cost of an Adult Funeral	\$800	\$1,095	\$2,324	\$5,377	\$6,160
Difference: (Burial Allowance Adjusted Minus Actual)	\$0	\$5	\$824	\$3,377	\$4,160

Source:

*Data for 1973, 1978, and 1988 obtained/ derived from Figure 10, Pp 10. An Assessment of the Burial Benefits Program by the Department of Veterans Affairs, Department of Veterans Affairs, December 2000. **Data for 1973, 1978, and 1988 from Assessment of Burial Benefits Program. Data for 2001 and 2007 from 2004 National Funeral Directors Association (NFDA) Report; adjusted for inflation using Chained CPI.

Non-Service Connected Burial Allowance. In 1973, the NSC allowance totaled \$250, or 22 percent of the average cost of an adult funeral. The allowance was increased once, and in 2007 represented 4 percent of the average cost of an adult funeral. Returning the allowance to a level comparable to 1973 (22 percent of average funeral cost) would require an increase of \$1,616. The new allowance would total \$1,916 (see Exhibit 5-32).

¹⁹ http://gravesolutions.com/SitePages/whoweare.asp#HOW%20IT%20WORKS

Exhibit 5-32. Non-Service Connected Burial Allowance, Average Funeral Cost, and Adjusted Burial Allowance to Original Percent of Average Funeral Costs				
	1973	1978	2001	2007
Actual NSC Burial Allowance Amount	\$250	\$300	\$300	\$300
Average Cost of an Adult Funeral*	\$1,116	\$1,522	\$7,468	\$8,555
NSC Burial Allowance as Percent of Average Cost	22%	20%	4%	4%
NSC Burial Allowance Adjusted to Approximately 22 Percent of the Average Cost of an Adult Funeral	\$250	\$341	\$1,673	\$1,918
Difference: (Burial Allowance Adjusted Minus Actual)	\$0	\$41	\$1,373	\$1,616

Source: *Data for 1973 and 1978 from An Assessment of the Burial benefits program by the Department of Veterans Affairs, Department of Veterans Affairs, December 2000. Data for 2001 and 2007 from 2004 National Funeral Directors Association (NFDA) Report; adjusted for inflation using Chained CPI.

Plot Allowance. In 1973, the plot allowance totaled \$150, or 54 percent of the average cost of a burial plot. The allowance was increased only once since then and in 2007 represented 14 percent of the average cost of a burial plot. Returning the allowance to a level comparable to 1973 (54 percent of average burial plot cost) would require an increase of \$850. The new allowance would total \$1,150 (see Exhibit 5-33).

Exhibit 5-33. Plot Allowance, Average Cost of Burial Plot, and Adjusted Allowance to Original Percent of Average Funeral Costs				
	1973	2001	2007	
Actual Plot Allowance Amount	\$150	\$300	\$300	
Average Cost of a Burial Plot*	\$278	\$1,862	\$2,133	
Plot Allowance as Percent of Average Cost	54%	16%	14%	
Plot Allowance Adjusted to Approximately 54 Percent of the Average Cost of an Adult Funeral	\$150	\$1,004	\$1,150	
Difference: (Plot Allowance Adjusted Minus Actual)	\$0	\$704	\$850	

Source: *Average plot cost, 2007 – Gravesolutions.com, May 2007; Average plot cost, 2001 – 2007 plot cost adjusted for inflation using chained CPI; Average plot cost, 1973 – Applied average plot cost as percent of average funeral cost in 2007 to average funeral cost in 1973. Average funeral cost in 1973 taken from An Assessment of the Burial Benefits Administered by the Department of Veterans Affairs, p. 11.

The analysis conducted above indicates that the three allowances no longer provide the same level of financial support as when they were initiated. Significant increases in the allowances are necessary to return the allowances to their initial levels as related to actual funeral, burial and plot costs. Exhibit 5-34 provides an estimate of the burial and plot obligations if the allowances were increased as specified above. In this scenario the allowances are not adjusted for inflation. Under this scenario, VA's obligations for the burial and plot allowances would increase nearly five-fold to \$335 million from 2007 to 2009. Obligations in 2014 would fall to \$320 million due to the decline in the number of veterans.

Exhibit 5-34. Actual and Projected Burial and Plot Obligations Applying Adjusted Allowances -Scenario 1 (Allowances Not Adjusted for Inflation) Actual Projected with Revised Allowances* 2007 2009 2014 Work-**Obligation** Work-**Obligation** Work-**Obligation** load** (\$000)load** (\$000)load** (\$000)

Service-Connected (SC) Burial Obligations 14,200 \$24,933 15,336 \$94,476 14,653 \$90,269 Non Service Connected (NSC) Burial Obligations 67,219 \$30,066 84,038 \$161,053 80,295 \$153,882 **Burial Plot Obligations** 50,310 \$15,105 69,169 \$79,525 \$75,983 66.089 Total \$70,104 168.543 \$335.054 161.037 \$320.134 131.729

Source: Benefits and Burial Programs and Departmental Administration, 2009 Congressional Submission. p. 2A-2 and 2A-3.

Exhibit 5-35 details a second scenario that adjusts the higher allowances for inflation. Under this scenario, total obligations in 2009 and 2014 reach \$343 and \$362 million, respectively.

	Exnibit	5-35.	
Actual and Projected Burial and Plot Obligations Applying Adjusted Allowances – Scenario			
2 (Allowances Adjusted for Inflation)			
	Actual	Projected with Revised Allowances*	

Evelotilett E OE

	Actual		Projected with Revised Allowances*				
		2007	2	009	2014		
	Work- load**	Obligation (\$000)	Work- Obligation load** (\$000)		Work- load**	Obligation (\$000)	
Service- Connected (SC)							
Burial Obligations	14,200	\$24,933	15,338	\$98,196	14,653	\$103,589	
Non-Service Connected							
(NSC) Burial Obligations	67,219	\$30,066	84,038	\$164.114	80,295	\$173,127	
Burial Plot Obligations	50,310	\$15,105	69,160	\$81,036	66,089	\$85,485	
Total	131,729	\$70,104	168,536	\$343,345	161,037	\$362,201	

^{*}SC allowance = \$6,160/eligible veteran who applies; NSC allowance \$1,916/eligible veteran who applies; and plot allowance = \$1,150/eligible veteran who applies.

Source: Benefits and Burial Programs and Departmental Administration, 2009 Congressional Submission. p. 2A-2 and 2A-3.

^{*}SC allowance = \$6,160/eligible veteran who applies; NSC allowance \$1,916/eligible veteran who applies; and plot allowance = \$1,150/eligible veteran who applies. The allowances are not adjusted for inflation.

^{**}Workload in 2007 and 2009 from VA 2009 Congressional Submission, p. 2A-3. Workload in 2014 applied the proportion of workload to number of veteran deaths in 2009 to the estimated number of veteran deaths in 2014. The number of veteran deaths was obtained from VetPop.

^{**}Workload in 2007 and 2009 from VA 2009 Congressional Submission, p. 2A-3. Workload in 2014 applied the proportion of workload to number of veteran deaths in 2009 to the estimated number of veteran deaths in 2014. The number of veteran deaths was obtained from VetPop2007. CPI (All Items) used to adjust for inflation in 2009 and 2014

c. How do Other Government Burial Benefits Affect the VA Burial Allowance?

Nearly all of the Federal Government burial benefits available to veterans are provided by VA. The allowances described above are part of the package of burial benefits that also includes a headstone/marker, burial flag, Presidential Memorial Certificate, and burial in a national cemetery. Burial in a national cemetery may represent the most significant burial benefit and includes the gravesite, graveliner, opening and closing the grave, perpetual maintenance and placement of the headstone or marker. In addition, these benefits are also extended to eligible spouses and dependent children of eligible veterans. Since the majority of veterans are eligible for the burial in a national cemetery, any change to this specific benefit impacts more veterans/family members than the burial and plot allowances. Exhibit 5-36 summarizes the importance of this benefit. Family members of veterans who chose to be buried in a national cemetery saved, on average, \$4,675 in 2006/2007 over private sector costs.

Exhibit 5-36. Average Costs for Funeral Home Services* for Bui National/State Cemeteries*	rial at Private and
	2006 – 2007
Average Funeral Home Costs Associated with Burial at a Private Cemetery	\$8,555
Average Funeral Home Costs Associated with Burial at a National/State Cemetery	\$3,880
Difference	\$4,675
*Includes Burial, Funeral, Transportation, and Burial Plot costs	

Source: Private Cemetery - National Funeral Directors Association; 2005 Member General Price List Survey adjusted for inflation (chained CPI); National/State Cemetery - VA Form 21-530 for 2006/2007.

Below is a discussion of other Government burial benefits that may be available to veterans and their families.

1. What other Government burial benefits are available to veterans and their families?

Social Security Administration. A spouse of a veteran who has died may be eligible for a one-time death payment from the Social Security Administration (SSA) of \$255²¹. If there is no surviving spouse, the payment can be made to a minor child. To receive the benefit the individual who died must have worked long enough (and therefore paid enough Social Security taxes) to be insured under the Social Security program. The younger the individual the fewer years they are required to work to qualify for the program. However, no one is required to have worked more than 10 years to qualify. The benefit is paid directly to the spouse and is not paid to funeral homes for funeral expenses. Based on these criteria, most veterans would be eligible for this benefit.

Office of Personnel Management. If the veteran was an employee of the United States Government at the time of their death, their spouse or other "personal representative" may be

²⁰ Veterans discharged under conditions other than dishonorable or who died while an active duty are eligible.

²¹ The SSA death payment has remained unchanged since 1997.

entitled to a payment of up to \$800.²² The individual's death must have resulted from "an injury sustained in the performance of duty." Based on these criteria, it is likely that very few veterans would be eligible for this benefit.

New York State. The Division of Veterans' Affairs in New York State implements a burial allowance program for New York's war casualties. Families of servicemembers who are "killed in combat or duty subject to hostile fire or imminent danger" can receive up to \$6,000 to cover funeral and burial costs. A servicemember must have been a resident of New York to qualify. Federal funeral benefits are applied against incurred funeral costs before the State benefit applies. Approximately 200 servicemembers from New York State have died in Operations Iraqi Freedom or Enduring Freedom²⁴.

Other death benefits, which are not Government sponsored, but which may apply to some veterans include life or causality insurance, different state or local welfare allowances, or employer's payments (severance pay or vacation pay). These are not available to all veterans and apply to those who have insurance, meet welfare eligibility or who were working at the time of their death, respectively.

2. What is the impact of Government benefits on the adequacy of VA's burial allowance?

The impact of other Government burial benefits is relatively small. The benefit applicable to most veterans is the SSA benefit, which amounts to \$255, or 3 percent of the estimated cost of an adult funeral. The other benefits noted above, are restrictive and only apply to a small number of veterans.

d. Is the Current Situation Adequate and Reasonable for the Future, and if not, What is the Best Policy?

The analysis conducted above shows that the current burial and plot allowances no longer provide the same level of financial support when they were initiated. Only one adjustment has been made to the NSC burial allowance and plot allowance since 1973. Each of the three adjustments to the SC allowance was, on average, nearly 10 years apart.

The current VA Bill being discussed is Veterans Burial Benefits Improvement Act of 2007 H.R. 3249, and it proposes relatively large adjustments in the allowances:

- SC allowance –\$4,100 (increase of \$2,100)
- NCS allowance \$1,270 (increase of \$970)
- Plot allowance \$745 (increase of \$445).

VA supports the increases and acknowledges the value of the allowances has eroded. Nevertheless, the proposed allowances fall short of the allowances outlined above that are based on current burial and plot costs and the original intent of the allowances.

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²² U.S. Code - Title 5, Part III, Subpart G, Chapter 81, Subchapter I, Section 8134: Funeral expenses; transportation of body. Federal Employees' Compensation Act.

²³ http://www.veterans.state.ny.us/BurialAllowance.htm. accessed on May 5, 2008

²⁴ http://projects.washingtonpost.com/fallen/states/ accessed on May 7, 2008

While the Bill, if passed, will provide much needed adjustments to the allowances, there appears to be no consistent policy regarding the timing of the adjustments or the basis for the adjustments. An adequate and reasonable policy for the future is one that provides a basis for adjustments to the allowances and insures adjustments are made when necessary.

e. Findings and Recommendations

This section examined the service-connected (SC) burial allowance, non-service connected (NSC) burial allowance and plot allowance offered on behalf of an eligible veteran to offset the veteran's funeral, burial and burial plot costs. The intent of the allowances is not to completely offset these costs. Since 1990, funeral costs have increased at a rate higher than the average of all prices. Adjustments to the burial and plot allowances have occurred infrequently since 1973 and it was determined have not kept pace with inflation. In 1973, the SC burial allowance, NSC burial allowance and plot allowance were found to be 72 percent of funeral costs, 22 percent of funeral costs and 54 percent of burial plot costs, respectively. By 2007, the value of these allowances has decreased significantly and now represents 23 percent of funeral costs, 4 percent of funeral costs and 14 percent of burial plot costs, respectively.

Significant increases in the allowances are necessary to restore the value of these important benefits to original levels. H.R. 3249 proposes to address the erosion of these benefits. Nevertheless, a policy that establishes a basis for assessing the value of allowances and a schedule for the periodic assessment of the allowances is necessary to prevent future erosion of the allowances.

VA burial and plot allowances are important benefits to veterans. Those eligible for the allowances are the veterans who are likely to be in greatest need of financial support (i.e., those who receive or are eligible for VA pension or compensation). To ensure the allowances remain a meaningful benefit, study recommendations include:

- Recommendation #18: Establish a basis for each allowance, which should be a percentage of the average cost of a funeral, burial, and burial plot. As outlined above, these percentages were estimated to be the following in 1973:
 - SC allowance 72 percent of funeral costs
 - NSC allowance 22 percent of funeral costs
 - Plot allowance 54 percent of burial plot costs.

The adjusted allowances proposed H.R. 3249 provide another set of percentages:

- SC allowance 48 percent of funeral costs
- NSC allowance 15 percent of funeral costs
- Plot allowance 35 percent of burial plot costs.

Although recommendations for actual percentages for the SC and NSC allowance cannot be suggested from this study, if H.R. 3249 or alternative version is passed, the recommendation is the new allowances should be used to determine the percentages that will form the basis of future adjustments to the allowances.

 Recommendation #19: Develop an annual schedule for reviewing and adjusting the allowances for funeral, burial, and burial plot costs using the Consumer Price Index for funeral expenses maintained by the Bureau of Labor Statistics.

Developing a basis for the allowances and requiring the regularly scheduled review of funeral and burial expenses and subsequent adjustments to the allowances, will ensure this important benefit maintains its value in the future.

The next chapter, Chapter 6, summarizes the findings and recommendations from the program evaluation.

This chapter presents findings and recommendations from the VA Burial Benefits Program Evaluation. A summary of key findings with recommendations are presented for the main research questions in the following chapters:

- Chapter 3 Ensuring Burial Needs Are Met
- Chapter 4 Memorialization of Veteran Service to Our Nation
- Chapter 5 Monetary Burial Benefit

Each chapter is discussed below.

A. Chapter 3: Ensuring Burial Needs Are Met

a. Adequacy and Reasonableness of the 75-mile Service Area Standard

The current VA policy is to establish new national cemeteries in areas where the unserved veteran population is at least 170,000 within a 75-mile radius to ensure adequate veteran and family access. The current study examined the adequacy and reasonableness of the current 75 mile standard and evaluated several potential alternatives for how VA's ability to serve veterans' burial needs might be changed. Specifically, the evaluation examined the following alternatives:

- Changing the linear distance from 75 miles to another distance standard
- Replacing the linear distance standard with a drive time standard
- Changing the veteran population threshold needed to establish a new national cemetery from 170,000 to another threshold standard.

Considering all alternatives, the evaluation sought to recommend an "ideal" service area standard in terms of a time and/or distance criterion and a population threshold. The findings are summarized below by key area.

Measuring the percent served

- Based on current Geographic Information Systems (GIS) technology, the program evaluation concluded that VA's current methodology of measuring the percent served by a VA burial option needs to be enhanced in the following ways, which were employed for the program evaluation:
 - The first refinement is that Census tracts rather than counties are employed as the fundamental geographic identifier in the enhanced approach. Census tracts are "small, relatively permanent statistical subdivisions of a county" that average about 4,000 inhabitants. As a building block of Census geography, Census tracts allow more detailed analysis of population data than counties, but also have the advantage of precise aggregation to the county level. Unlike zip-codes, Census tracts never overlap county boundaries; the sum of the veterans estimated to live within in a county's nested Census tracts is equal to the county-level veteran population. The advantage of using Census tracts as the main geographic identifier is that this method allows for a much larger number of

- potential locations to be tested during the process of judging where to place a new cemetery so that it will serve the largest number of veterans.
- A second refinement relates to the method used to avoid double counting veterans who live within the 75-mile service area of two or more cemeteries. The enhanced method adds additional clarity through the creation of Thiessen polygons around each of the cemeteries, allowing each service area to remain mutually exclusive for counting purposes. Thiessen polygons are generated from a set of sample points. Each Thiessen polygon defines an area of influence around its sample point, such that any location inside the polygon is closer to that point than any of the other sample points.
- The third major refinement for estimating the percent served relates to the criteria used to determine how many veterans should be considered served who live in a Census tract that is only partially contained within the service area of an existing cemetery. The enhanced approach to estimating the percent served within each 75 mile service area—proportional overlay—replaces the current "rule of thumb" approach used by VA with a more systematic methodology for counting veterans. Proportional overlay capitalizes on modern GIS techniques that allow only veterans living inside the service area to be counted, while excluding those living beyond 75 miles of the cemetery.

The relationship of distance to veterans' choice of burial location

- The analyses conducted indicated that distance is a major factor in making burial choices. Most veterans are buried quite close to their surviving spouses; 92 percent of veterans buried in private cemeteries and 51 percent of veterans buried in national or state veteran cemeteries are buried within 20 miles of the spouse.
- The analyses conducted indicated that those buried in national or state veteran cemeteries are buried significantly further (19.2 miles) from the residence of their spouse than those buried in a private cemetery (3.8 miles).
- Regression analysis revealed that there is a strong propensity to take advantage of a VA burial option among those living close (i.e., within 20 miles) to a national or state veterans cemetery, and a low usage rate for those who live beyond the current service area standard (i.e., 75 miles). Among the sample, propensity declines steadily with every increase of about 5 miles, until about the 35 mile range, then drops more rapidly.
- Regression analysis indicated that veterans' distance to the nearest national or state veterans cemetery matters a great deal in all MSNs, but its impact on veteran's choice of burial location is strongest for those in the northeastern U.S. (MSN 1). Whereas an increase of about five miles from the nearest national or state veterans cemetery is associated with a 5 percent decline in propensity to select burial in a national or state veterans cemetery for all MSNs, in MSN 1 (Philadelphia region), the same increase in distance is associated with a decline of 7 percentage points.

Relationship of distance, drive time, and choice of burial location

- GIS analysis indicated that 95 percent of families choosing a private cemetery live within a 45-minute drive of the cemetery in comparison to only 67 percent of families choosing a VA burial option.
- Correlation analysis indicated that drive time is so closely related to linear distance that one could serve as a proxy for the other for nearly any measurement purpose (correlation, r =.92). While in theory drive time would seem to promise a fairer metric on which to base the service standard, in practice, this high correlation means that drive time provides VA very little information that is not already captured by linear distance.
- Analysis of next of kin drive times to the nearest national or state veterans cemetery in a sample of three different communities (urban, suburban, and rural) indicated that within two hours, next of kin from all three types of communities can travel to a national cemetery within 75 miles of their residence. Should VA consider a drive time standard, a two hour standard would be a good candidate because it is the closest approximation to the current 75-mile distance standard. However, there are several shortcomings with a drive time standard, which include:
 - A drive time standard will naturally lead many veterans and next of kin to consider whether it has been calculated correctly by VA.
 - No matter what data source is used, the personal experience of some veterans will differ from the calculated drive time. They are likely to question, with merit, that their personal experience of bad roads, traffic conditions, etc. has not been considered by VA.
 - Currently there is no national data source that accurately captures the real-time, frequently changing driving conditions that impact an individual's actual drive time. Current data sources and methods provide only averages based on road speeds, and can become quickly outdated without frequent updates requiring substantial resources including personnel, technology, and time. A drive time standard does not meet the need for reliability, and would be highly resource intensive to continuously update and maintain.

Current service area: 75-mile service area standard

- The five largest concentrations of veterans in 2010 not served by a VA burial option under the current 75-mile standard are centered in and around Charleston, WV, Schuyler, NE, Tallahassee, FL, La Crosse, WA, and Houghton Lake, MI.
- None of the above locations currently meet the population threshold for the establishment of a new national cemetery because they do not meet the veteran population threshold of 170,000.
- No location in the U.S. will meet the criteria for the establishment of a new national cemetery under the current service area standard (i.e., 75 miles, 170,000 veterans) until 2015, at which time only one community, the St. Louis, MO metropolitan area, will reach the population threshold of 170,000, due to the closing of Jefferson Barracks National Cemetery (scheduled to close in or around 2017). The GIS analysis revealed that the optimal Census tract to host a new cemetery for this region (if the current cemetery is not expanded) is at or near Crystal City, MO.

Alternative service area standards (65 and 55 miles)

- A 65- or 55-mile service area standard will reduce the percent of veterans served by a VA burial option nationally. A linear distance standard of 65 miles will reduce the percent served to 82.4 percent in 2010, and a 55-mile standard will reduce the percent served to 74.1 percent in 2010.
- The five largest concentrations of veterans in 2010 not served by a VA burial option under a 65-mile alternative standard are centered in and around Hamden, OH, Ventura, CA, Cocoa, FL, Jones, OK, and Scribner, NE. However, none of these communities meet the current 170,000 population threshold.
- The five largest concentrations of veterans in 2010 not served by a VA burial option under a 55-mile alternative standard are centered in and around Moorpark, CA (near Los Angeles), Logan, OH (outside Columbus and midway between Cincinnati and Cleveland), Attica, NY, Lake Huntington, NY, and Orlando, FL. Two of these areas would immediately meet the criteria for the establishment of a new national cemetery under a population threshold of 170,000: Moorpark, CA and Logan, OH.

Alternative population thresholds

- Very few areas will meet the criteria for a new national cemetery between 2010 and 2030 <u>regardless</u> of whether a 75-, 65-, or 55-mile standard is in effect, because they will not meet the 170,000 veteran population threshold.
- Several areas with relatively large numbers of veterans (i.e., more than 110,000) will remain unserved by a VA burial option if the veteran population threshold is not reduced.
- Lowering the population threshold to 110,000 would allow several areas to "qualify" for a new national cemetery under <u>any</u> of the three distance alternatives.
- Revising the population standard will not rollback progress VA has made over the last decade in gradually increasing the percent of veterans served. By contrast, reducing the linear distance standard would substantially reduce the percent served nationally, as would switching to a drive time standard any lower than 2.5 hours.
- Adjusting the population threshold downward from 170,000 would link VA policy to current and future demographic changes in the veteran community (e.g., migration, death rates, military discharges) more effectively than adjusting the area component of the service standard. That is, as the veteran population begins to decline, so should the threshold.

Based on these findings, the following are recommended:

Recommendation #1: Retain the 75-mile service area standard for the construction of new national cemeteries, but reduce the population threshold to 110,000 to allow more unserved communities to qualify.

Recommendation #2: Between 2010 and 2015, construct new national cemeteries, or assist states in constructing their own state veteran cemeteries at or near the following locations, all of which meet a criterion of 110,000 unserved veterans within a 75-mile radius: Charleston, West Virginia and Schuyler, Nebraska.

Recommendation #3: Between 2015 and 2020, construct a new national cemetery, or assist the state with construction of a state veterans cemetery at or near Crystal City,

Missouri to replace Jefferson Barracks National Cemetery scheduled to close in or about 2017.

Recommendation #4: Revise the method used by NCA to calculate the annual performance measure of percent of veterans served by a VA burial option to a method similar to that used for this evaluation. The revised methodology will integrate new capabilities offered by 21st century GIS technology to provide needed improvements in measurement precision. Specifically:

- Use Census tracts, rather than counties, as the primary geographic unit to test and identify potential locations for new national cemeteries and to count the percent served.
- Use the Thessien polygon approach to deal with the issue of overlapping service areas, ensuring veterans are never double-counted when calculating NCA's performance measure.
- Replace 'decision rules' for counting/not counting veterans in counties bisected by a service area with a proportional overlay method.

b. Cremation Only as an Acceptable Burial Option

VA's service area standard is currently measured and defined as the percentage of veterans living within a 75-mile radius of an open national or state veterans cemetery, including national cemeteries which accept only cremated remains. The proportion of cremation-only cemeteries may increase in future years as the inventory of casket gravesites at existing national cemeteries declines, and some cemeteries close to new casketed interments. This trend, however, is balanced by the likelihood that VA will continue to build new national cemeteries to maximize the percentage of veterans served, expand existing cemeteries by acquiring adjacent land, and introduce new burial options for veterans as appropriate. However, the service standard leaves open the issue of whether cremation-only cemeteries are "serving" the veteran community in cases where the veteran may not prefer cremation.

Based on this policy issue, the following research questions were addressed: 1) what percentage of veterans would consider themselves served and unserved if cremation was their only burial option at a national or state veterans cemetery?; 2) what are the demographic profiles of veterans who would consider themselves served and unserved by a cremation-only burial option?

The primary findings for the sub-group of interest (i.e., veterans preferring burial in a national/state veterans cemetery) were:

- Approximately 68 percent would accept cremation if it was the only burial option available at the nearest national/state veterans cemetery.
- The demographic and social factors most related to acceptance of a cremation-only burial included: religion, Memorial Service Network (region), and service period. More specifically, among veterans preferring burial in a national/state veterans cemetery, veterans with no declared religion are approximately 3 times as likely to accept burial in a national or state veterans cemetery that provides cremation as the only burial option than veterans with a declared religion. Among veterans preferring burial in a national/state veterans cemetery, veterans in Memorial Service Network (MSN) 5

(Oakland) and veterans that served in the Navy are each approximately 1.5 times as likely to accept burial in a national or state veterans cemetery that provides only cremation, compared to other veterans.

Based on these findings, the following are recommended:

Recommendation #5A (option 1): Adjust the formula for calculating percent served by a VA burial option by classifying two-thirds of veterans living exclusively within 75 miles of a cremation-only national/state veterans cemetery as served and one-third as unserved.

Recommendation #5B (option 2): Track and set targets for two performance measures related to percent of veterans served by a VA burial option: 1) percent of veterans within 75 miles of a national or state veterans cemetery offering both a casketed and cremation burial option and, 2) percent of veterans within 75 miles of a national or state veterans cemetery offering only a cremation burial option.

c. Factors Influencing Burial Choice

VA provides both casket and cremation burial options for veterans. To plan for providing sufficient burial options, VA must stay current with the burial preferences of veterans, and the factors that influence them (e.g., region of the country).

Based on this policy issue, the program evaluation set out to answer the following questions: 1) what is the role of religion, culture, familial practices, generational differences, and geographic location on veterans' burial choices?; 2) what would be the impact on VA if new services were implemented to address veteran preferences not currently served?

The primary findings are:

- The nationally representative survey conducted for this evaluation found that VA meets the burial choices of almost all veterans, as approximately 85 percent of veterans plan to select casket or cremation at their time of need. Of the remaining veterans, 12 percent either do not know what they plan for burial or skipped answering the question on the survey, leaving only 3 percent of veterans indicating mausoleum.
- An analysis on the sub-group of veterans who prefer either casket or cremation indicated that veterans with no declared religion are approximately 4.3 times as likely to prefer cremation, veterans from MSN 5 (Oakland Memorial Service Network) are 1.9 times as likely to prefer cremation, and female veterans are 1.8 times as likely to prefer cremation, compared to their respective counterparts. In terms of attitudinal factors, veterans who indicated that cost was influential in their decision around burial choice were 2.5 times as likely to select cremation as compared to veterans who said cost was not influential.
- Approximately 43 percent of all veterans said they were likely to choose burial in a national/state veterans cemetery, with the largest demographic factors being service period, age, and career years. Specifically, younger veterans are more likely to prefer burial in a national/state veterans cemetery (52 percent of 20-39 year olds), as compared to older veterans (34 percent of veterans 80+ years in age).
- The regression analysis on survey respondent data indicated that non-demographic factors (e.g., cost, preferences of family) play a much larger role in the selection of burial

location than do demographic factors. A significant finding from this analysis is that veterans with a strong connection to or affiliation with the military are 7 times as likely to prefer burial in a national or state veterans cemetery, compared to other veterans.

Based on these findings, the following are recommended:

Recommendation #6: Maintain current information on veteran burial preferences by conducting recurrent surveys of a representative sample of the veteran population at the MSN and national level every three to five years.

d. Methods by which Veterans and their Families Access Information on VA Burial Benefits

The Improvement of Veterans Outreach Programs enacted December 27, 2001 (Public Law 107-103) sought to increase the type and level of outreach programs provided by VA. Additionally, the Veterans' Housing Opportunity and Benefits Improvement Act of 2006 mandates that VA conduct outreach efforts so that no veterans are denied awareness of the benefits for which they may be eligible. This situation presents a challenge to VA in both assessing and developing optimal communications for burial benefits. The program evaluation identified the primary sources veterans, families, and funeral directors use to get information on VA burial benefits, the demographic factors related to accessing sources of information, and most importantly, the ways to best reach various veteran subpopulations.

The research questions included: 1) what are the primary sources veterans, families, and funeral directors use to get information on VA burial benefits?; 2) what are the demographic factors related to accessing sources of information on VA burial benefits?; 3) what are the barriers and enablers of accessing sources of information on VA burial benefits by demographic variables and 4) what are the various outreach methods used by VA to provide information and increase awareness of the VA benefits for veterans and their families?

The primary findings are:

- Almost half of the veteran survey respondents indicated they would use VA's toll-free number and over two out five veteran survey respondents indicated they would try looking for burial benefits information on VA's Web site.
- Almost one of every ten veteran survey respondents indicated not knowing where to go for burial benefits information. Given the current veteran population, this suggests that about 2.5 million veterans do not know where to go for burial benefits information.
- While only one out of six World War II veterans selected VA's Web site as a preferred source of information about burial benefits, over three out of four Gulf War veterans selected the Web as a preferred choice.
- In focus groups, the majority of veteran family members indicated that much of the information they obtained, on items such as the burial allowance, burial flag, headstones, and the PMC, came from the funeral director or the funeral home.
- In focus groups, when asked to identify the most useful information that they received on burial benefits, veteran family members mentioned two: (1) the amount of money that VA would pay for the burial allowance, and (2) the importance of DoD form DD214 for processing requests for burial benefits.

Based on these findings, the following are recommended:

Recommendation #7: Develop an interactive web-based tool targeting outreach to younger veterans and their family members, so that potential beneficiaries could enter information, and then get an explanation of the burial benefits to which they are eligible, including ones currently unknown to many.

B. Chapter 4: Memorialization of Veteran Service to our Nation

a. Identify and Evaluate Challenges in Meeting National Shrine Mandate

There is a legislative mandate that "all national and other veterans' cemeteries under control of the National Cemetery Administration be considered national shrines (Title 38, Part II, Chapter 24, Section 2403)." In accordance with the Government Performance Results Act (1993), NCA has established a set of performance measures for the National Shrine mandate to monitor and report its results in meeting the mandate for all of its national cemeteries.

Through the evaluation, there were two primary research questions that were addressed: 1) is the current set of performance measures adequate in terms of their validity (i.e., measure the concepts as intended), completeness (i.e., measure all areas of performance that relate to the mandate), and quality?; 2) what are the challenges inherent in meeting and maintaining the National Shrine mandate (e.g., increasing interments, aging infrastructure)?

The primary findings are:

- The six existing performance measures address the key components outlined in the national shrine definition, covering both the tangible and intangible aspects of the definition. These performance measures are supplemented by the national cemetery operational standards and measures that currently guide cemetery directors and staff on necessary maintenance and care.
- The number of interments in columbaria at national cemeteries is expected to quadruple by 2030. As a result, a separate performance measure for columbaria is needed.
- NCA's annual survey of next of kin and funeral directors has two limitations. The first is that data are collected from next of kin who interred a loved one in a national cemetery in the past year. Opinions of next of kin who return to the cemetery more than one year after the interment are not captured and their perceptions of the cemetery may be different. Data collected from next of kin at different time periods would provide better information on which to base policy changes. A second limitation is that data on the annual survey are not collected for cemeteries with low interment activity.
- Several factors will affect NCA's ability to meet the National Shrine mandate in the future. Increasing interments, gravesites, and an aging infrastructure will pose considerable challenges in maintaining the national cemeteries as national shrines.

Based on these findings, the following are recommended:

Recommendation #8: Develop a new performance measure to assess satisfaction with columbaria and measure it on the National Cemetery Satisfaction Survey. The specific measure is: "Increase the percent of respondents rating the quality of the columbaria as excellent."

Recommendation #9: Review strategic targets of 100% to reset these targets as these performance levels are not achievable.

Recommendation #10: Expand the annual Survey of Satisfaction with National Cemeteries as described in Recommendations 10A and 10B below.

- Recommendation #10A: Expand the sample of the Survey to include next of kin who interred a veteran or family member in a national cemetery within the past 5 years.
- Recommendation #10B: Conduct annual intercept surveys of visitors at closed cemeteries to collect data from these visitors. Enumerators would administer a short survey (approximately 10 questions) to a random sample of visitors. Depending on the expected number of visitors, the data collection period could range from one day to one week.

b. Adequacy and Impact of Symbolic Expressions of Remembrance

VA provides a number of symbolic expressions of remembrance for veterans and their families, including headstones, markers, and PMCs, as well as coordination with the Department of Defense (DoD) or local veteran volunteers to provide military funeral honors.

The research questions included: 1) what is the adequacy and impact of the current set of symbolic expressions of remembrance?; 2) what would be the impact of policy changes to provide additional symbolic expressions of remembrance?

The primary findings are:

- All four symbolic expressions of remembrance (i.e., U.S. Flag, headstone or marker, PMC, and military honors) were rated either important or very important by at least three out of four veterans on the survey. A greater percentage of veterans rated the U.S. flag and the headstone/marker benefit as important, compared to the PMC and military honors.
- When veteran survey respondents were asked for headstone or marker options that are desirable but are not currently available, veterans indicated it would be important to expand the option to place military symbols on the markers (54 percent of the respondents indicated it was important or very important) and to increase the area for personal inscription (47 percent of the respondents indicated it was important or very important).

Based on these findings, the following are recommended:

Recommendation #11: Provide two additional memorialization benefits that veterans asked for in the survey, that include: 1) room for military insignia on the headstone or marker, and 2) additional room for appropriate personal inscriptions on the headstone or marker.

Recommendation #12: Officially request that DoD offer empty shell casings following the military honors ceremony to next of kin as a standard protocol.

Recommendation #13: Conduct a conjoint analysis study (i.e., decision-making task) with a large sample on the value of new symbolic expressions that may be offered, to further build on the pilot data gathered via conjoint analysis for this study¹.

c. Impact of Presidential Memorial Certificates

A Presidential Memorial Certificate is an engraved paper certificate, bearing a likeness of the current President's signature, to honor the memory of honorably discharged deceased veterans. Eligible recipients include the deceased veteran's next of kin and loved ones. The PMC was started by President Kennedy in March of 1962. Since that time, 11.9 million PMCs have been distributed.

The research questions include: 1) what is the impact of the current PMC on the perceptions of veterans and their loved ones?; 2) what would be the impact of introducing new processes to increase the accuracy of information provided on PMCs?

The primary findings are:

- On the survey, 80 percent of veterans indicated that the concept of the PMC benefit makes them feel that the country appreciates the service of veterans to our nation.
- In focus groups, of the 37 next of kin participants, only one knew about the PMC benefit. In the focus groups with funeral directors, only 2 out of 29 knew about the PMC benefit.
- The error rate for PMCs is very low at only 100 for every 400,000 PMCs issued.

Based on these findings, the following are recommended:

Recommendation #14: Conduct an outreach campaign to better promote the PMC among veterans, veteran family members, and funeral directors.

Recommendation #15: Develop an Internet Web-based tool so that next of kin and friends can apply on-line for a PMC, which would raise the visibility and value of the PMC.

C. Chapter 5: Monetary Burial Benefits

a. Feasibility of Cash Payment in Lieu of Burial in a National Cemetery

The National Cemetery Expansion Act of 2003 authorized VA to open six new national cemeteries within four years after enactment to serve veterans in areas of the U.S where the greatest number of veterans did not have access. The cost to construct the six new cemeteries is approximately \$156 million as well as an additional \$25 million per year in operating costs. As an alternative policy, VA could consider compensating veterans and their families by implementing a cash payment program made on behalf of veterans not residing within 75 miles of a national or state veterans cemetery at the time of their death. This policy, if supported by VA, would require legislative changes.

The research questions to explore findings of alternative policy include: 1) what burial services could VA provide if it opened no new national cemeteries and did not fund state cemeteries?:

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¹ See appendix for the pilot data gathered via conjoint analysis.

and, 2) what is the feasibility of offering a cash payment in lieu of burial in a national or state veterans cemetery where they are not available?

The primary findings are:

- High acceptance (72 percent) of cash payments among veterans whose perceptions were measured in the survey.
- Under the current standard VA would need to construct and maintain one new national cemetery in 2015 at a NPV cost of \$77,998,000. The fiscal cost for one cemetery was far exceeded by the cost of the cash payment program under three of four different cash payment benefit scenarios. It was determined that the point at which the cost of new cemetery construction and the cost of the cash payment program are equal assumes only 5 percent of those eligible for the program would participate. This level of participation is not realistic.

Based on these findings, the following are recommended:

Recommendation #16: Continue to build and maintain national cemeteries and fund state veterans cemeteries rather than adopt an alternative benefit using cash payments.

b. Impact of a Financial Means Test on Eligibility for Burial Allowance

VA burial allowances are partial reimbursements of eligible veterans' burial and funeral costs. Currently, there is no financial means testing for burial allowance eligibility taking into consideration either the income or assets of veterans.

The feasibility of instituting a financial means test was examined for eligibility of this benefit. Three income level thresholds were tested and information on two are presented below. The research questions included: 1) what would be the results of implementing a financial means test?; 2) what is the number of people affected at each of the three income level thresholds?

The primary findings are:

- Significantly lower administrative costs for conducting means tests for burial benefits than the pension program using a means test similar to pension (i.e., an explicit income level threshold and a "reasonableness" net worth test),
- Tests at different income levels revealed that, as expected, the greatest savings to the government would be realized if the level below which benefits were provided was set at the lowest proposed income, \$50,081 in 2008 dollars. At this income level, the government would save over 34.5 million dollars per year if the claims paid rate stayed constant. At the highest income level (\$81,382), the government would save almost 13.7 million dollars per year. However, the loss in benefits to veterans' families per year would be \$38.2 million and \$19.1 million, respectively, at these two income levels.

Based on these findings, the following are recommended:

Recommendation #17: Do not implement a financial means test at the current time, since existing data do not support VA moving forward with implementation.

c. Assessment of Burial Allowance

VA burial allowances are partial reimbursements for an eligible veteran's burial and funeral costs. The amount of the allowance depends on whether the cause of death is due to a service-connected (SC) condition. VA will pay an allowance up to \$2,000 toward burial expenses. If the veteran is buried in a national cemetery, some or all of the cost of transporting the deceased may be reimbursed. For a non-service-connected (NSC) death, VA may pay up to \$300 toward burial and funeral expenses, and a \$300 plot-interment allowance. If the death occurred while the veteran was in a VA hospital or under VA-contracted nursing home care, some or all of the costs for transporting the deceased's remains may be reimbursed.

The main research questions include: 1) what is the comparison of the VA burial allowance to legislative intent?; 2) How does VA's current burial allowance compare to the average cost of burial in the private sector?; 3) Is the current policy adequate and reasonable for the future, and if not, what are the alternatives.

The primary findings are:

- Since 1990, funeral costs have increased at a rate higher than the average of all other prices. Adjustments to the burial and plot allowances have occurred infrequently since legislative enactment in 1973 and have not kept pace with inflation.
- In 1973, the SC burial allowance covered 72 percent of funeral costs, the NSC burial allowance covered 22 percent of funeral costs, and the plot allowance covered 54 percent of burial plot costs.
- By 2007, the value of these allowances has decreased significantly and now represents only 23 percent of funeral costs for the SC burial allowance, 4 percent of funeral costs for the NSC burial allowance, and 14 percent of burial plot costs for the burial allowance.
- Significant increases in the allowances are necessary to restore the value of these important benefits to original levels. H.R. 3249 in 2007 proposed to address the erosion of these benefits. Nevertheless, a policy that establishes a basis for assessing the value of allowances and a schedule for the periodic assessment of the allowances is necessary to prevent further erosion of these benefits.

Based on these findings, the following are recommended:

- Recommendation #18: Establish a basis for each allowance, which should be a percentage of the average cost of a funeral, burial, and burial plot. As outlined above, these percentages were estimated to be the following in 1973:
 - SC allowance 72 percent of funeral costs
 - NSC allowance 22 percent of funeral costs
 - Plot allowance 54 percent of burial plot costs.

The adjusted allowances proposed H.R. 3249 provide another set of percentages:

- SC allowance 48 percent of funeral costs
- NSC allowance 15 percent of funeral costs
- Plot allowance 35 percent of burial plot costs.

•	Recommendation #19: Develop an annual schedule for review and adjustment of the allowances for funeral, burial, and burial plot costs using the Consumer Price Index for funeral expenses maintained by the Bureau of Labor Statistics.

ABBREVIATIONS

ACS - American Community Survey

AMAS - Automated Monument Application System

AMBC - American Battle Monuments Commission

BIRLS - Beneficiary Identification and Record Locator Subsystem

BOSS - Burial Operations Support System

BRE - Business Reply Envelope

CFR - Code of Federal Regulation

CPI - Consumer Price Index

DoD - Department of Defense

FAQ - Frequently Asked Questions

FIPS - Federal Information Processing Standard

FNOD - First Notice of Death

FY - Fiscal Year

GIS - Geographic Information System

GPRA - Government Performance Results Act

GMT - Geographic Means Test

IRS - Internal Revenue Service

LMI - Logistics Management Institute

MAPR - Maximum Annual Pension Rate

MSN - Memorial Service Network

MUE - Marginal Utility Estimates

NCA - National Cemetery Administration

NCS - National Cemetery System

NFDA - National Funeral Directors Association

NHDVS - National Homes for Disabled Volunteer Soldiers

NPS - National Park Service

NSFNet - National Science Foundation Net

NSC - Non Service-Connected

NSV - National Survey of Veterans

OMB - Office of Management and Budget

OPP - Office of Policy and Planning

OMR - Optical Mark Read

ABBREVIATIONS

PART – Program Assessment Rating Tool

PMC - Presidential Memorial Certificate

Q/A - Questions/Answers

ROTC - Reserve Officer Training Corps

SA - Service Area

SC – Service-Connected

SSA - Social Security Administration

STF - Sub-Themed Finding

VA - Department of Veteran Affairs

VACO - Veterans Affairs Central Office

VBA - Veterans Benefits Administration

VABBP - Veterans Burial Benefits Program

VBBS - Veterans Burial Benefits Survey

VetPop - Veteran Population Model

VHA - Veterans Health Administration

VSO - Veterans Service Organization

GLOSSARY

Allowable Deductions Allowable deductions are those payments made by veterans for

certain non-reimbursed medical expenses, funeral and burial expenses and educational expenses. Veterans are able to exclude allowable deductions from their total *gross household income* in determining their eligibility for VA health care benefits.

Applicant A person who has submitted a formal request for VA health care

benefits and/or for enrollment in the VA health care system.

Asset Property or resource of an individual which includes: cash,

stocks and bonds, individual retirement accounts, income

producing property, etc.

Basic Income Amount of money needed for one to afford the basic necessities

for oneself and family.

Beneficiary Identification and Records Locator Subsystem (BIRLS) VA database the primary purpose of which is to track claims folder location and to provide information on beneficiaries. Also used to request transfer of claims folders. Located at Austin

Data Processing Center.

Catastrophically Disabled

A veteran who has a permanent, severely disabling injury, disorder, or disease that compromises the ability to carry out the activities of daily living to such a degree that he/she requires personal or mechanical assistance to leave home or bed, or requires constant supervision to avoid physical harm to self or

others.

Combat Service A status applied for a veteran who served on active duty in a

theater of combat operations during a period of war recognized

by the VA.

Compensable Disabilities Disability compensation is a monetary benefit paid to veterans

who are disabled by an injury or disease that was incurred or aggravated during active military service. These disabilities are considered to be service connected and are compensable. Disability compensation varies with the degree of disability and the number of veteran's dependents, and is paid monthly. Veterans with certain severe disabilities may be eligible for additional special monthly compensation. The benefits are not

subject to federal or state income tax.

Congressional Appropriation

The funding allocated by Congress to VA for providing benefits

and medical services to eligible VA beneficiaries.

Countable Income Income included in calculation of pension rate (M21-1 part IV

Chapter 16).

GLOSSARY

Covered Benefit Medically necessary care and services included in the Medical

Benefits Package as defined within 38 Code of Federal

Regulation (CFR) 17.38.

Dependent Spouse or unmarried child (to include a biological, legally

adopted, or step child under the age of 18, or between the ages

of 18 and 23 and attending school, or a child who was permanently and totally disabled before the age of 18).

Earned Income Money you receive from working.

Elderly Anyone 65 years or older.

Financial Assessment A means of collecting income and asset information used to

determine a veteran's eligibility for benefits.

Gross Household Income Generally, gross income of the veteran, spouse and dependent

children is counted for determining a veteran's eligibility for VA health care benefits. This includes earned and unearned income but excludes most need-based payments such as welfare.

Supplemental Security Income (SSI).

Gross Income Income before allowable expenses are subtracted.

Housebound Benefit A veteran who is determined by VA to be in need of the regular

aid and attendance of another person, or a veteran who is permanently housebound, may be entitled to additional disability compensation or pension payments. The housebound payment

may be paid if the claimant, due to disability, is factually

housebound, that is, substantially confined to his or her dwelling and the immediate premises or, if institutionalized, to the ward or clinical areas, and it is reasonably certain that the disability and confinement will continue throughout his or her lifetime.

Alternatively, the housebound allowance may be paid if there is

a permanent disability rated at 100 percent and there is

additional disability ratable at 60 percent or more, separate and distinct from the disability rated at 100 percent and involving

different anatomical segments or bodily systems.

Low-Income Threshold Veterans with *gross household income* under the "low income

threshold" are eligible to receive certain health related benefits at no cost to the veteran. The low income threshold is set by law and varies according to the veteran's family size and benefit

applied for.

Master Record Master file of beneficiary data for all VBA programs.

Means Test The term means test refers to a process undertaken to

determine whether or not an individual or family is eligible to receive certain types of benefits from the VA. The test is use for the VA Pension program with a veterans household income and

GLOSSARY

assets. The means test is also used to determine veteran copay responsibilities and for determining health care

enrollment priorities for some veterans.

Medicaid A jointly funded federal and state program that provides hospital

expense and medical expense coverage to persons with low-

income and certain aged and disabled individuals.

Medical Benefits Package The term "Medical Benefits Package" refers to a group of health

care services that are provided to all enrolled veterans.

Medicare A federal program that provides health care coverage for people

age 65 and older, as well as some younger individuals with

specific health problems. Medicare Part A covers

hospitalization, extended care and short term nursing home care; Medicare Part B covers outpatient services, and is subject to a monthly premium. Medicare Part C, formerly known as "Medicare+Choice," is now known as "Medicare Advantage". Medicare Part D is a federal program to subsidize the costs of prescription drugs for Medicare beneficiaries in the United

States.

Net Present Value

Net present value (NPV) is a standard method for the financial

appraisal of long-term projects. Used for capital budgeting, and widely throughout economics, it measures the excess or shortfall of cash flows, in present value (PV) terms, once

financing charges are met.

Net Worth Simply put, "net worth" means the market value of everything

you own, minus what you owe. There are exclusions, not everything you own or owe is considered. VA has some very

specific guidelines on how it computes net worth.

Non-Compensable Non-compensable refers to the awards of service-connection

which VA determines do not warrant the award of monetary

compensation.

Non-Service Connected Disability or death not necessarily related to military service (38)

CFR § 3.1 (1)).

Non-Service Connected

Veteran

An eligible veteran who has been discharged from active military duty, and does not have a VA adjudicated illness or

injury incurred in or aggravated by military service.

Peacetime Service Veterans who were discharged from the military during three

periods of July 26, 1947 thru June 26, 1950, February 1, 1955 thru August 4, 1964, and May 8, 1975 thru August 1, 1990.

Pension Benefit VA pension is a monetary award paid on a monthly basis to

veterans with low income who are permanently and totally

disabled, or are age 65 and older, may be eligible for monetary support if they have 90 days or more of active military service, at least one day of which was during a period or war. Payments are made to qualified veterans to bring their total income, including other retirement or social security income, to a level set by Congress annually. Veterans of a period of war who are age 65 or older and meet service and income requirements are also eligible to receive a pension, regardless of current physical condition.

Purple Heart

A "Purple Heart" is a medal given by the military to a service person injured as a direct result of combat.

Service-Connected

Generally a service-connected disability is a disability that VA determines was incurred or aggravated while on active duty in the military and in the line of duty. A service-connected rating is an official adjudication by VA that the illness/condition is directly related to active military service. Service connected ratings are adjudicated by 57 VA Regional Offices located around the country.

Service-Connected Veteran

A veteran who has an illness or injury incurred in or aggravated by military service as determined by VA.

Stakeholders

A person or organization with a vested interest in the program (Veterans, Congress, VSOs, etc).

Veteran

The term 'veteran' means a person who served in the active military, naval, or air service, and who was discharged or released under conditions other than dishonorable.

VetPop

Statistical and actuarial tool that VA uses to project the veteran population at the state level to 2030 by age, gender, and period of service.

Wartime Service

As defined in 38 CFR § 3.3.

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