



Capital Asset Realignment for
Enhanced Services (CARES)

Stage I Summary Report
Site: **Livermore**

August 2005

This report was produced under the scope of work and related terms and conditions set forth in Contract Number V776P-0515. PricewaterhouseCoopers' work was performed in accordance with Standards for Consulting Services established by the American Institute of Certified Public Accountants (AICPA). PricewaterhouseCoopers' work did not constitute an audit conducted in accordance with generally accepted auditing standards, an examination of internal controls or other attestation service in accordance with standards established by the AICPA. Accordingly, we do not express an opinion or any other form of assurance on the financial statements of the Department of Veterans Affairs or any financial or other information or on internal controls of the Department of Veterans Affairs.

The VA has also contracted with another government contractor, Jones Lang LaSalle to develop re-use options for inclusion in this study. Jones Lang LaSalle issued its report, *Enhanced Use Lease Property Re-use/Redevelopment Plan Phase One: Baseline Report, Veterans Affairs Medical Center, Livermore, California*, and as directed by the VA, PricewaterhouseCoopers has included information from their report in the following sections of this report: Real Estate Market and Demographic Overview, Environment, Re-Use Options and Development and specific Re-Use options. PricewaterhouseCoopers was not engaged to review and therefore makes no representation regarding the sufficiency of nor takes any responsibility for any of the information reported within this study by Jones Lang LaSalle.

This report was written solely for the purpose set forth in Contract Number V776P-0515 and therefore should not be relied upon by any unintended party who may eventually receive this report.

OVERVIEW AND CURRENT STATE

Statement of Work

Team PwC is assisting the VA in identifying the optimal approach to provide current and projected veterans with healthcare equal to or better than is currently provided in terms of access, quality, and cost effectiveness while maximizing any potential re-use of all or portions of the current real property inventory at the study sites. This work relies on two principal teams to undertake capital planning and re-use planning.

The Livermore study will review realignment to improve access and quality of patient care by moving services closer to where patients live and by collocating care. Outpatient services, sub-acute and low-volume specialty care will be transferred off-site to the Palo Alto VAMC. A new Nursing Home Care Unit (NHCU) will be constructed either on the Livermore campus or on another site in the community, continuing to serve the patients in the Livermore ‘area’, as clarified by the VA. The primary focus of Livermore’s capital and re-use studies is to determine the most effective way to retain a nursing home presence in Livermore.

Summary of Market

The Livermore campus began operations in 1929 as a tuberculosis hospital. In 1950 the tuberculosis hospital was demolished and converted into the Livermore VAMC. The Livermore VAMC operated as an independent medical center until 1995 when it was integrated into the VA Palo Alto Health Care System and was renamed Livermore Division (LVD). The campus is located in a rural, park-like setting just south of the city of Livermore, California, 43 miles southeast of San Francisco, and 30 miles southeast of Oakland. Most veterans who use LVD commute from the East Bay or Central Valley.

Today LVD maintains a 120-bed NHCU and 20 intermediate care beds. Ambulatory care clinics provide inpatient and outpatient care to 12,045 veterans. The demand for nursing home inpatient services shows a slight decline over the 20 year projection period from 2003 to 2023. However, the demand for ambulatory health services appears to increase over the same projection period with a slight spike in demand for primary care services in the interim.

LVD is situated on 112 acres located in a fast growing high-income rural setting. The campus has a large amount of land available for construction; 78 of the 112 acres of the campus are considered usable for re-use/redevelopment.

Alameda County is the seventh highest populated county in the state of California and has been steadily growing since the last census in 2000. By the year 2020, the county’s population is expected to reach 1.8 million. The city of Livermore has experienced higher than county average growth from 2000 to 2004 at 7%.

Figure 1: Map of Northern California Market Served by VA, incl. Palo Alto Health Care System



Summary of Current Services Provided

LVD provides services to veterans in Southern Alameda County and the Central San Joaquin (Central) Valley. LVD hosts 140 total operating beds including sub-acute care programs, specialty care programs, and a free-standing 120-bed NHCU. Additionally, LVD provides outpatient primary care and mental health services.

In the Secretary’s Decision of May 2004, it was decided that access and quality of patient care would be improved if most services were collocated with other regional VA services, closer to where patients live in areas of higher veteran population density.

Summary of Current Facility Condition

The Livermore campus has 17 buildings consisting of six temporary/modular structures, two main clinical buildings, two administrative buildings, and seven buildings that house supportive functions. Building 62 is the main building at LVD and is located in the center of the campus. Buildings on the LVD campus range in age from 15 to 81 years old. Although some of the buildings were constructed over 50 years ago, they are well maintained and none are registered as historically significant by any local, state, or federal agency. In addition, Livermore has 454 vehicle parking spaces according to the Livermore Parking Plan.

In terms of utilities, steam is provided by an on-site boiler facility, gas and electric are provided by Pacific Gas & Electric, and water is received from a public waterline. LVD has a self-contained sewage and sewage treatment facility.

Approximately 34 acres (nearly 30%) of the total 112 acres is not suited for development due to topographical constraints. Surrounding uses include predominately undeveloped hillsides and steep slopes used for agricultural and recreational purposes. VA has jurisdiction over its own property and the City of Livermore has control over development of the surrounding campus. However, the VA's policy is to plan, design, and build in accordance with local standards. Since LVD is located outside Livermore city limits, the site is under the jurisdiction of Alameda County. Meanwhile, the City of Livermore does have control over development surrounding the campus.

Site Plans

Figure 10: Existing Building Distribution

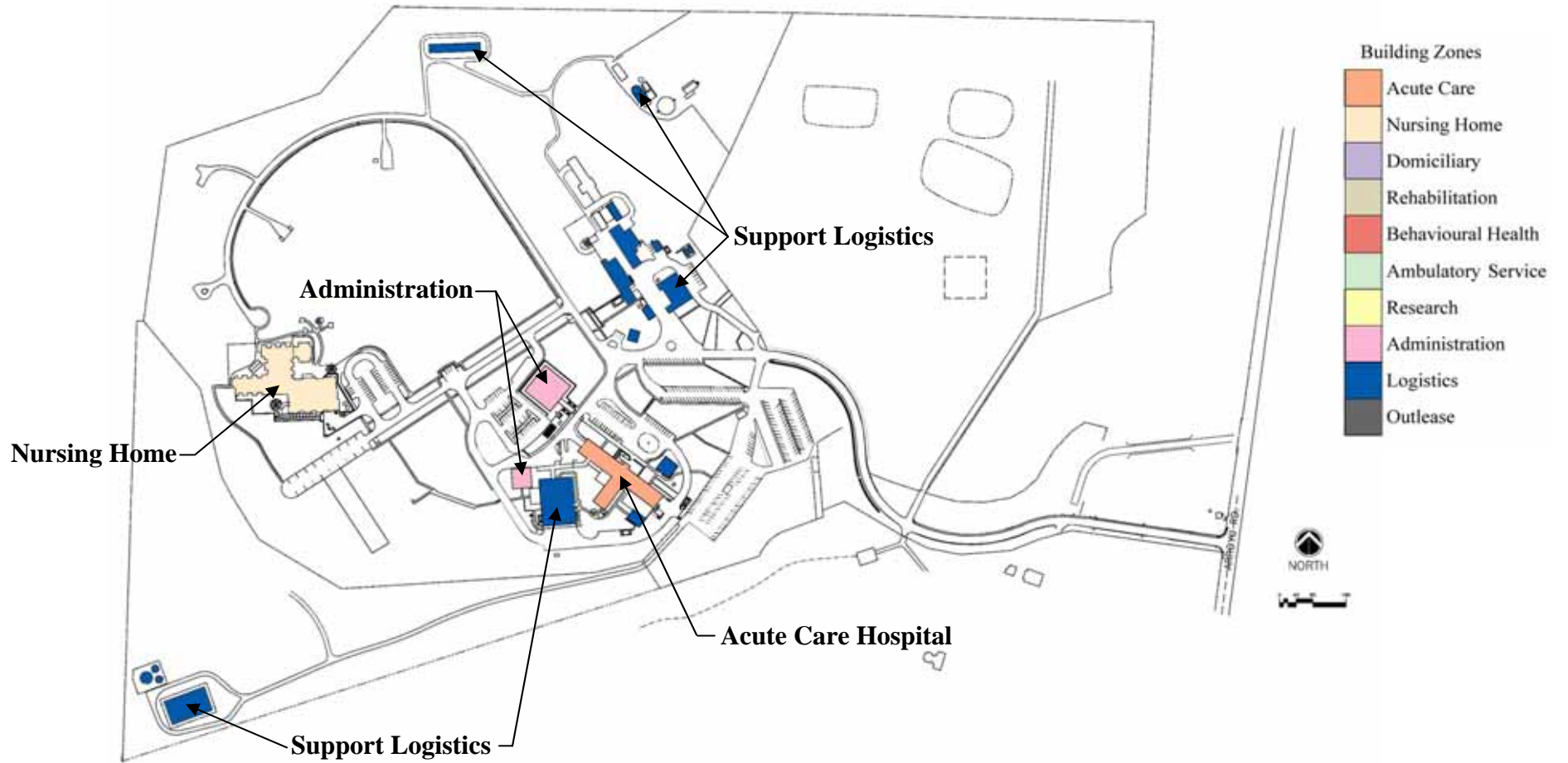
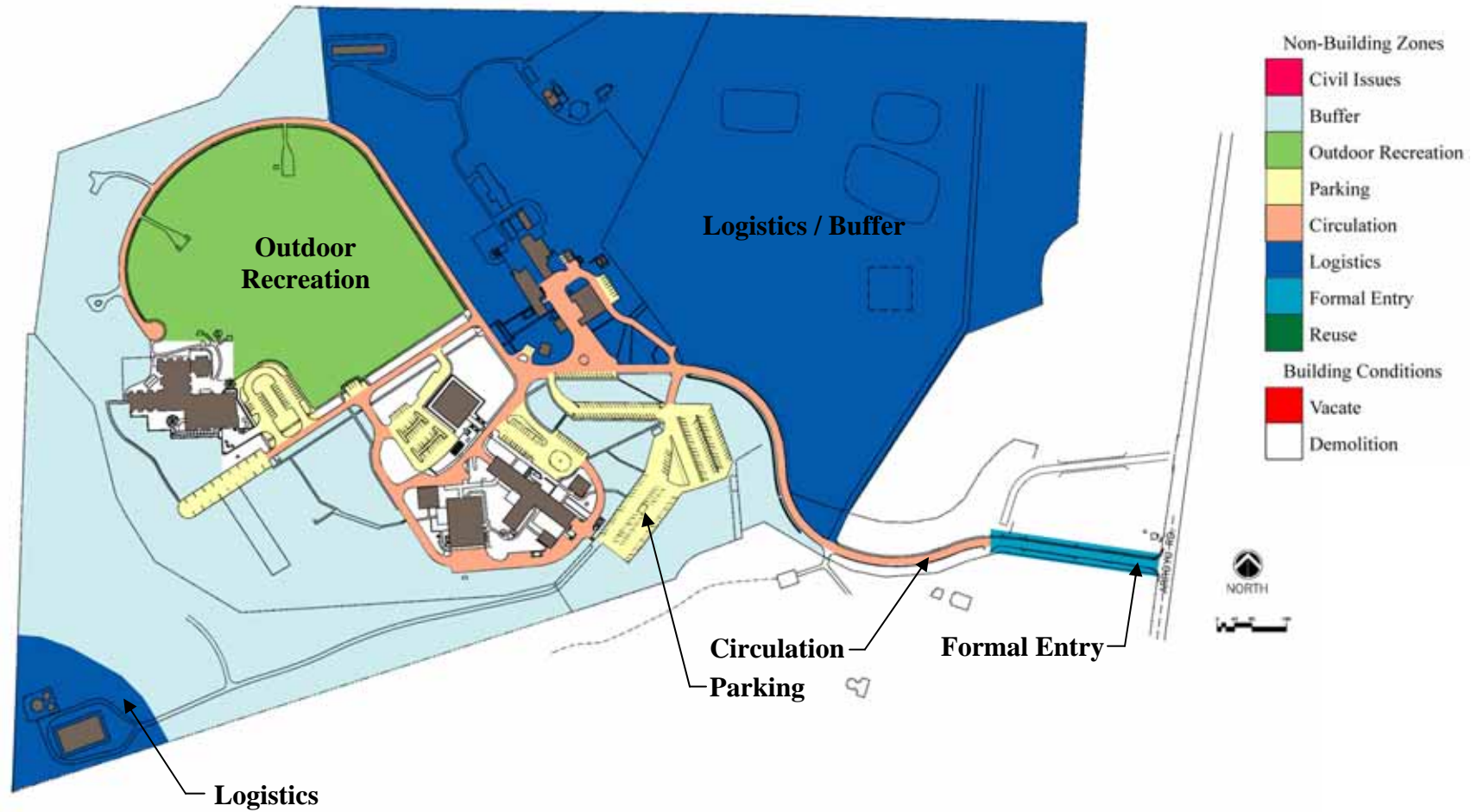


Figure 11: Existing Non-Building Zones



COMMUNITY INFORMATION

Real Estate Market Assessment

Located on the eastern side of the San Francisco Bay, Alameda County is part of the state's busiest urban areas. Alameda County has a diverse employment base with a majority of employment in trade, transportation, utilities, government, and professional and business services sectors. According to the California Employment Development Department, Alameda County is expected to experience employment growth in several sectors through 2006. The projected three largest growth industries from 1999-2006 are wholesale trade, services, and manufacturing.

The primary attraction to the Livermore area includes its scenery and recreational destinations including wineries and golf courses. Today over 5,000 acres of vineyards and 32 wineries call Livermore home, and the numbers continues to grow. The 1992 *South Livermore Valley Plan* was enacted to increase vineyard acreage and protect the vineyards. LVD is adjacent to Wente Vineyards and Golf Course, the largest winery in Livermore. To accommodate tourists, the City of Livermore has approximately 15 national chain hotels, one resort/spa and conference center, and several destination resorts located in the Wine Country region.

California home prices have escalated at a rapid pace. According to the California Association of Realtors, the minimum household income needed to purchase a median-priced home at \$552,590 in California is \$122,690. Livermore is among the costliest housing markets in the nation. In 2005, the City of Livermore accounted for 28,592 households in Alameda County (5% of households). Alameda County and the City of Livermore both have strong income profiles with household incomes of \$86,597 and \$105,279 respectively. Livermore also has a diverse range of multi-family residential housing, including large complexes. According to the 2004 *State of the City Report for Livermore*, Livermore has an inventory of 2,268 units in large multi-unit buildings with an occupancy rate of 94.5%. A recent phone survey indicated that all apartment complexes in Livermore report occupancy levels in excess of 90%, indicating a strong rental market and confirming stable occupancy trends.

In their Master Plan, the City of Livermore has projected the elderly population to increase by 49% by 2010, indicating an increased need for senior housing. According to city sources, Livermore has 15 senior care facilities set aside for the elderly with income constraints, accommodating 224 residents. A total of six major senior living facilities were identified in Livermore for all income levels. Typically the facilities have less than 100 units but most are at or near capacity. The city also reported that one senior center, Gardella Gardens, is currently under development.

The City of Livermore also has a large industrial market presence with approximately 13 million square feet. The industrial market is mainly composed of industrial facilities, warehouses, and high tech/research and development facilities. Industrial and warehouse vacancy rates remain relatively low (5%) while R&D/Flex space vacancy rates are high (32%).

The Livermore office market consists of approximately 1,157, 959 square feet, constituting about 5% of the total space in the Tri-Valley. Livermore’s office vacancy rate is in excess of 20% and price per square foot is low for the market.

The retail market of the LVD site includes the areas in and around the City of Livermore. The abundance of “Big Box” retailers and national retail brand stores are centered on Interstate 580, which is 10 miles from the campus. Most small retail developments are located in downtown Livermore; however, there is a project underway to revitalize the downtown area. Livermore has approximately 200,000 square feet of retail vacancy. Rental rates range from \$12 to \$25 per square foot, triple net.

Alameda County’s higher educational system is a mix of public and private colleges and universities with two to four year programs. The prestigious University of California-Berkeley is located in Alameda County and is the flagship of California’s public university system. Locally in Livermore, there is the Las Positas College, a two-year, public community college.

BUSINESS PLAN OPTION DEVELOPMENT

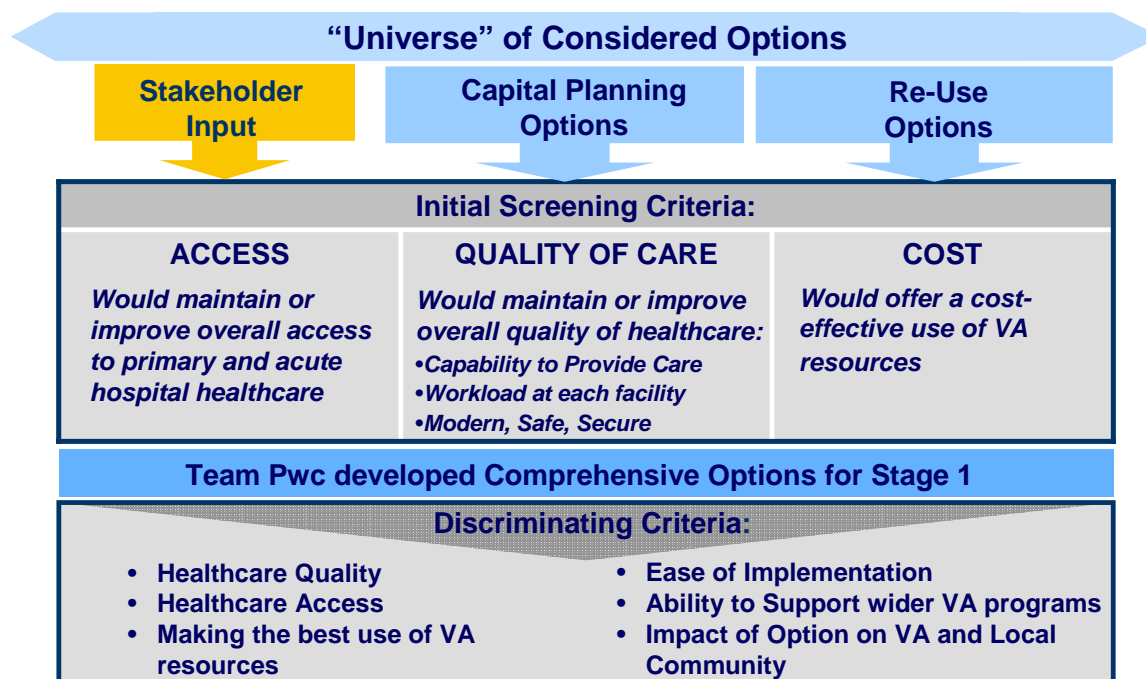
Option Development Process

Team PwC developed a set of comprehensive BPOs to be considered for LVD. A comprehensive BPO at Livermore is defined as consisting of a single capital planning (CP) option and at least one re-use (RU) option. Therefore, the formula for a comprehensive BPO would be:

$$\text{Comprehensive BPO} = \text{CP option} + \text{RU option}$$

A multi-step process was employed in the development and selection of these comprehensive BPOs to be further assessed. Initially, a broad range or “universe” of discrete and credible capital planning options and re-use options were developed by the team. These options were tested against the agreed-upon initial screening criteria of access, quality, and cost. The capital and re-use options that passed the initial screenings were then further considered to be potential options to comprise a comprehensive BPO. The teams utilized an internal panel of experts to select the most appropriate combinations of capital planning and re-use options to create a set of comprehensive BPOs. All of the comprehensive BPOs were then further assessed at more detailed level according to set of discriminating criteria.

Figure 2: BPO Development Process



Stakeholder Concerns

For the Livermore CARES Study Site, 80 stakeholder input items were received between January 1, 2005 and June 30, 2005 including comment forms (paper and electronic), letters, written testimony, oral testimony, and other forms. The greatest amount of written and electronic input was received from veterans and VA or medical center employees.

Stakeholders who submitted written and electronic input indicated that their top three key concerns centered on keeping the facility open, job loss or local economic effects, and impact on research and educational programs at the facility. Similarly, stakeholders who contributed oral testimony at the May 2005 Livermore Local Advisory Panel (LAP) public meeting indicated a key concern related to maintaining current services/facility. Many stakeholders also expressed concern regarding the effect of changing the status of LVD on its research affiliations and education programs.

In addition, a proposal from the Board of Supervisors and the residents of San Joaquin County, California was submitted to the VA. The proposal focused on moving the VA Skilled Nursing Home and Outpatient Health Care facilities, targeted by the VA CARES assessment, from their current location in Livermore, California to San Joaquin General Hospital Campus in Stockton, California. This proposal was addressed in the BPO Development Process.

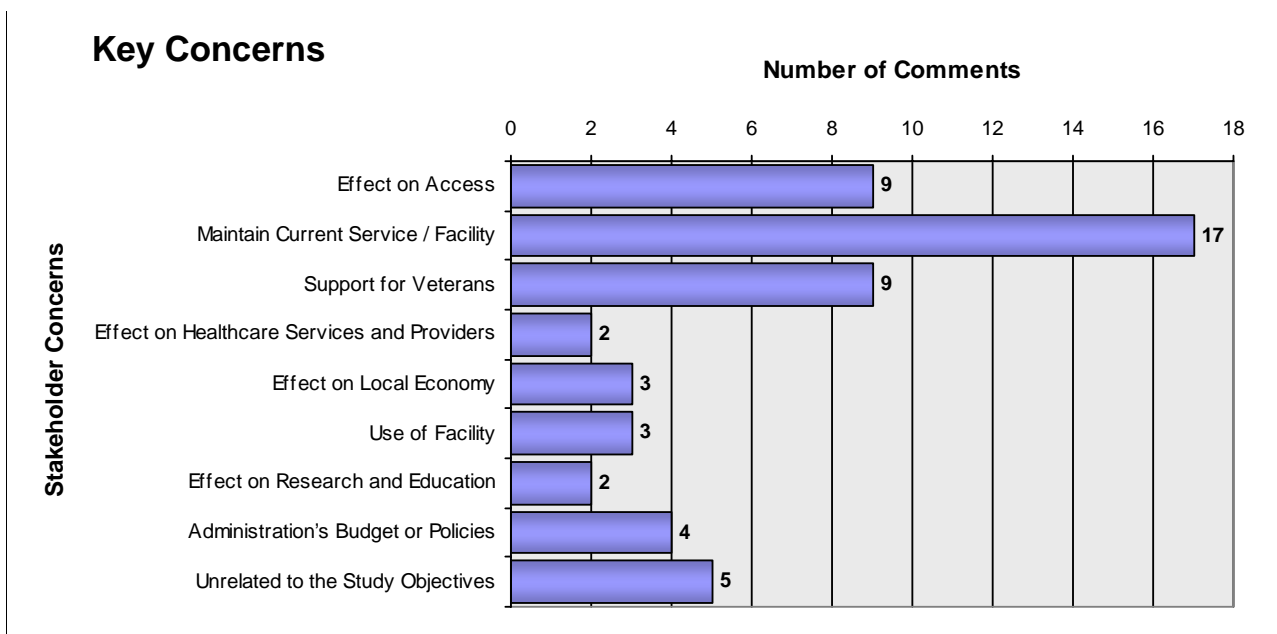
Table 1: Definitions of Stakeholder Concerns

Stakeholder Concern	Definition
Effect on Access	Involves a concern about traveling to another facility or the location of the present facility.
Maintain Current Service/Facility	General comments related to keeping the facility open and maintaining services at the current site.
Support for Veterans	Concerns about the federal government/VA's obligation to provide health care to current and future veterans.
Effect on Healthcare Services & Providers	Concerns about changing services or providers at a site.
Effect on Local Economy	Concerns about loss of jobs or local economic effects of change.
Use of Facility	Concerns or suggestions related to the use of the land or facility.
Effect on Research & Education	Concerns about the impact a change would have on research or education programs at the facility.
Administration's Budget or Policies	Concerns about the effects of the administration's budget or other policies on health care for veterans.
Unrelated to the Study Objectives	Other comments or concerns that are not specifically related to the study.

Figure 3 & 4: Analysis of Stakeholder Input

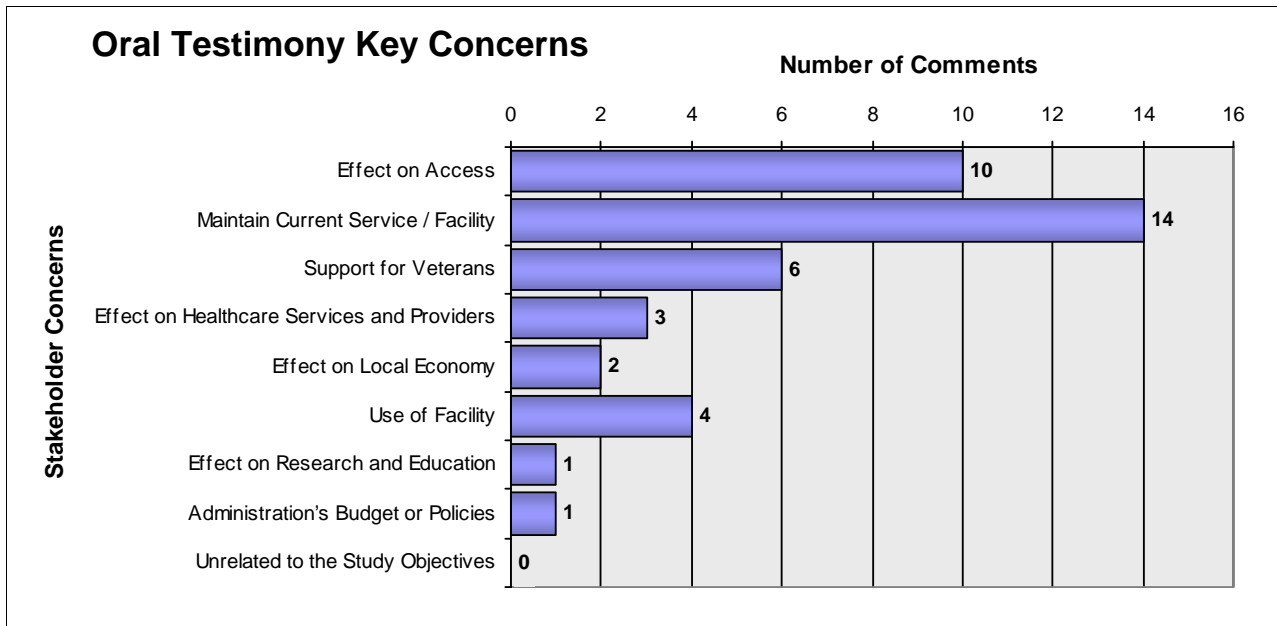
**Analysis of Written and Electronic Inputs
(Written and Electronic Only):**

The breakout of “Key Stakeholder Concerns” regarding the Livermore study site is as follows*:



**Analysis of Oral Testimony Input Only
(Oral Testimony at LAP Meeting):**

The breakout of “Key Stakeholder Concerns” that were expressed during Oral Testimony for the Livermore study site is as follows*:



* Note that totals reflect the number of times a "key concern" was raised by a stakeholder. If one stakeholder addressed multiple "key concerns", each concern is included in the totals.

COMPREHENSIVE BUSINESS PLANNING OPTIONS

Baseline Option

The Baseline is the BPO under which there would not be significant changes in either the location or type of services provided in the study site. In the Baseline BPO, the Secretary’s Decision and forecasted long-term healthcare demand forecasts and trends, as indicated by the demand forecasted for 2023, are applied to the current healthcare provision solution for the study site.

Specifically, the Baseline BPO is characterized by the following:

- Healthcare continues to be provided as currently delivered, except to the extent healthcare volumes for particular procedures fall below key quality or cost effectiveness threshold levels. In the case of Livermore, the Baseline BPO follows the Secretary’s Decision and all functions currently provided at the LVD campus, other than the nursing home services, are collocated with either/both the Palo Alto VAMC, San Joaquin and (to be developed) East Bay Clinics. Nursing home workload is held constant at 2003 levels and maintained on the LVD campus.
- Capital planning costs allow for current facilities to receive such investment as is required to rectify any material deficiencies (e.g. in safety or security) such that they would provide a safe healthcare delivery environment as required in the Secretary’s Decision.
- Life cycle capital planning costs allow for on-going preventative maintenance and life-cycle maintenance of major and minor building elements.
- Re-use plans use vacant space in buildings and/or vacant land or buildings that emerge as a result of the changes in demand for services and the facilities in which they sit.

As noted above, in the Baseline BPO all NHCU services will remain on campus with no change to location of services. After relocation of sub-acute and ambulatory services to Palo Alto and new CBOCs off campus, VA will contract for emergency medical services for the NHCU residents. The capital investments focus on the continuation of nursing home care in a renovated and enhanced building to assure a modern, safe, and secure environment without any new construction. Underutilized buildings not required for support of the NHCU on campus are vacated.

Options Not Selected for Assessment

Table 2: Options Not Selected for Assessment

Label	Description	Screening Results
Relocate the NHCU independently in East Bay portion of market	Relocate the new nursing home care unit in the East Bay area.	Option is inferior because the opportunity to collocate with the contemplated East Bay Clinic (pursuant to the Secretary’s Decision) provides greater visibility for VA services and anticipated cost efficiencies in combined facilities.
Reconstruct the NHCU	Construct new NHCU building on	Option is inferior due to the limitation on

Label	Description	Screening Results
on Parcel 2	Livermore campus as located on Parcel 2 (southeast central parcel) of site plan. New NHCU building will be a stand-alone facility with all support integrated into a single structure including central plant, engineering, kitchen, administration, etc. Vacate all LVD buildings after new NHCU is constructed. Use existing buildings and/or land for re-use.	re-use potential for the balance of the LVD campus.
Reconstruct the NHCU on Parcel 4	Construct new NHCU building on Livermore campus as located on Parcel 4 (northwest upper parcel) of site plan. New NHCU building will be a stand-alone facility with all support integrated into a single structure including central plant, engineering, kitchen, administration, etc. Vacate all LVD buildings after new NHCU is constructed. Use existing buildings and/or land for re-use.	Option is inferior due to the limitation on re-use potential for the balance of the LVD campus.

Comprehensive BPOs to be Assessed in Stage I

The comprehensive BPOs incorporate capital and re-use option components as previously described. The combinations of capital and re-use options were formulated to determine the most appropriate options for the site. They will be more thoroughly assessed according to the discriminating criteria in the subsequent sections.

Table 4: Comprehensive BPOs

Designation	Label	Description	Support for BPO Selection
<p>BPO 1</p> <p>Comprising: CP-1</p>	<p>Baseline</p>	<p>Conduct normal maintenance and upgrades necessary to provide a modern, safe, and secure environment for healthcare. NHCU will utilize existing infrastructure and campus support, including central plant, engineering, kitchen, administration, etc.</p>	<ul style="list-style-type: none"> • CP-1 represents the least level of change to current nursing home care service provision. All existing nursing home services remain on campus in facilities for which appropriate investments to render them modern, safe and secure are implemented. • Recurring maintenance costs for existing underutilized buildings will be minimized. • Supports the potential re-use/redevelopment of Parcels 1, 2 and 3.
<p>BPO 2</p> <p>Comprising: CP-2A / RU 1, 2 & 4</p>	<p>New NHCU on LVD site (Parcel 3)</p>	<p>Construct new NHCU building on Livermore campus as located on site plan (upper campus). Use existing buildings and/or land for re-use.</p>	<ul style="list-style-type: none"> • Meets stakeholder concerns by keeping NHCU services on current grounds and provides new facilities. • Replaces aging and inefficient facilities with new facilities. • Permits the re-use/redevelopment of Parcels 1, 2 and 4. • Eliminates recurring maintenance costs for aging existing buildings. • Enhances facility maintenance and management through consolidation into a smaller allocation on site.
<p>BPO 3</p> <p>Comprising: CP-2B / RU 2, 3 & 4</p>	<p>New NHCU on LVD site (Parcel 1)</p>	<p>Construct new NHCU Building on Livermore campus as located on site plan (lower campus). Use existing buildings and/or land for re-use</p>	<ul style="list-style-type: none"> • Meets stakeholder concerns by keeping NHCU services on current grounds and provides new facilities. • Replaces aging and inefficient facilities with new facilities. • Permits the re-use/redevelopment of Parcels 2, 3, and 4. • Eliminates recurring maintenance costs for aging existing buildings. • Enhances facility maintenance and management through the consolidation into a

Designation	Label	Description	Support for BPO Selection
			smaller allocation.
<p>BPO 4</p> <p>Comprising: CP-3A / RU 1, 2, 3 & 4</p>	Collocate NHCU with CBOC	Construct new NHCU in collocation with CBOC in Central Valley (e.g., Stockton, Modesto, Tracy, etc.) or new East Bay Clinic Site (TBD). Use all existing buildings and/or land for re-use.	<ul style="list-style-type: none"> • Replaces aging and inefficient facilities with new facilities. • Permits full re-use/redevelopment of the entire site, based on a variety of re-use/redevelopment opportunities. • Eliminates recurring maintenance costs for aging existing buildings. • Provides access for nursing home patients to VA ambulatory care and some outpatient specialty services. • Depending on location, may address stakeholder concerns by providing care nearer to the majority of patients and family. [Note: A complete assessment of patient access is not undertaken for Comprehensive Care project sites.] • Enhances facility maintenance and management through the consolidation onto a site with VA ambulatory service. • Decreases operational cost compared to stand-alone NHCU facility.
<p>BPO 5</p> <p>Comprising: CP-3B / RU 1, 2, 3 & 4</p>	Relocate NHCU to Independent Site	Construct new NHCU in independent new site within Livermore area, off the LVD campus. Use all existing buildings and/or land for re-use.	<ul style="list-style-type: none"> • Replaces aging and inefficient facilities with new facilities. • Permits the re-use/redevelopment of the entire site. • Eliminates recurring maintenance costs for aging existing buildings. • Depending on location, may address stakeholder concerns by providing care near majority of patients and family. • Potentially mitigates stakeholder concerns of vacating the current campus if the new NHCU is located in a market of high veteran population density, as expected.

Designation	Label	Description	Support for BPO Selection
			<ul style="list-style-type: none"> • Full re-use/redevelopment of the campus provides the VA with maximum return on assets by a non-VA user. • Existing site enhances patient rehabilitation and care, and the general grounds provide opportunities for outdoor recreation re-use/redevelopment parties.

ASSESSMENT SUMMARY

Table 5: BPO Assessment Summary

Assessment Summary	BPO 2	BPO 3	BPO 4	BPO 5
Healthcare Access	↔	↔	↔	↔
Healthcare Quality				
Modern, safe, and secure environment	↑	↑	↑	↑
Meets forecasted need	↑	↑	↑	↑
Cost Effectiveness				
Operating cost effectiveness	-	-	-	↑
Level of capital expenditure anticipated	-	-	-	-
Level of re-use proceeds	↑	↑	↑↑	↑↑
Cost avoidance opportunities	-	-	-	-
Overall cost effectiveness	-	-	-	↓↓
Ease of Implementation				
Riskiness of BPO implementation	↑	↑	↑	↑
Wider VA Program Support				
DoD sharing	↔	↔	↔	↔
One-VA Integration	↓	↓	↓	↓
Special Considerations	↔	↔	↔	↔

Evaluation System for BPOs

The evaluation system below is used to measure the impact on the Baseline BPO for all discriminating criteria in the BPOs.

Table 6: Evaluation System for BPOs

Rating for all categories except cost and overall evaluation	
↑	The BPO has the potential to provide a slightly improved state than the Baseline BPO for the specific discriminating criteria (e.g. access, quality, etc)
↔	The BPO has the potential to provide materially the state as the Baseline BPO for the specific discriminating criteria (e.g. access, quality, etc)
↓	The BPO has the potential to provide a slightly lower or reduced state than the Baseline BPO for the specific discriminating criteria (e.g. access, quality, etc).
Operating cost effectiveness (based on results of initial healthcare/operating costs)	
↑↑↑↑	The BPO has the potential to provide significant recurring operating cost savings compared to the Baseline BPO (>15%)
↑↑↑	The BPO has the potential to provide significant recurring operating cost savings compared to the Baseline BPO (>10%)
↑↑	The BPO has the potential to provide some recurring operating cost savings compared to the Baseline BPO (5%)
↑	The BPO has the potential to require materially the same operating costs as the Baseline BPO (+/- 5%)
-	The BPO has the potential to require slightly higher operating costs than the Baseline BPO (>5%)
↓	The BPO has the potential to require slightly higher operating costs than the Baseline BPO (>10%)
↓↓	The BPO has the potential to require slightly higher operating costs than the Baseline BPO (>15%)
↓↓↓	The BPO has the potential to require slightly higher operating costs than the Baseline BPO (>20%)
↓↓↓↓	The BPO has the potential to require slightly higher operating costs than the Baseline BPO (>25%)
Level of capital expenditure anticipated (based on results of initial capital planning costs)	
↓↓↓↓↓	Very significant investment required relative to the Baseline BPO (≥ 200%)
↓↓↓	Significant investment required relative to the Baseline BPO (121% to 199%)
-	Similar level of investment required relative to the Baseline BPO (80% to 120% of Baseline)
↑↑	Reduced level of investment required relative to the Baseline BPO (40%-80%)
↑↑↑↑	Almost no investment required (≤ 39%)
Level of Re-use proceeds relative to Baseline BPO (based on results of initial Re-use study)	
↓↓↓	High demolition/clean-up costs, with little return anticipated from Re-use
-	No material Re-use proceeds available
↑	Similar level of Re-use proceeds compared to Baseline (+/- 20% of Baseline)
↑↑	Higher level of Re-use proceeds compared to Baseline (e.g. 1-2 times)
↑↑↑	Significantly higher level of Re-use proceeds compared to Baseline (e.g. 2 or more times)
Cost avoidance (based on comparison to Baseline BPO)	
-	No cost avoidance opportunity
↑↑↑	Significant savings in necessary capital investment in the Baseline BPO
↑↑↑↑↑	Very significant savings in essential capital investment in the Baseline BPO

Overall Cost effectiveness (based on initial NPC calculations)	
↓↓↓↓	Very significantly higher Net Present Cost relative to the Baseline BPO (>1.15 times)
↓↓↓	Significantly higher Net Present Cost relative to the Baseline BPO (1.10 – 1.15 times)
↓	Higher Net Present Cost relative to the Baseline BPO (1.05 – 1.09 times)
-	Similar level of Net Present Cost compared to the baseline (+/- 5% of Baseline)
↑	Lower Net Present Cost relative to the baseline (90-95% of Baseline)
↑↑↑	Significantly lower Net Present Cost relative to the Baseline BPO (85-90% of Baseline)
↑↑↑↑	Very significantly lower Net Present Cost relative to the Baseline BPO (<85% of Baseline)

Acronyms

AMB	Ambulatory
BPO	Business Plan Option
CBOC	Community Based Outpatient Clinic
CIC	CARES Implementation Category
DoD	Department of Defense
IP	Inpatient
LAP	Local Advisory Panel
OP	Outpatient
MH	Mental Health
VA	Department of Veterans Affairs
VACO	VA Central Office
VAMC	Veterans Affairs Medical Center
VISN	Veterans Integrated Service Network

Definitions

CARES (Capital Asset Realignment for Enhanced Services) – a planning process that evaluates future demand for veterans’ healthcare services against current supply and realigns VHA capital assets in a way that results in more accessible, high quality healthcare for veterans.