Capital Asset Realignment for Enhanced Services (CARES)

Stage I Report
Site: Livermore

June 2006

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VA has also contracted with another government contractor, S&S/ACG Joint Venture, to develop re-use options for inclusion in this study. S&S/ACG Joint Venture issued its report, *Technical, Financial and Legal Assistance and Support for Property Re-use/Redevelopment Plans, Phase 1 Report, Data Collection and Planning Analysis, VA Medical Center, Livermore, CA,* and as directed by VA, PwC has included information from its report in the following sections in this report: Recent and Planned Capital Improvements, Outleased Areas/Use Agreements, Real Estate Market, and Re-use Potential. PwC 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 S&S/ACG Joint Venture.

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.

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1.0 Introduction

CARES (Capital Asset Realignment for Enhanced Services) is the Department of Veterans Affairs' (VA's) effort to produce a logical, national plan for modernizing healthcare facilities. The objective is to identify 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 owned by VA. The Secretary's Decision Document of May 2004 called for additional studies in certain geographic locations to refine the analyses developed in Phase I of the CARES planning and decision-making process. Team PricewaterhouseCoopers (Team PwC) is assisting VA in conducting VA CARES Business Plan Studies at 17 sites around the United States as selected by the Secretary, which include site-specific requirements for Healthcare Delivery Studies, Capital Plans, and Re-use Plans.

The Livermore Division of California's Palo Alto Health Care System, is one of the CARES study sites and includes capital planning and re-use planning studies, but not healthcare delivery. The Secretary's Decision Document of May 2004 makes the following decisions for Livermore:

- VA will realign the Livermore campus to improve access to patient care by moving services closer to where patients live and by collocating care. The realignment will transfer outpatient care to an expanded Central Valley clinic and to a new East Bay clinic.
- Sub-acute and low-volume specialty services currently provided at Livermore will be moved to the Palo Alto VAMC where they will be collocated at a tertiary care facility.
- VA will maintain access to services locally by retaining a nursing home presence in Livermore through construction of a new facility.
- VA will develop a referral agreement to ensure it is able to effectively respond to emergent situations.
- VA will develop a Master Plan for the Livermore campus that will include a careful study of the appropriate size and location of the new nursing home including a cost-effectiveness analysis to ensure maximum effective use of VA resources.

VA defined the Livermore "area" as communities in the East Bay (the west of Livermore), through the Tri-Valley Area (including the City of Livermore), and east into the northern Central Valley (San Joaquin).

2.0 Purpose of this Report

The CARES studies are being performed in three stages: an initial planning phase and two phases centered on option development and selection. This report presents the results of Stage I (option development). In Stage I, Team PwC develops and assesses a broad range of potentially viable business plan options (BPOs) that meet the forecast healthcare needs for the study sites. Based upon an initial analysis of these BPOs, Team PwC recommends up to six BPOs to be taken forward for further development and assessment in Stage II. VA decides which BPOs should be studied further in Stage II. During Stage II, a more detailed assessment is conducted

including a financial analysis with refined inputs and consideration of second-order impacts such as the implications on the community. After Stage II, Team PwC recommends a single BPO to the Secretary.

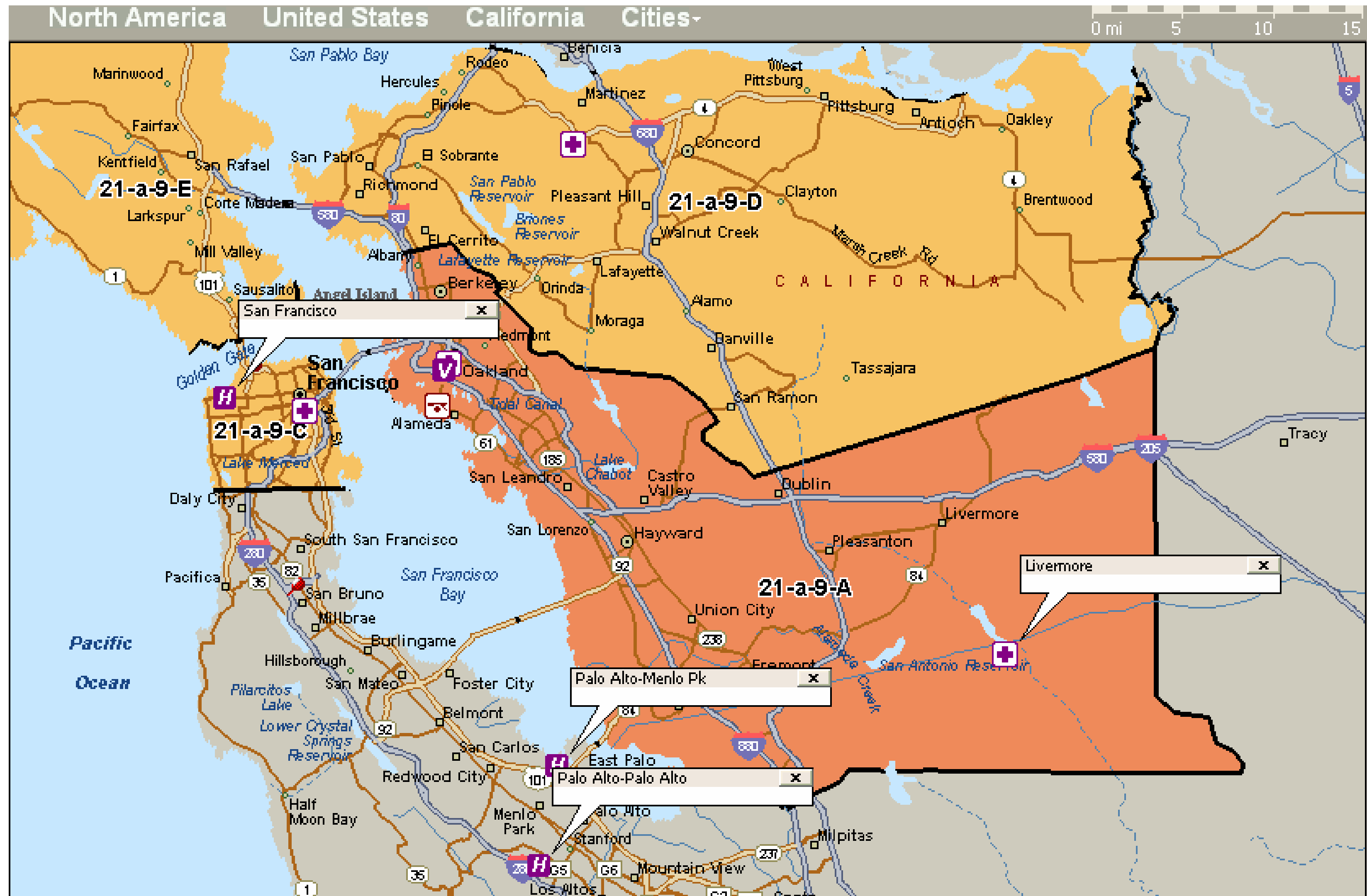
Stakeholder input from veterans, veterans advocates, and the community play an important role in BPO development and assessment. A Local Advisory Panel (LAP) has been established at each study site to ensure veterans' issues and concerns are heard throughout the study process. Veterans' and other stakeholder views are presented at a series of public meetings and through written and electronic communication channels.

Team PwC has prepared this report in accordance with the CARES Business Plan Studies Methodology and Statement of Work (SOW) for the CARES studies. The SOW calls for submission in Stage I of a range of BPOs that are at the concept stage and represent feasible choices that have the potential to meet VA objectives. In Stage II, Team PwC will further develop selected BPOs into technical data driven analyses and a recommended primary BPO.

3.0 Site Overview

The Livermore Veterans Affairs Medical Center (VAMC) began operations in 1929 as a tuberculosis hospital. A main hospital was constructed in 1949 and a 120-bed nursing home care unit (NHCU) was constructed in 1982. In 1995, the Livermore VAMC was integrated into the VA Palo Alto Health Care System (VAPACHS) and was renamed Livermore Division. The Livermore Division is located just south of the City of Livermore, California within 45 miles of San Francisco and 30 miles of Oakland. The Livermore Division is in Veterans Integrated Service Network (VISN) 21, which comprises six markets: Pacific Islands, North Coast, South Coast, North Valley, South Valley, and Sierra Nevada. The Livermore facility is in the South Coast market, but also serves a number of veterans located in the East Bay counties of the North Coast market. The Livermore Division’s catchment area includes part of Alameda County which is in the south and managed by VAPACHS and the northern Central Valley Counties (San Joaquin, Stanislaus, Tuolumne, Calaveras) managed by the Northern California Health Care System.

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



Current Healthcare Provision

The Livermore Division’s mission is to provide outpatient primary care, specialty care, mental health services, sub-acute care, and nursing home care to veterans in Southern Alameda County and the Central San Joaquin Valley. Today, the Livermore Division provides outpatient and nursing home care for veterans residing in Alameda and Central Valley counties. In Alameda County, there are 90,401 veterans and 88,319 veterans live in counties in the Central Valley.* The Livermore Division is authorized for 150 inpatient beds, of which 120 are classified as extended care and 30 as sub-acute. In FY 2004, nursing home care experienced 43,800 bed days of care with an inpatient average daily census of 120.

A number of outpatient clinics in surrounding counties provide primary care and mental health services to veterans in the Livermore catchment area. In Alameda County, there are two outpatient clinics in the cities of Livermore and Oakland. Central Valley Counties operate three outpatient clinics in Modesto, Stockton, and Sonora. Based on the Secretary’s Decision, a new Community Based Outpatient Clinic (CBOC) is to be developed in the East Bay, which has one of the largest veteran populations in the Livermore Division’s catchment area.

Facilities

The Livermore Division consists of 112 acres in a rural area. It is in a fast growing, high-income area that is located approximately ten miles from Interstate 580, which goes west to the Bay Area and east to join Interstate 5 in the Central Valley. The primary mode of transportation to Livermore Division is by automobile. No scheduled public bus service is available to the site; however, special modes of transport are available from commercial carriers and Veterans Service Organizations (VSOs). Approximately 34 acres (about 30%) of the total 112 acres are not suitable for development due primarily to topographical constraints.

Currently, the Livermore Division campus is comprised of 13 buildings; 10 permanent, including connecting corridors, comprising 215,198 gross square feet, and three temporary structures comprising 9,900 gross square feet. The distribution of buildings is depicted in Figure 2. The buildings are described in Table 1. The buildings are in a park-like setting.

The buildings on campus range in age from 15 to 81 years old. There are no listed historical buildings or parcels located on Livermore Division's campus. Some of the buildings were built over 50 years ago but most are not considered structurally or historically significant. However, Alameda County has indicated the main hospital building is a structure of “historical interest” with no specific definition. At this time, neither the site nor the buildings are listed as historical by any local, state or federal agency. Many (10) buildings are considered eligible for historic designation as they were constructed prior to 1956. Building 62 is the original, main hospital structure and is located in the center of the campus. Building 90 houses the current skilled

* Source: FY 03 Veteran Population Database.

nursing facility and buildings 88, 69, 64, and 6 are used for administrative, engineering and logistical functions. The campus has 454 vehicle parking spaces.

The main facilities are located on the western portion of the site. To the east of the site are approximately 18 acres that were deeded to the Livermore Area Park and Recreation District to extend the Arroyo Del Valle Park southward. Located east of the Livermore Division is Wente Vineyards, which encompasses over 2,000 acres, the largest vineyard in the Livermore Valley area.

Facilities Condition

The buildings on campus appear well maintained. The nursing home facility (Building 90) and the existing support buildings (Buildings 88, 69, 64, and 6) have received ratings between 4.2 and 5 on a scale of "5" for critical values such as accessibility, code, functional space, and facility conditions.[*] Campus facilities associated with nursing care require various upgrades to comply with current building codes and VA standards of care to be considered modern, safe, and secure.

Mechanical systems are reported to be in good condition, but will require phased replacement and upgrades over the next 20 years. Steam is provided by an on-site boiler facility. Gas service is provided via a line that runs through the property and connected at the boiler facility. Electric service is generated by a 12KV system that is primarily above ground. Water is received from a public waterline and the system is equipped with an earthquake valve and fire hydrants.

The Livermore Division has its own self-contained sewage and sewage treatment facilities, located on the eastern portion of the site. A network of sewer lines connects campus buildings with the treatment center. The Livermore Division is outside the City of Livermore's sewage service district. The county would need to extend the sewer line to the campus if this parcel was made available for re-use. A sewage disposal feasibility study was conducted in 1984 to discuss connection routes to the city's sewer system but has not been implemented.+

[*] Source: VA Capital Asset Index

[+] Phase 1 report on reuse/redevelopment of LVD, S&S/ACG Joint Venture, May 2005.

Figure 2: Existing Building Distribution

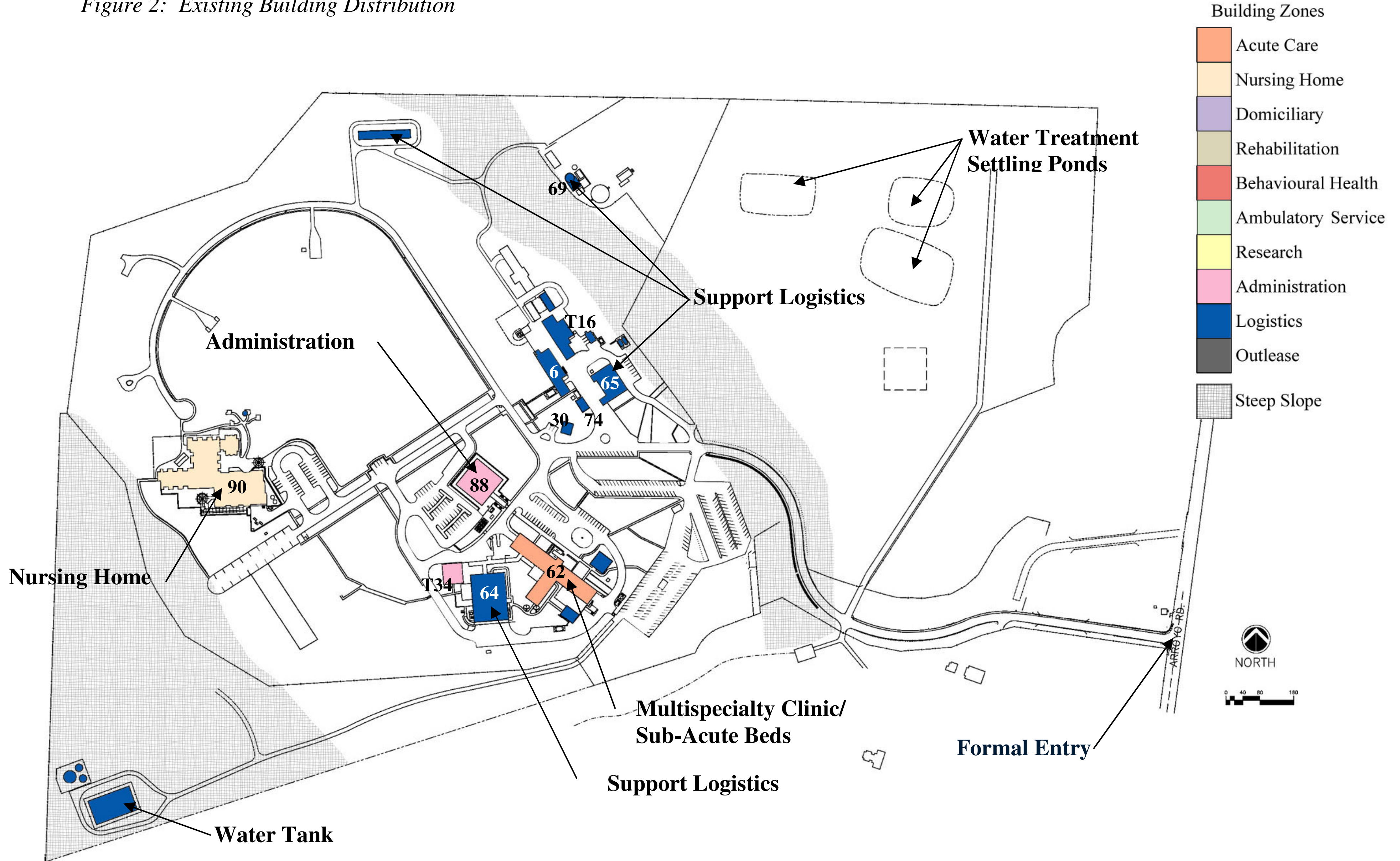


Table 1: Existing Departmental Distribution by Building[*]

Building	Floor	Function	Year Built	Year Renovation	Floors	Seismic Standards Apply	Building Total GSF
6		Boiler Plant	1924		1	X	6,300
30		Resident Housing	1930		1	E0	1,035
62		Clinical/Inpatient Med	1949	1996	7	X	86,280
	B	Radiology, Linen Service & Environ. Management	1949	1996			
	1	ACS-Specialty Care, Pharmacy, Eye Clinic & ACS-Urgent Care	1949	1996			
	2	Dental, Nuclear Medicine, Pathology, Pulmonary, Rehab. Med. & Radiology	1949	1996			
	3	ACS-Primary Care & ACS-Speciality Care	1949	1996			
	4	ACS-Primary Care, Beds HOPTEL & Mental Health Clinic,	1949	1996			
	5	30 Beds Intermediate & 10 Beds NHC	1949	1996			
	6	Engineering, Rehab. Med. & SPD Service	1949	1996			
63		Incinerator building			1	X	600
64		Administration	1951		2	X	27,400
65		Administration	1953		2	X	19,200
69		Engineering	1952		1	X	900
74		Engineering	1930		1	X	883
88		Administration	1978		2	E0	19,900
90		Nursing Home Care Unit	1982		2	X	48,700
T10		Engineering	1930		1	X	1,200
T16		Engineering	1946	1972	1	X	5,100
T34		Temporary Bldg	1990		1	X	3,600
CC		Connecting Corridor 62/64	1940		2		4,000

Seismic Definitions

EO Non-Exempt

X Exempt

[*] *Source:* VA Capital Assets Inventory (CAI) database

Seismic Considerations[+]

Livermore Division is located in Alameda County, which is a highly seismic zone. The Alameda County ground is a complex system of folds and faults. All existing Livermore Division buildings constructed before the adoption of the 1975 National Model Building Codes (H-08-8) are considered exceptionally high risk unless they meet the stipulated exempt criteria (see Table 1). Building 30 (resident housing) and Building 88 (administration) are not exempt from the building code and would require seismic upgrades to comply. Though Building 90 is indicated as compliant with seismic design criteria within the CAI database, buildings designed and constructed in the early 1980s would not typically comply with current standards. While buildings of this vintage are not typically collapse hazards, enough damage could occur to render the building un-occupiable after a major seismic event. Further analysis may be required to determine potential risk.

The Livermore Division's close proximity to potentially active faults warrants further investigation to determine if any new construction may be located on or near a fault. Review of existing maps of fault locations is necessary. Based upon the findings of the map review, additional investigation including fieldwork and/or other geologic investigation may be necessary to avoid areas with potential for surface fault rupture. If applicable, it is recommended that special measures be incorporated into the project design to reduce the potential for damage due to surface fault rupture.

Environment[*]

There are several environmental considerations identified for the Livermore campus. These relate to prior use of the Livermore Division as a tuberculosis hospital, flood zones, drainage, underground storage tanks, hazardous materials, and asbestos.

The Livermore Division opened as a tuberculosis hospital in 1925. No detailed information is available concerning the use or disposal of hazardous materials, substances, and wastes associated with the operation of the tuberculosis hospital. Building demolition took place when the site was converted from a tuberculosis hospital to the VAMC in 1950. Most of the demolished building materials are believed to have been disposed of near the location of the existing wastewater treatment facility (percolation ponds).

Flood zones have not been delineated on the subject property. However, according to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Community Panel No. 060001 0220A for Alameda County, California, the area surrounding the site is within Flood Zone C.

[+] Source: S&S/ACG Joint Venture Report, *Technical, Financial and Legal Assistance and Support for Property Reuse/Redevelopment Plans, Phase I Report, Data Collection and Planning Analysis, VA Medical Center, Livermore, California*

[*] Ibid.

The United States Geological Survey (USGS) Livermore Quadrangle Map shows a naturally occurring drainage feature, down slope of the main Livermore Division campus in proximity to the wastewater treatment facility. Although not identified on the National Wetland Inventory, (NWI Map), wetlands may be associated with the tributary to Arroyo Del Valle and the drainage feature on the south side of the property.

In November 1990, two 12,000-gallon #5 fuel oil underground storage tanks (UST) were removed from the firehouse site. Several holes were observed in the tanks upon removal from the ground. Soil impact was observed and samples were taken immediately. Groundwater was encountered and, in order to facilitate the excavation, approximately 20,000 gallons of groundwater were removed.

Based on information provided by Livermore Division Engineering staff, a total of 12 USTs containing hazardous materials were formerly located on the property. Ten of the USTs have been removed and two closed in place. Based on review of information provided by the Livermore Division, there are no existing underground storage tanks on-site. During the removal of the tanks, several discharges were observed.

According to VA furnished information, there is evidence that asbestos is present in three buildings and a portion of the underground piping.

Outleased Areas/Use Agreements[*]

Livermore Division does not have any existing outleases or use agreements with other entities.

Current and Forecast Investment Requirements

The Secretary's CARES Decision Document directs the Livermore Division to move all existing services to other facilities, with the exception of the NHCU. A moderate amount of capital investment will be necessary under the baseline to bring the NHCU building up to modern, safe, and secure standards. Included in this are renovation costs, as well as periodic and recurring maintenance costs. According to VA[+], there is a need for $6.3 million for facility maintenance and repair. Ongoing maintenance and scheduled upgrades of the existing NHCU and support facilities will be required until construction of a new NHCU is completed. The total cost to upgrade facilities to modern, safe and secure standards will be determined in Stage II.

Summary of Current Surplus / Vacant Space

The Livermore campus is comprised of approximately 112 acres of land area. Currently, approximately 30 acres of land are vacant around the nursing home, with about 20 acres to the north (at the loop road) and about ten acres to the south. The CAI database indicates that there is currently only 650 square feet of vacant building space on the campus.

[*] Ibid.

[+] Capital Asset Inventory (CAI) database.

At this campus, space requirements for the planning horizon of 2023 are for the new NHCU building only, as all other service lines are to be relocated off the campus according to the Secretary's Decision. Therefore, the existing total building gross square footage of 225,098 is surplus.

Nursing home square footage projections are to be based on a 120-bed facility. It should be noted that while the 120-bed requirement is flat between 2003 and 2023, the associated square footage needed to modernize the facility will increase. The nursing home square footage projection of approximately 70,000 gross feet is based on analysis performed by Team PwC capital planners. The square footage is for a typical stand-alone 120-bed nursing home based on current VA Standards and will be validated in Stage II of this study.

Re-Use[≠]

This section describes the real estate market and re-use potential of the Livermore campus.

Real Property

The re-use contractor's market sector assessment focuses on the hospitality, industrial, institutional, office, residential, and retail real estate sectors. Within each sector, historical market dynamics, current inventory and demand, projected future demand, market activity and comparable developments in the marketplace that may impact its viability for the possible re-use or redevelopment of the Livermore Division campus were researched.

Hospitality

The primary attraction to the Livermore area includes its scenery and recreational destinations including wineries and golf courses. Livermore is one of the oldest winemaking regions in California. There are 30 wineries located in Livermore that offer a variety of events throughout the year. The Livermore Division is adjacent to Wente Vineyards and Golf Course, a family owned and renowned winery established in 1883.

The market area for a destination resort in Livermore is defined by its potential direct competition in the region. The market generally includes destinations that are considered "close-in getaways" - approximately one hour or less from the San Francisco, Oakland, and San Jose airports. The market area encompasses the Napa/Sonoma Valley and the region east of the Bay Area which includes Livermore and is considered the Wine Country Region of California.

The re-use contractor performed a survey of destination resorts in the region. The City of Livermore has approximately 15 national chain hotels and one resort and spa center called the Purple Orchid Inn Resort, Spa, Conference and Event Center. The Purple Orchid Inn is the first project to be developed under the *1993 South Livermore Plan*, a partnership between agriculture

[≠]Source: S&S/ACG Joint Venture Report, *Technical, Financial and Legal Assistance and Support for Property Reuse/Redevelopment Plans, Phase I Report, Data Collection and Planning Analysis, VA Medical Center, Livermore, California.*

and development. The region has several destination resorts that are primarily located in the Wine Country Region.

Industrial

For the Livermore Division, the market area for regional industrial space is the Tri-Valley area. Within this Tri-Valley market there is approximately 17,592,300 square feet of available industrial space. The three distinctive markets that make up the bulk of the industrial inventory are Dublin, Livermore, and Pleasanton, the key communities comprising the Tri-Valley area. The narrower Livermore industrial market consists of approximately 13,056,500 square feet, positioning Livermore as the largest industrial market in the Tri-Valley area.

The industrial inventory of the Tri-Valley market is composed of 57% industrial facilities, 37% warehouse, and 5% high tech/R&D facilities. For the most part, the industrial market is comprised of larger, owner-user facilities and small- to mid-size manufacturing facilities. The City of Livermore has a large industrial market presence.

Significant new industrial development is also underway according to Permits Office records. Industrial and warehouse vacancy rates remain relatively low in all of the Tri-Valley markets, while Research & Development (R&D)/Flexible Use (Flex) space vacancy is high at almost 32%. The high R&D/Flex space vacancy is attributable to a not fully recovered technology and research development market in the greater San Francisco Bay area.

Institutional

Alameda County’s higher education system is a mix of private colleges and universities as well as a public four-year college and public two-year college, both of which are part of the California State School System. Two-year, four-year, and graduate degrees are offered in many subject areas including engineering, business, education, computer science, public administration, health sciences, and fine arts. Located in Alameda County, the University of California (UC) - Berkeley is the oldest of the UC campuses, and serves as the flagship of California's public university system. Locally, in Livermore, there is the Las Positas College, a two-year, public community college.

Healthcare providers in Alameda County include eight hospitals in various locations throughout the county. Valley Memorial Medical Center, a regional healthcare system, is located in Livermore.

Office Space

The market area for office space is the Tri-Valley area, and is comprised of approximately 22,100,000 square feet. The three distinctive markets that make up the bulk of the office inventory are San Ramon, Dublin, and Pleasanton. These three submarkets consist of approximately 18,000,000 square feet. The smaller Livermore office market, also in the Tri-Valley market area, consists of approximately 1,158,000 square feet, constituting about 5% of the total space in the Tri-Valley market. The complete Tri-Valley office market attracts large

corporate users who have relocated from traditional headquarters to the suburban market located east of San Francisco, which is due in large part to the availability of housing, qualified workers, and easier commute patterns. According to the re-use contractor, during the last 24 to 30 months, the Tri-Valley markets have suffered from increased vacancy and reduced rental rates. These trends have been common to the greater San Francisco Bay Area.

In terms of vacancy, the leading submarkets in the Tri-Valley area are Alamo, Danville, and Dublin. In terms of price per square foot, the leading submarkets in the Tri-Valley area are Alamo, Danville, and San Ramon. Overall, Livermore has the weakest office market with vacancies in excess of 20% and a price per square foot which is at the lower end of the market.

The analysis of recent sales reveals that office buildings are trading in the $120 to $250 per square foot range for properties. Properties located in Pleasanton and Dublin, the two closest markets to Livermore, command higher prices because of their proximity to the San Francisco Bay area and access to public transportation nodes, including the regional Bay Area Rapid Transit (BART) rail system.

The City of Livermore has had only one major transaction recently, Independence Plaza I, which transferred from Independence Plaza, Inc. to Yang Bioscience, LLC in March 2005. The next closest sale to the subject was an office property located at 5890 Stoneridge Drive which transferred for $173 per square foot in July 2004.

Residential: Apartments

Livermore has a diverse range of multifamily residential housing including large complexes and many smaller rental housing options. Multi-family housing is found within the city, primarily on major streets such as East Avenue, Murrieta Boulevard, and Portola Avenue.

Livermore is among the costliest housing markets in the nation. The City of Livermore has long passed the national average of home values, apartment/condo conversions, and residential development. Mentioned previously, the year-to-date median sale price in the City of Livermore is $640,061, representing a 52% increase in home values from the year 2000.

The development of apartment housing has been limited in Livermore. Coupled with a strong housing market and low interest rates, developers have focused their efforts on the construction of for-sale housing. The City of Livermore has recognized its increasing need for affordable housing to meet a variety of income levels and household types and have put incentive programs in place for this type of development. According to the City of Livermore, affordable housing is offered for rent to qualified lower income families whose annual household income does not exceed 60% of the median income of Alameda County.

According to the *State of the City Report for Livermore*, published in 2004, Livermore has an inventory of 2,268 units in large multi-unit buildings with an occupancy rate of 94.5%, which is slightly higher than the Tri-Valley region rate of 93.6%. Livermore's average apartment rents are slightly lower than the Tri-Valley average of $1,323 per month. City statistics indicate that renters constitute 30% of households in the city.

The re-use contractor compiled an inventory of large apartment complexes in the City of Livermore to ascertain market conditions. The re-use contractor conducted a phone survey to determine if occupancy levels were consistent with the rates reported in the 2004 *State of the City Report*. All apartment complexes reported occupancy levels in excess of 90%, indicating a strong rental market and confirming stable occupancy trends. Rental rates are typically $745 to $1,095 per month for single-bedroom apartments and upwards to $1,515 for three-bedroom apartments.

Senior Housing

In its Master Plan, the City of Livermore has projected the elderly population to increase by 49% by 2010, indicating an increased need for senior housing serving a population aged at or over 65 years.

Livermore has a diverse range of senior housing options including mid-size complexes and many smaller senior housing options. According to City sources, Livermore has 15 senior care facilities set aside for seniors with income constraints, accommodating 224 residents.

The City reported that one senior center, Gardella Gardens, is currently in development. Research identified six major senior living facilities in Livermore with all income levels eligible. Typically, the facilities had less than 100 units. A phone survey conducted to determine occupancy found that all facilities are at or near full capacity.

Retail

The retail market area of the Livermore Division site includes the areas in and around the City of Livermore. The abundance of “big box” retailers and national retail brands are centered along Interstate 580. The majority of smaller retail developments are located in the downtown area of Livermore. There is currently a project underway to revitalize much of the downtown area in order to attract and retain business.

The City of Livermore tracks available retail space in the market. According to statistics provided by City sources, Livermore has approximately 200,000 square feet of retail vacancy. Total retail space is not tracked in Livermore, but the vacancy may account for about 10% of the market, according to a broker familiar with retail in Livermore. Rental rates for retail in the area range from $12 to $25 per square foot, triple net.[*]

Sales in and around the vicinity of the City of Livermore have been trading as high as $293 per square foot. According to Real Capital Analytics, the sale of the Las Positas Center in Livermore in October of 2004 traded for $493 per square foot. Recently, however, per square foot prices have averaged closer to $157. Capitalization rates for recent transactions range anywhere from 6% to 7.18%.

[*] A lease where the tenant is solely responsible for all of the costs relating to the asset being leased. Examples are any upgrades, utilities, etc.

Agriculture

In Livermore, the agricultural use that would generate the most revenues for the land is vineyards. In 1992, the *South Livermore Valley Plan* was enacted to protect the regional vineyards. Today, over 5,000 acres of vineyards and 32 wineries call Livermore home and the number continues to grow. Increasing vineyard acreage is a stated objective of the Valley Plan.

Regulatory Environment

Title reports and title abstracts were not available for review. The re-use contractor's analysis assumes that the title is either clear of any encumbrances or will be clear of any encumbrances that would impede development.

The site has a 30-foot wide easement with the State of California that has been identified crossing the northeastern portion of the Livermore Division property for a 60" inch water line. The water line is located under the eastern portion of the site, an area where retention ponds are located. The property does not appear to be adversely affected by the existing easement.

For re-use purposes, since Livermore Division is located outside Livermore's city limits, the site is under the jurisdiction of Alameda County. Under the County Zoning Ordinance (Title 17 of the Alameda County General Code), the property would be zoned A-CA (Agriculture, Cultivated Agriculture). The base zoning is Agriculture (A) with a Cultivated Agriculture (CA) overlay.

The Alameda County zoning regulation states that, "Agricultural districts… are established to promote implementation of general plan land use proposals for agricultural and other non-urban uses, to conserve and protect existing agricultural uses, and to provide space for and encourage such uses in places where more intensive development is not desirable or necessary for the general welfare." The CA overlay district "is established to be combined with the A district to implement the land use policies and standards for the Vineyard Area of the South Livermore Valley Area Plan."

However, the City of Livermore does have control over development surrounding the campus. The City of Livermore has developed a Land Use Element called the General Plan to shape the future physical development in Livermore and surrounding areas. The General Plan includes the creation of the Urban Growth Boundary (UGB) that controls growth within its borders. Although Livermore Division's property is non-contiguous to the UGB, any development at Livermore Division would require an amendment to the City's General Plan. Furthermore, large scale developments have to be in compliance with the National Environmental Policy Act (NEPA) to determine the impacts of development on the environment and the community (e.g., traffic, utilities, pollution, and environment).

Key Observations from Other Government Contractor

Based on the initial analysis of attributes and constraints of the Livermore campus, combined with known private interest in the property, this project is likely to generate a large number of bidders and has a high probability of success for enhanced-use lease opportunities.

Potential for Non-VA Re-use/Redevelopment

Figure 3 illustrates the parcels of land on the current Livermore Division campus. (Note that these parcels will be referenced in the BPO Development section of this report and in the corresponding re-use options for assessment in Stage I.) Parcels have been identified as discrete portions of the campus with relatively unique characteristics based on location, topography and, importantly, re-use/redevelopment potential. For Livermore, four parcels are identified on the site plan below.

Figure 3: Map of Campus Parcels

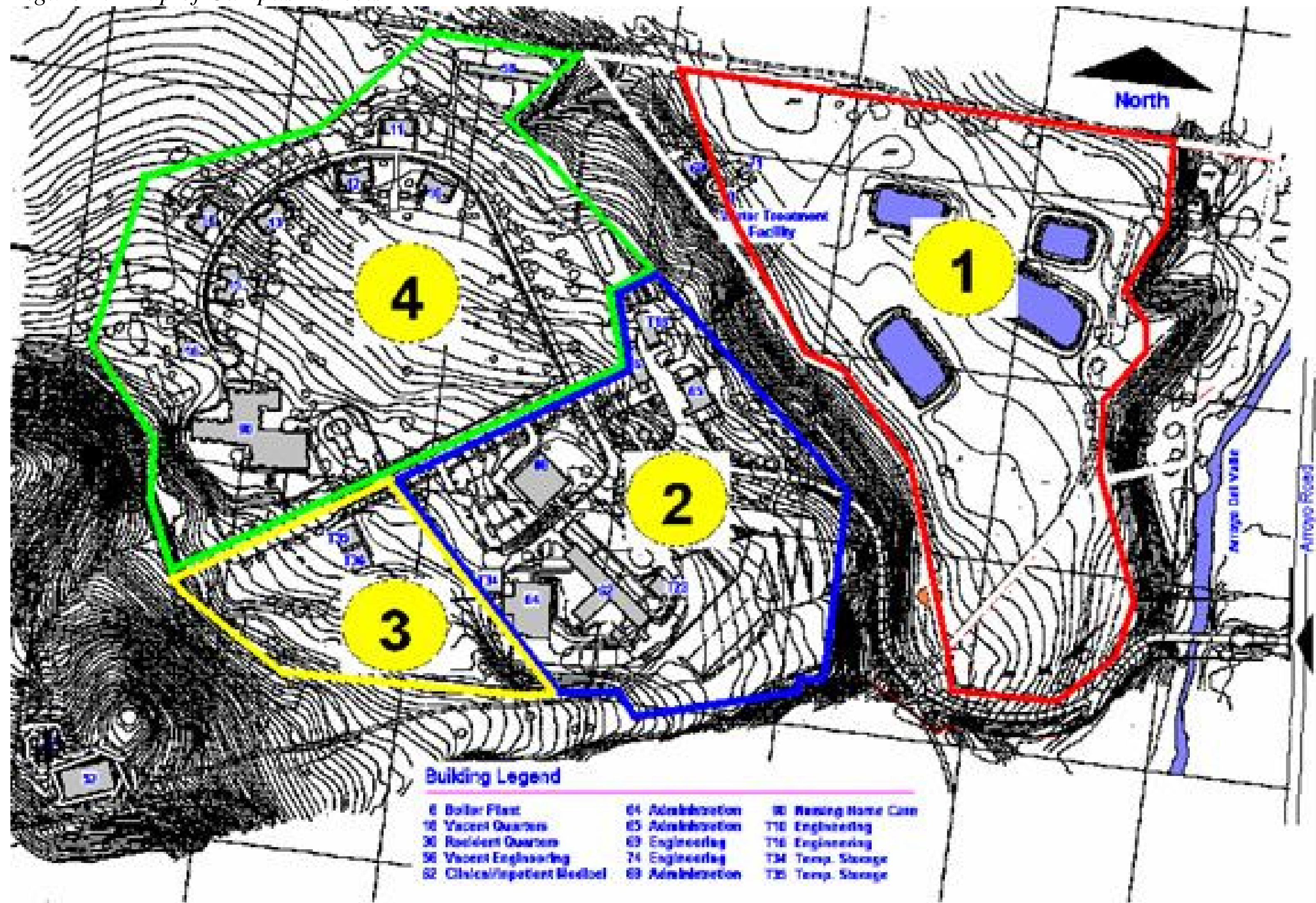


Table 2 identifies the discrete parcels for potential re-use based on implementation of the capital planning options prepared by Team PwC.

Table 2: Re-use Options, Livermore

Name	Description	Acreage	Re-use Potential
Parcel 1	This parcel is located on the eastern portion of the campus, just to the north of the main entrance. It is a flat parcel. It is currently encumbered with the campus waste water treatment facility, which includes four percolation ponds. The waste water treatment facility spreads out over the majority of Parcel 1. Additionally, there may be a landfill that includes the debris from former facilities destroyed by an earthquake. There is no documentation or visual evidence of a landfill and/or any old demolition materials on the lower portion of the site. The sewage treatment facility currently located on Parcel 1 services the entire Livermore campus. No local sewage connection exists. The county would need to extend the sewer line to the campus if this parcel was made available for re-use. Low potential for re-use because of remediation issues.	25	Senior Living, Institutional (e.g., educational), Destination Hospitality, Recreational
Parcel 2	This parcel encompasses the majority of the existing improvements on the campus. It is a relatively flat parcel with little room for additional development. Surface parking for the improvements occupies the majority of the land not encumbered by existing structures. Medium potential for re-use because of level topography, good vehicular access but high redevelopment costs for existing buildings.	20	Senior Living, Institutional (e.g., educational), Destination Hospitality
Parcel 3	This parcel is situated behind Parcel 2 in the southwest portion of the campus. It is a relatively small parcel constrained to the west by a steeply ascending hill where the water storage facilities reside. It has the steepest average grade of the parcels with no existing improvements. Medium potential for re-use because of steep upward slope and isolation from existing access points.	8	Senior Living, Institutional (e.g., educational), Destination Hospitality

Name	Description	Acreage	Re-use Potential
Parcel 4	The final identified parcel encompasses the northwest portion of the campus. It is a relatively flat parcel and includes the existing NHCU (Building 90). The parcel formerly contained the campus golf course, but now serves only as open space. Its significant size, expansive views, and minimal development constraints make it ideal for new development. High potential for re-use because of level topography and vacant land, but limited vehicular access	25	Senior Living, Institutional (e.g., educational), Destination Hospitality

If the decision is made to locate the new NHCU on the existing Livermore Division campus, the location of the new facility on the site will play an important role in the ability to successfully market the remainder of the site. If an off-site location is selected for the new NHCU, it would make the entire campus available for non-VA re-use and redevelopment.

The area surrounding Livermore Division is predominantly undeveloped. Controlled development has been engrained in the local and county zoning laws that encourage agricultural uses and discourage any development in unincorporated Eastern Alameda County. The re-use potential is not as obvious as if it were to reside in an urban area with strong real estate fundamentals, but the potential for a range of private and institutional redevelopment uses is significant.

In the re-use contractor's experience, sites with similar characteristics attract interest not from the typical market participants, such as major office and residential developers, but from entities with a unique use or multiple uses for the property. These market-related matters will be addressed in Stage II when the re-use contractor will explore typical and non-typical development options.

4.0 Overview of Healthcare Demand and Trends

Veteran enrollment and utilization for healthcare services was projected for 20 years, using 2003 data as supplied by VA as the base year and projecting through 2023. Projected utilization data is based upon market demand allocated to the Livermore facility. The following section describes these long-term trends for veteran enrollment and utilization for healthcare services at the Livermore Division.

Enrollment Trends

The Livermore Division is located in the South Coast market of VISN 21. Although the facility is located in the South Coast market, the campus draws a large number of enrollees from the North Coast market. A summary of the enrollment totals for both markets is provided in Tables 3 and 4. The South Coast market (Table 3) contains approximately 68,000 enrollees and is expected to decline by 26% to approximately 50,000 enrollees in 2023. The North Coast market

(Table 4) shows a similar trend over the 20-year time period. The enrollment for the North Coast market is projected to decline by 23% with an expected decrease from 68,000 to 52,000 enrollees.

Over the next 20 years, the enrollment for priority 1-6 veterans (veterans with the greatest service-connected needs) in the North and South Coast markets is expected to decrease by 9% and 12%, respectively. Over this same time period, the enrollment totals for priority 7-8 veterans are projected to decline by 50% or more for each of the markets. The enrollment forecast for Priority 7-8 veterans assumes an annual enrollment fee, and the continued freeze on new P8 enrollment.

Table 3: Projected Veteran Enrollment for the South Coast Market by Priority Group

Fiscal Year	Enrolled 2003	Projected 2013	% Change (2003 to 2013)	Projected 2023	% Change (2003 to 2023)
Priority 1-6	43,229	46,373	7%	39,405	-9%
Priority 7-8	24,741	12,643	-48%	10,852	-56%
Total	**67,970**	**59,016**	**-12%**	**50,257**	**-26%**

Table 4: Projected Veteran Enrollment for the North Coast Market by Priority Group

Fiscal Year	Enrolled 2003	Projected 2013	% Change (2003 to 2013)	Projected 2023	% Change (2003 to 2023)
Priority 1-6	48,526	50,447	4%	42,716	-12%
Priority 7-8	19,139	10,039	-48%	9,564	-50%
Total	**67,655**	**60,486**	**-11%**	**52,280**	**-23%**

Utilization Trends

Utilization was analyzed for those CARES Implementation Categories (CICs) for which the Livermore Division facility has projected demand. A summary of utilization data is provided for each CIC in the following tables. Inpatient utilization is measured in number of beds, while ambulatory and outpatient mental health utilization is measured in number of clinic stops. A clinic stop is a visit to a clinic or service rendered to a patient.

It is important to note that according to the Secretary's CARES Decision Document, only the NHCU's workload will be considered in the current study of the Livermore Division, as all other services currently provided at the Livermore Division will be relocated either to Palo Alto VAMC (a tertiary care facility) or to off-site CBOCs in the Central Valley or East Bay (to be constructed).

Considering overall demand for inpatient and outpatient services (Tables 5 and 6), outpatient clinic stops (including radiology and pathology) are expected to increase by 19% over the 2023 time period. The only inpatient CIC currently at the Livermore campus is nursing home care. Due to a planning decision made by VA, Livermore's NHCU capacity of 120-beds is maintained over the 20-year period. Additionally, VA expects to contract with regional providers to accommodate nursing home volume above this 120-bed capacity.

Table 5: Livermore Division Outpatient Summary

Livermore	2003 Actual	2013 Projected	2023 Projected	% Change (2003 to 2013)	% Change (2013 to 2023)	% Change (2003 to 2023)
Total Clinic Stops*	61,958	75,534	73,505	22%	-3%	19%

Table 6: Projected Utilization for Inpatient CICs for the Livermore Division

CIC	2003 Actual Beds	2013 Beds Needed	2023 Beds Needed	% Change (2003 to 2013)	% Change (2013 to 2023)	% Change (2003 to 2023)
Nursing Home	120	120	120	0%	0%	0%
Sub Acute	30	0	0	-100%	0%	-100%
Total	**150**	**120**	**120**	**0%**	**0%**	**0%**

The overall demand for ambulatory (non-mental health) services (Table 7) is expected to increase over the forecast period. These trends reflect the healthcare needs of an aging veteran

* Total clinic stop volume includes radiology and pathology data.

- Cardiology
- Eye Clinic
- Orthopedics
- Primary care and related specialties
- Surgical and related specialties

There is a significant net decrease (-41%) indicated for urology and a smaller net decrease (-13%) for non-surgical specialties projected for 2023 as compared to 2003. Rehabilitation medicine remains constant during the projected period due to a planning assumption by VA.

Table 7: Projected Utilization for Ambulatory CICs for the Livermore Division

CIC	2003 Actual Stops	2013 Projected Stops	2023 Projected Stops	% Change (2003 to 2013)	% Change (2013 to 2023)	% Change (2003 to 2023)
Cardiology	2,843	5,228	5,079	84%	-3%	79%
Eye Clinic	5,323	6,196	6,477	16%	5%	22%
Non-Surgical Specialties	8,345	7,322	7,275	-12%	-1%	-13%
Orthopedics	4,966	6,335	6,340	28%	0%	28%
Primary Care & Related Specialties	16,930	22,573	20,776	33%	-8%	23%
Rehab Medicine	7,050	7,050	7,050	0%	0%	0%
Surgical & Related Specialties	5,960	6,269	6,141	5%	-2%	3%
Urology	1,582	872	930	-45%	7%	-41%
Total	**52,999**	**61,845**	**60,068**	**17%**	**-3%**	**13%**

Considering the expected utilization of outpatient mental health services (Table 8), demand will increase substantially over the forecast period. There are net increases indicated for the following outpatient mental health services:

- Behavioral health
- Homeless

These are the VA outpatient mental health programs for which there is no private sector benchmark. These increased utilization projections reflect assumptions used in the development of the VA Mental Health Strategic Plan. Some areas in which refinements were made include:

- Utilization rates for special mental health programs begin at current actual rate and are brought up to the nationwide 85th percentile utilization rate by fiscal year 2012
- Age cohort adjustments to reflect anticipated increased use of certain mental health services by aging veterans from Vietnam and later eras
- Expanding outpatient mental health programs to reflect a recovery model

Table 8: Projected Utilization for Outpatient Mental Health CICs for the Livermore Division

CIC	2003 Actual Stops	2013 Projected Stops	2023 Projected Stops	% Change (2003 to 2013)	% Change (2013 to 2023)	% Change (2003 to 2023)
Behavioral Health	4,991	5,930	5,933	19%	0%	19%
Homeless	20	843	646	4115%	-23%	3130%
Total	**5,011**	**6,773**	**6,579**	**35%**	**-3%**	**31%**

The space requirement to deliver the projected volume of healthcare services in a modern, safe, and secure environment were calculated using Team PwC's capital planning methodology. The Livermore Division currently accommodates the existing need, as well as the projected bed need through 2023. If the nursing home remains on the existing campus, significant surplus building stock would result.

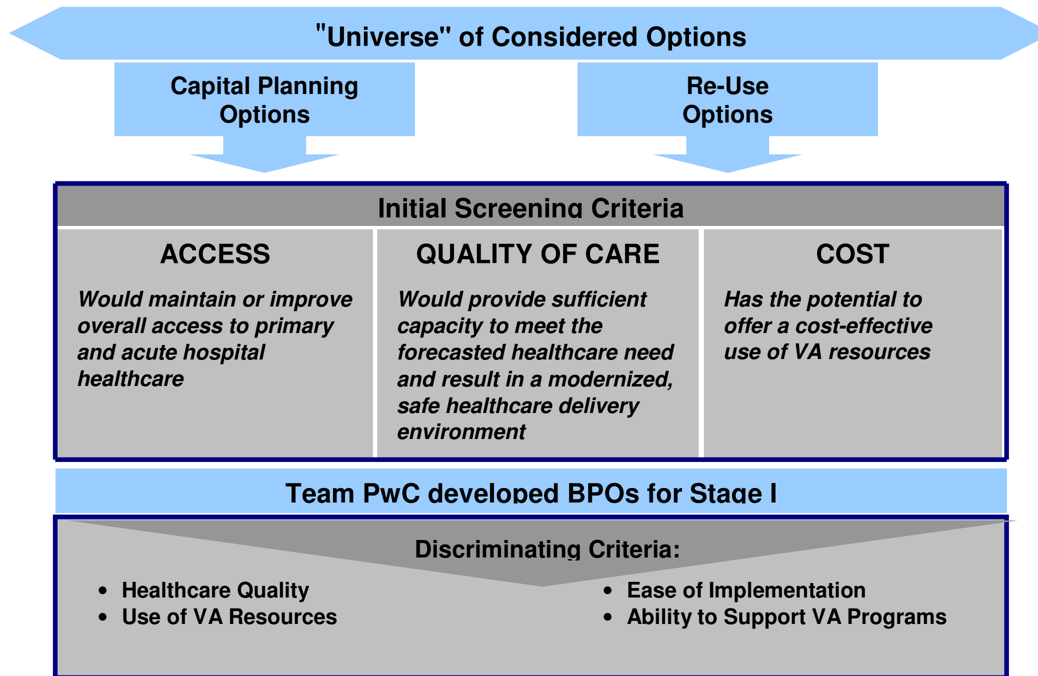
5.0 Business Plan Option Development Approach

Options Development Process

Using VA furnished information, site tours and interviews, as well as stakeholder and LAP member input, Team PwC developed a broad range of discrete and credible capital planning options and associated re-use options. Each capital planning option that passed the initial screening served as a potential component of BPOs. A review panel of experienced Team PwC consultants, including capital planners and real estate advisors considered the assessment results and recommended the BPOs. Each of the BPOs was then assessed at a more detailed level according to a set of discriminating criteria.

The following diagram illustrates the complete options development process:

Figure 4: Options Development Process



Initial Screening Criteria

Discrete capital planning options were developed for the Livermore Division and were subsequently screened to determine whether or not a particular option had the potential to meet or exceed the CARES objectives. The following describes the initial screening criteria that were used during this process:

- **Access**: *Would maintain or improve overall access to primary and acute hospital healthcare* – The Secretary's CARES Decision Document , calls for new construction of a NHCU on or off-campus. Although specific access guidelines are not available for nursing home care, this capital planning study assumes that access will be maintained or improved for all capital options as compared to the baseline. This study assumes that the NHCU facility will be strategically located in an area with a high enrolled veteran population requiring nursing care services.

- **Quality of Care:** *Would provide sufficient capacity to meet the forecasted healthcare need and result in a modernized, safe healthcare delivery environment that is compliant with existing laws, regulations, and VA requirements* – This was assessed by consideration of whether the option provides sufficient capacity (space) to meet the CIC workload requirements. Additionally, the physical environment proposed in the option was considered and any material weaknesses identified in VA's space and functional

surveys, facilities' condition assessments, and seismic assessments for existing facilities, and application of a similar process to any alternative facilities proposed.

- **Cost**: *Has the potential to offer a cost-effective use of VA resources* – This was assessed as part of Team PwC's initial cost effectiveness analysis. A 30-year planning period was used in the cost effectiveness analysis. Any option that did not have the potential to provide a cost effective physical and operational configuration of VA resources as compared to the baseline failed this test.

Discriminating Criteria

After passing the initial screening, BPOs were developed and the following discriminating criteria were applied to assess the overall attractiveness of the BPO.

- **Healthcare Quality** – These criteria assess the following:
  - If the BPO can ensure the forecasted healthcare need is appropriately met.
  - Whether each BPO will result in a modernized, safe, and secure healthcare delivery environment.

- **Use of VA Resources** – These criteria assess the cost effectiveness of the physical and operational configuration of the BPO over a 30-year planning horizon. Costs were assessed at an "order of magnitude" level of analysis in Stage I. Detailed costing will be conducted in Stage II. These criteria include:

  - Operating Cost Effectiveness: The ability of the BPO to provide recurring/operating cost increases or savings as compared to the baseline.
  - Level of Capital Expenditures: The amount of investment required relevant to the baseline based on results of initial capital planning estimates.
  - Level of Re-use Proceeds: The amount of re-use proceeds and/or demolition/clean-up cost based on results of the initial re-use study.
  - Cost Avoidance: The ability to obtain savings in necessary capital investment as compared to the baseline BPO.
  - Overall Cost Effectiveness: The initial estimate of net present cost as compared to the baseline.

- **Ease of Implementation** – These criteria assess the risk of implementation associated with each BPO. The following major risk areas were considered:

  - Reputation
  - Continuity of Care
  - Organization & Change
  - Legal & Contractual
  - Compliance
  - Security
  - Political
  - Infrastructure
  - Financial
  - Technology
  - Project Realization

- **Ability to Support VA programs** – These criteria assess how the BPO would impact the sharing of resources with DoD, enhance One-VA integration, and impact special considerations, such as DoD contingency planning, Homeland Security needs, or emergency need projections.

Operational Costs

The objective of the cost analysis in Stage I is to support the comparison of the estimated cost effectiveness of the baseline with each BPO. The Study Methodology calls for an "order of magnitude" level of analysis in Stage I and detailed costing in Stage II. The total estimated costs include operating costs, initial capital planning costs, re-use opportunities, and any cost avoidances. The operating costs for the baseline and each BPO are a key input to the financial analysis for Stage II. Operating costs considered for the Stage I analysis include direct medical care, administrative support, engineering and environmental management, and miscellaneous benefits and services.

The baseline operating costs were provided to Team PwC by VA. The 2004 costs were obtained from the Decision Support System (DSS), VA's official cost accounting system. This information was selected for use because DSS provides the best available data for identifying fixed direct, fixed indirect, and variable costs. The data can be rolled up to the CIC level and the data is available nationally for all VAMCs and CBOCs. These costs are directly attributable costs and generally do not reflect the total costs of the operation.

The costs were obtained for each facility within the study scope and were aggregated into the CICs. The costs were categorized as total variable (per unit of care), total fixed direct, and total fixed indirect costs. The definition of each cost category is as follows:

- Total Variable (Direct) Cost: The costs of direct patient care that vary directly and proportionately with fluctuations in workload. Examples include salaries of providers and the cost of medical supplies. Variable direct cost = variable supply cost + variable labor cost. The cost of purchased care is considered a variable direct cost.

- Total Fixed Direct Cost: The costs of direct patient care that do not vary in direct proportion to the volume of patient activity. The word “fixed" does not mean that the costs do not fluctuate, but rather that they do not fluctuate in direct response to workload changes. Examples include depreciation of medical equipment and salaries of administrative positions in clinical areas.

- Total Fixed Indirect Cost: The costs not directly related to patient care, and, therefore, not specifically identified with an individual patient or group of patients. These costs are an allocation of the total other costs (i.e. not direct costs) associated with the operation of the facility. These costs are allocated to individual medical departments through VA's

existing indirect cost allocation process. Examples of indirect costs include utilities, maintenance, and administration costs.

FY 2004 operating costs from DSS were deflated to FY 2003 dollars to create the costs for FY 2003 which is the base date for current cost comparison. These costs (fixed and variable) were then inflated for each year of the study period. Variable costs were multiplied by the forecasted workload for each CIC and summed to estimate total variable costs. Variable costs were also provided by VA for non-VA care. These are based on VA's actual expenses and are used in the BPOs where care is contracted.

These costs are used together with initial capital investment estimates as the basis for both the baseline option and each BPO with adjustments made to reflect the impact of implementation of the capital option being considered. Potential re-use proceeds are added to provide an overall indication of the cost of each BPO.

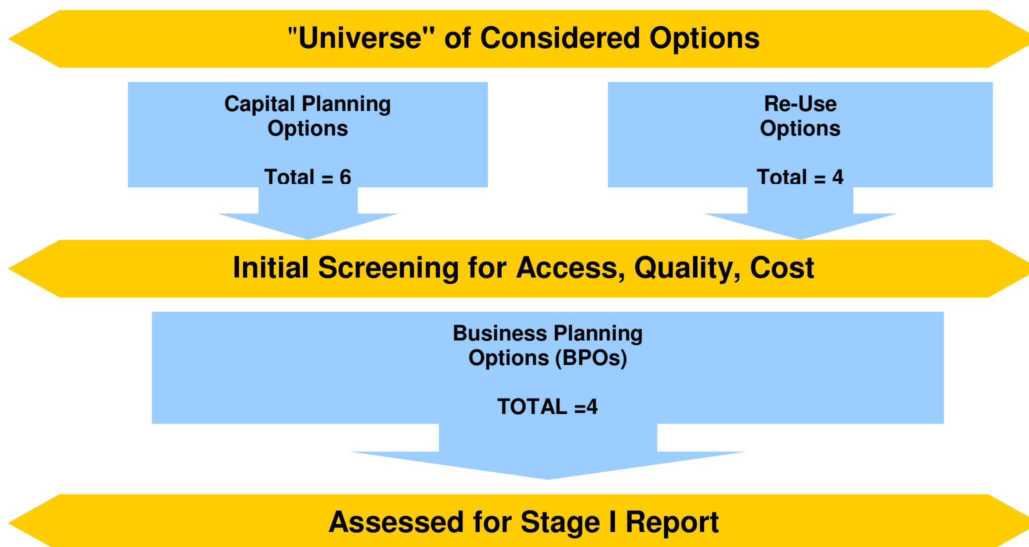
Summary of Business Plan Options

The individual capital planning and re-use options that passed the initial screening were further considered as options to comprise a BPO. A BPO is defined as consisting of a single capital option and its associated re-use option(s).* Therefore, the formula for a BPO is:

BPO = Capital Planning option + Re-use option(s)

The following diagram illustrates the final results of all alternate options given consideration:

Figure 5: Final Screening Results of Alternate BPOs



* In Stage I re-use options are described in terms of available re-use parcels, their potential re-use (residential,

Options Not Selected for Assessment

Two additional options created during the option development process did not pass the initial screening criteria. Table 9 lists those options that either did not pass the initial screening criteria or were deemed inferior to other options that did pass the initial screening. The table details the results of the initial screening and the reasons why these options were not selected.

Table 9: Capital Options Not Selected for Assessment

Label	Description	Reason(s) Not Selected
Reconstruct the NHCU on Parcel 2	Construct new NHCU building on Livermore campus 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 Livermore Division buildings after new NHCU is constructed. Use existing buildings and/or land for re-use.	From a capital planning perspective, all parcels are relatively equal with regard to reconstructing the NHCU. Upon consideration of re-use potential, the option is inferior due to the limitation on re-use potential for the balance of the Livermore Division campus (see Table 2).
Reconstruct the NHCU on Parcel 4	Construct new NHCU building on Livermore campus 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 Livermore Division buildings after new NHCU is constructed. Use existing buildings and/or land for re-use.	From a capital planning perspective, all parcels are relatively equal with regard to reconstructing the NHCU. Upon consideration of re-use potential, the option is inferior due to the limitation on re-use potential for the balance of the Livermore Division campus (see Table 2).

Baseline BPO

Based upon Team PwC's methodology, the baseline BPO advances in the Stage I process. The baseline is the BPO under which there would not be significant changes in either the location or type of services provided at the Livermore Division campus. In the baseline BPO, the Secretary's Decision Document and forecasted long-term healthcare demand forecasts and trends, as indicated by the demand forecasted for 2023, are applied to the existing healthcare provision solution for the Livermore Division campus.

Specifically, the baseline BPO is characterized by the following:

- Healthcare services are provided in a manner that is consistent with the Secretary's CARES Decision Document to relocate sub-acute, ambulatory services, and low-volume specialty care, while maintaining nursing home services.
- Capital planning investments rectify any material deficiencies (e.g., size of patient units) in the existing facilities in order to provide a modern, safe, and secure healthcare delivery environment.
- Life cycle capital costs provide on-going preventative maintenance and life-cycle maintenance of existing facilities.

- Buildings and/or land that become surplus as a result of changes in demand for healthcare services and/or capital plans for facilities are made available for re-use.

In the baseline option, all nursing home care 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 nursing home 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.

Evaluation System for BPOs

Each BPO is evaluated against the baseline BPO in an assessment table providing comparative rankings across several categories and an overall attractiveness rating. The results of the BPO assessment and the Team PwC recommendation are provided in subsequent sections.

Table 10: Evaluation System Used to Compare BPOs to Baseline BPO

Ratings to assess Quality and Ability to Support VA Programs	
↑	The BPO has the potential to provide a slightly improved state compared to the baseline BPO for the specific discriminating criteria (e.g., quality and ability to support VA programs)
↔	The BPO has the potential to provide materially the same state compared to the baseline BPO for the specific discriminating criteria (e.g., quality and ability to support VA programs)
↓	The BPO has the potential to provide a slightly lower or reduced state compared to the baseline BPO for the specific discriminating criteria (e.g., quality and ability to support VA programs)
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 compared to the baseline BPO (>5%)
↓↓	The BPO has the potential to require slightly higher operating costs compared to the baseline BPO (>10%)
↓↓↓	The BPO has the potential to require slightly higher operating costs compared to the baseline BPO (>15%)

Level of capital expenditure estimated	
↓↓↓↓	Very significant investment required compared to the baseline BPO (**≥ 200%**)
↓↓	Significant investment required compared to the baseline BPO **(121% to 199%)**
-	Similar level of investment required compared to the baseline BPO **(80% to 120% of Baseline)**
↑↑	Reduced level of investment required compared 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 the baseline (+/- 20% of baseline)
↑↑	Higher level of re-use proceeds compared to the baseline (e.g., 1-2 times)
↑↑↑	Significantly higher level of re-use proceeds compared to the 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 compared to the baseline BPO
↑↑↑↑	Very significant savings in essential capital investment compared the baseline BPO
Overall cost effectiveness (based on initial net present cost calculations)	
↓↓↓↓	Very significantly higher net present cost compared to the baseline BPO (>1.15 times)
↓↓	Significantly higher net present cost compared to the baseline BPO (1.10 – 1.15 times)
↓	Higher net present cost compared 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 compared to the baseline (90-95% of Baseline)
↑↑	Significantly lower net present cost compared to the baseline BPO (85-90% of baseline)
↑↑↑↑	Very significantly lower net present cost compared to the baseline BPO (<85% of baseline)
Ease of Implementation of the BPO	
↑	The BPO has the potential to provide a slightly improved state compared to the baseline BPO based upon the level of impact and likelihood of occurrence of risks to its implementation plan.
↔	The BPO has the potential to provide materially the same state as the baseline based upon the level of impact and likelihood of occurrence of risks to its implementation plan.
↓	The BPO has the potential to provide a slightly lower or reduced state compared to the baseline BPO based upon the level of impact and likelihood of occurrence of risks to its implementation plan.
Overall "Attractiveness" of the BPO Compared to the baseline	
↑↑↑↑	Very "attractive" – highly likely to offer a solution that improves quality and/or access compared to the baseline while appearing significantly more cost effective than the baseline
↑↑	"Attractive" - likely to offer a solution that at least maintains quality and access compared to the baseline while appearing more cost effective than the baseline
-	Generally similar to the baseline
↓↓	Less "attractive" than the baseline - likely to offer a solution that while maintaining quality and access compared to the baseline appears less cost effective compared to the baseline

↓↓↓↓	Significantly less "attractive" – highly likely to offer a solution that may adversely impact quality and access compared to the baseline and appearing less (or much less) cost effective than the baseline

Stakeholder Input: Purpose and Methods

VA determined at the beginning of the CARES process that it would use the Federal Advisory Committee Act (FACA) process to solicit stakeholder input and to provide a public forum for discussion of stakeholder concerns because "[t]he gathering and consideration of stakeholder input in this scope of work is of great importance." According to the Statement of Work, the purpose of the Local Advisory Panel (LAP) appointed under the FACA is to:

> provide the Contractor with a perspective on previous CARES local planning products, facility mission and workload, facility clinical issues, environmental factors, VISN referral and cross cutting issues in order to assist the Contractor in the refinement of the options the Contractor shall recommend. The Federal Advisory Committee will also provide feedback to the Contractor on proposed options and recommendations.

The LAP is required to hold at least four public meetings at which stakeholders would have an opportunity to present testimony and comment on the work performed by Team PwC and the deliberations of the LAP.

Team PwC also devised methods for stakeholders to communicate their views without presenting testimony at the LAP meetings. Throughout Stage I, a comment form was available electronically via the CARES website and in paper form at the first LAP public meeting. In addition, stakeholders were advised that they could submit any written comments or proposals to a central mailing address, and a number of stakeholders used this method as well.

The time in which stakeholder input was collected during Stage I can be divided into two input periods – Input Period One and Input Period Two. The intent of Input Period One was to collect general stakeholder input to assist in the development of potential BPOs, while Input Period Two allowed stakeholders to comment on the specific BPOs presented at the public LAP meeting. Input Period One started in April 2005 and ended on the day that the comment form with specific BPOs was available for public comment on the CARES website. For both periods, stakeholder input was reviewed and categorized into nine categories of concern which are summarized in the table that follows.

For Input Period Two, stakeholders were provided with a brief description of the BPOs and asked to indicate whether they favored the option, were neutral about the option, or did not favor the option. Ten days after the second LAP meeting was held, Team PwC summarized all of the stakeholder views that were received during Input Period Two, and this information is included in this report.

Summarized stakeholder views were available to LAP members for their review and consideration when evaluating BPOs as well as in defining new BPOs.

Table 11: Definitions of Categories of Stakeholder Concern

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.

Stakeholder Input to Business Plan Option Development

Approximately 60 members of the public attended the first LAP meeting held on May 13, 2005 and approximately 144 members of the public attended the second LAP meeting held on September 14, 2005. A total of 162 forms of stakeholder input (general comments on the study as well as specific BPOs) were received between April 20 and September 24, 2005. The concerns of stakeholders who submitted general comments not related to specific BPOs are summarized in the following table:

Table 12: Analysis of General Stakeholder Concerns (Periods One and Two)

Key Concern	Number of Comments *		
	Oral	Written and Electronic	**Total**
Effect on Access	18	17	**35**
Maintain Current Service/ Facility	27	15	**42**
Support for Veterans	14	13	**27**
Effect on Healthcare Services and Providers	5	2	**7**
Effect on Local Economy	2	4	**6**
Use of Facility	18	11	**29**
Effect on Research and Education	1	2	**3**
Administration's Budget or Policies	2	4	**6**
Unrelated to the Study Objectives	1	4	**5**

* Totals reflect the number of times a key concern was expressed, and not the total of individuals who provided input.

6.0 Business Plan Options

The option development process resulted in a multitude of discrete capital and re-use options, which were subsequently screened to determine whether a particular option had the potential to meet or exceed the CARES objectives (i.e., access, quality, and cost). Overall, there were four BPOs (comprising capital and re-use components) which passed initial screening and were developed for Stage I (see Figure 5).

Each BPO was assessed at a more detailed level according to the discriminating criteria. Each BPO examines replacing a NHCU comprised of the same number of beds (120) as the current facility either on the Livermore campus or an alternative site.

Two additional BPOs (BPOs 6 and 7) were proposed by the LAP at the second LAP Public Meeting. BPO 6 considers building two new NHCUs at off-site locations, and BPO 7 considers building a new NHCU collocated with the East Bay CBOC on the Livermore campus.

Site plans and overall project timing have been included for the BPOs developed by Team PwC (see Figures 6 and 7). The site plan for the baseline BPO (BPO 1) is the existing site plan (see Figure 2). The site plans are for reference only. They illustrate the magnitude of land and buildings required to meet projected utilization and are not designs.

Table 13: Business Plan Options

BPO 1: Baseline
Current state projected out to 2013 and 2023 without any changes to facilities or programs (except as indicated in the Secretary's Decision). Conduct maintenance and upgrades necessary to provide a modern, safe, and secure environment for healthcare that is consistent with current NHCU building and safety codes. The NHCU will rely on functions located in Building 62, including but not limited to dietary and laboratory/pathology. The NHCU will also utilize existing infrastructure and campus support, including central plant, engineering, kitchen, administration, and logistics. Parking space around campus is considered adequate. The NHCU would be renovated in two phases, with each phase lasting 36 months. Combined, both phases would span from 2009 to 2014. The activation of the East Bay and Central Valley CBOCs is scheduled to occur in 2010 and 2012 respectively. Additional renovations of two administrative buildings and the boiler plant will occur in 2009 and will last 24 months. Finally, renovation of the balance of campus is scheduled to occur throughout 2011. There are no structures or parcels available for re-use in the baseline option.
BPO 2: New NHCU On-Site in Parcel 3 (Upper Campus)
NHCU services will remain on the Livermore Division campus replaced in a new stand-alone NHCU building on the upper portion of the Livermore Division campus (Parcel 3). All support functions (central plant, administration, maintenance, storage, and logistics) will be integrated into the new NHCU structure. Parking space around campus is considered adequate and can be accommodated on the parcel. Construction of a new NHCU will occur over a 47-month period. The existing Modesto, Sonora, and Stockton CBOCs will be maintained. The activation of the East Bay and Central Valley CBOCs is scheduled to occur in 2010 and 2012 respectively. The existing NHCU (Bldg. 90) would be demolished in 2012, after construction of the replacement nursing home on Parcel 3 in order to provide a sufficient access buffer and landscape zones for the replacement nursing home. This BPO vacates most of the balance of the campus and leaves Parcels 1, 2, and 4 open for re-use/redevelopment. Such potential re-uses include: senior living, institutional (e.g., educational), destination hospitality, and recreational.

BPO 3: New NHCU On-Site In Parcel 1 (Lower Campus)
NHCU services will remain on the Livermore Division campus replaced in a new stand-alone NHCU building on the lower portion of the Livermore Division campus (Parcel 1). All support functions (central plant, administration, maintenance, storage, and logistics) will be integrated into the new NHCU structure. Parking space around campus is considered adequate and can be accommodated on the parcel. Construction of a new NHCU will occur over a 47-month period. The existing Modesto, Sonora, and Stockton CBOCs will be maintained. The activation of the East Bay and Central Valley CBOCs is scheduled to occur in 2010 and 2012 respectively. All existing buildings would be vacated and secured in 2012, after construction of the nursing home. Vacates the balance of the campus and leaves Parcels 2, 3, and 4 open for re-use/redevelopment. Such potential re-uses include: senior living, institutional (e.g., educational), and destination hospitality.
BPO 4: New off-site NHCU Collocated with VA CBOC
Relocates the NHCU off-site to a new stand-alone facility collocated with ambulatory care services. The new NHCU will be collocated with either an existing clinic site (Central Valley) or to the to-be-constructed East Bay clinic site. Parking will be available at the new site. Construction of a new NHCU will occur over a 47-month period. The existing Modesto, Sonora, and Stockton CBOCs will be maintained. The activation of the East Bay and Central Valley CBOCs is scheduled to occur in 2010 and 2012 respectively. All existing buildings would be vacated and secured in 2012, after construction of the nursing home. Vacates the entire campus and leaves Parcels 1, 2, 3, and 4 open for re-use/redevelopment. Such potential re-uses include: senior living, institutional (e.g., educational), destination hospitality, and recreational.
BPO 5: New NHCU on Independent Site
Relocates the NHCU off-site to a new stand-alone facility, independent of other VHA services, in the Livermore area, yet not on the Livermore Division campus. Parking will be available at the new site. Construction of a new NHCU will occur over a 47-month period. The existing Modesto, Sonora, and Stockton CBOCs will be maintained. The activation of the East Bay and Central Valley CBOCs is scheduled to occur in 2010 and 2012 respectively. All existing buildings would be vacated and secured in 2012, after construction of the nursing home. Vacates the entire campus and leaves Parcels 1, 2, 3, and 4 open for re-use/redevelopment. Such potential re-uses include: senior living, institutional (e.g., educational), destination hospitality, and recreational.
BPO 6: Two New NHCUs Collocated with CBOC in both the Central Valley and East Bay
Relocates the NHCU off-site to two new 60-bed nursing home facilities collocated with existing ambulatory programs, one in Central Valley and one in East Bay. Parking will be available at the new site. The existing Modesto, Sonora, and Stockton CBOCs will be maintained. Activation of the East Bay and Central Valley CBOCs is scheduled to occur in 2010 and 2012 respectively. All existing buildings would be vacated and secured in 2012, after construction of the NHCU. Vacates the entire campus and leaves Parcels 1, 2, 3, and 4 open for re-use/redevelopment. Such potential re-uses include: senior living, institutional (e.g., educational), destination hospitality, and recreational.

BPO 7: New NHCU Collocated with CBOC on Livermore Campus
NHCU services remain on campus, replaced in a newly constructed facility on an undetermined Livermore Division parcel. The to-be-constructed East Bay CBOC will be located on the Livermore Division campus*. Integration of all support functions (central plant, administration, maintenance, storage, and logistics) will be integrated into the new NHCU and/or CBOC structure. It is assumed that adequate parking can be accommodated. The existing Modesto, Sonora, and Stockton CBOCs will be maintained. Activation of the East Bay and Central Valley CBOCs is scheduled to occur in 2010 and 2012 respectively. All existing campus buildings would be vacated in 2012, after construction of the NHCU. Vacates a portion of the campus, but specific parcels are undetermined. Such potential re-uses include: senior living, institutional (e.g., educational), destination hospitality, and recreational.

* According to VA definitions, CBOC-like services provided at a VA medical center campus are defined as 'multi-specialty clinic' programs. However, for consistency in terminology and in understanding the intent of this BPO, the CBOC term is used in reference to mutli-specialty clinic programs proposed for the LVD campus.

BPO Site Plans

Figure 5: Proposed Site Plan - BPO 2(New NHCU On-Site in Parcel 3 (Upper Campus))

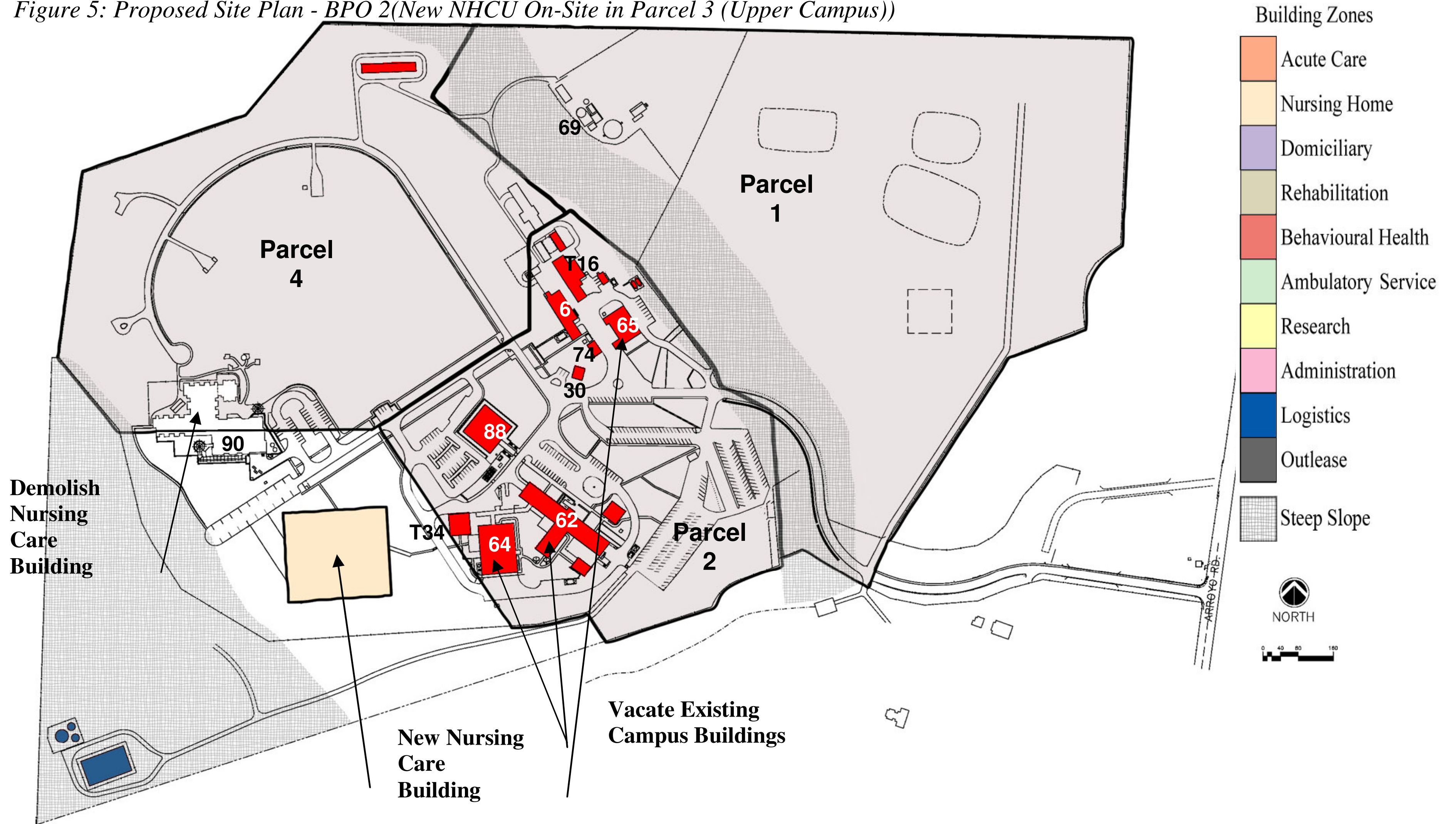
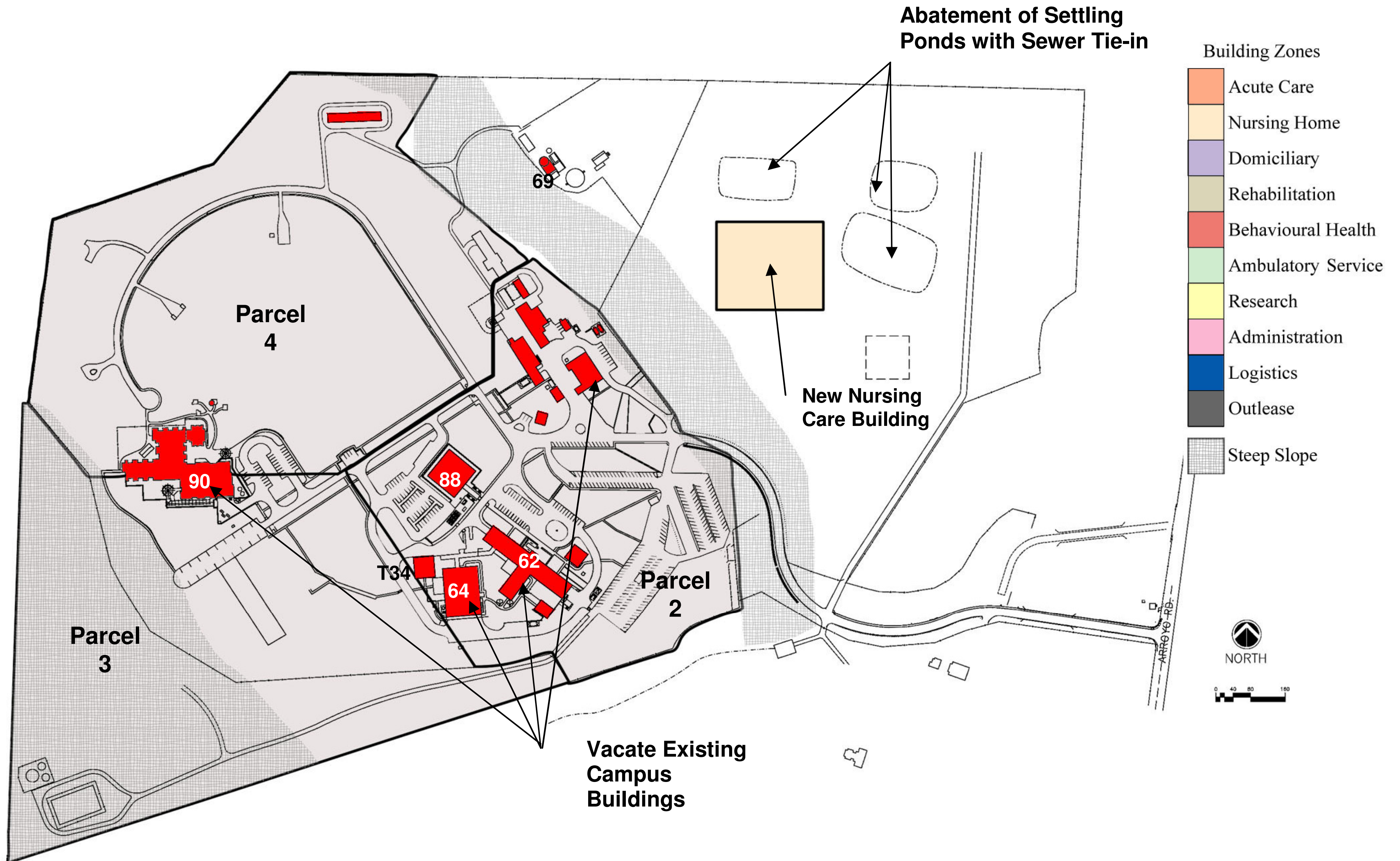


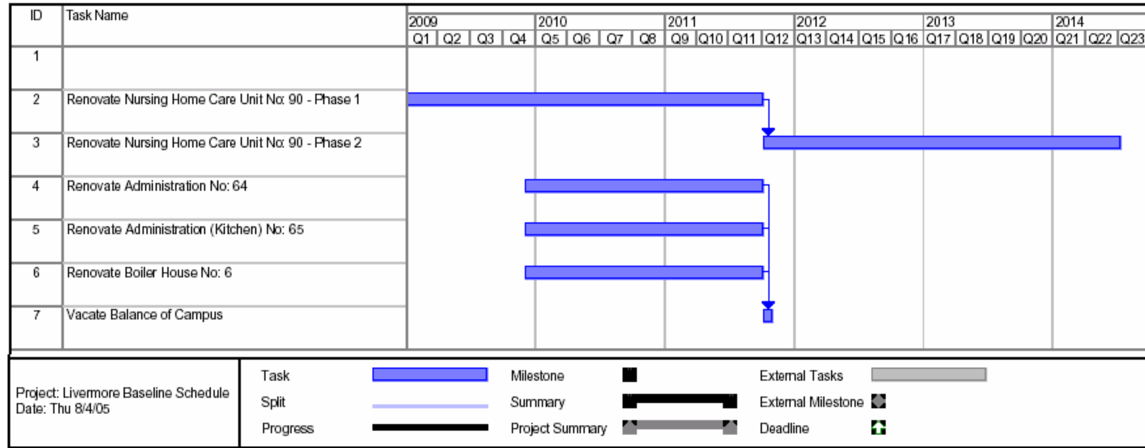
Figure 6: Proposed Site Plan - BPO 3 (New NHCU On-Site In Parcel 1 (Lower Campus))



BPO Schedules

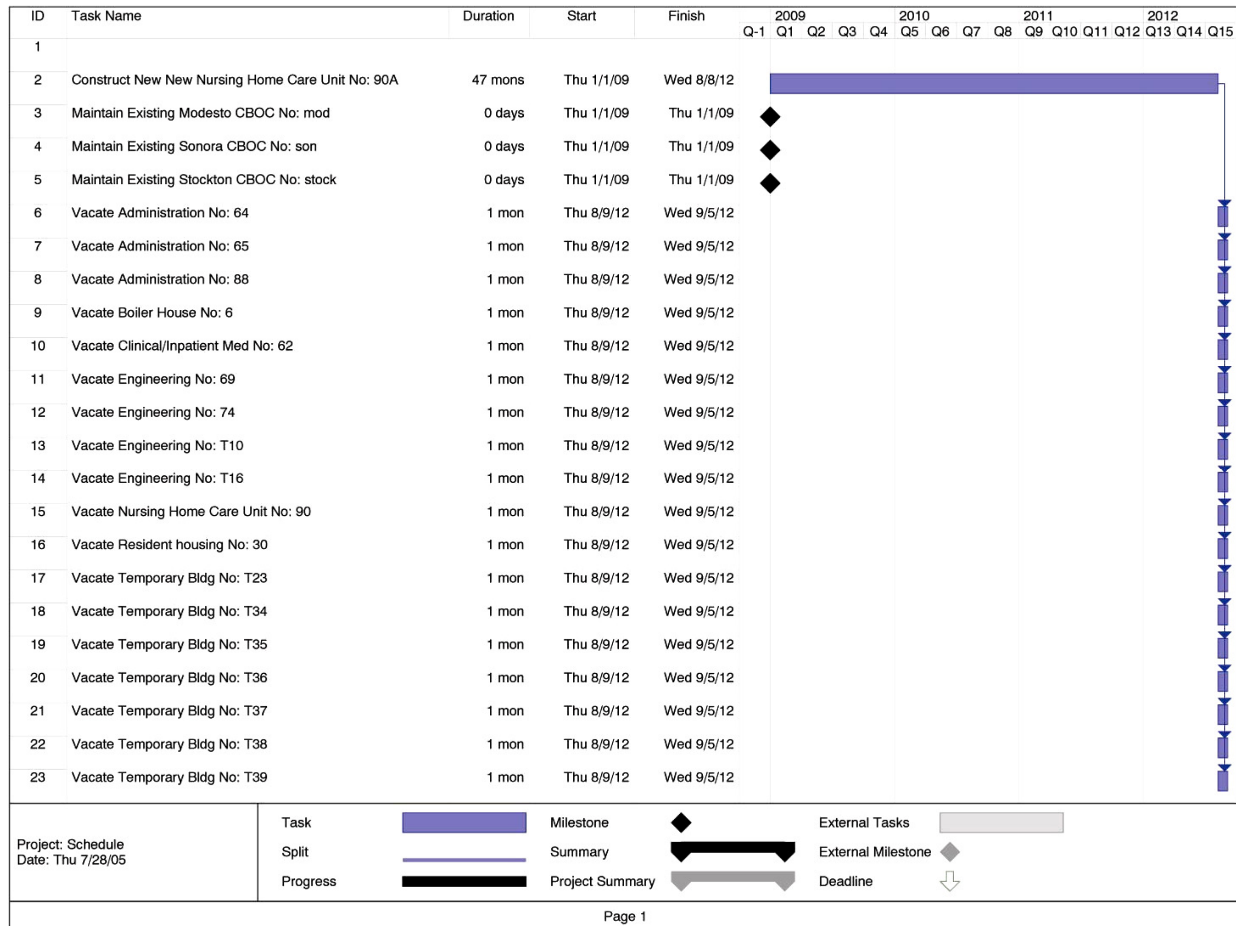
The following schedules were developed for the Baseline and alternate BPOs. All schedules are preliminary and tentative.

Figure 7: BPO 1 (Baseline)



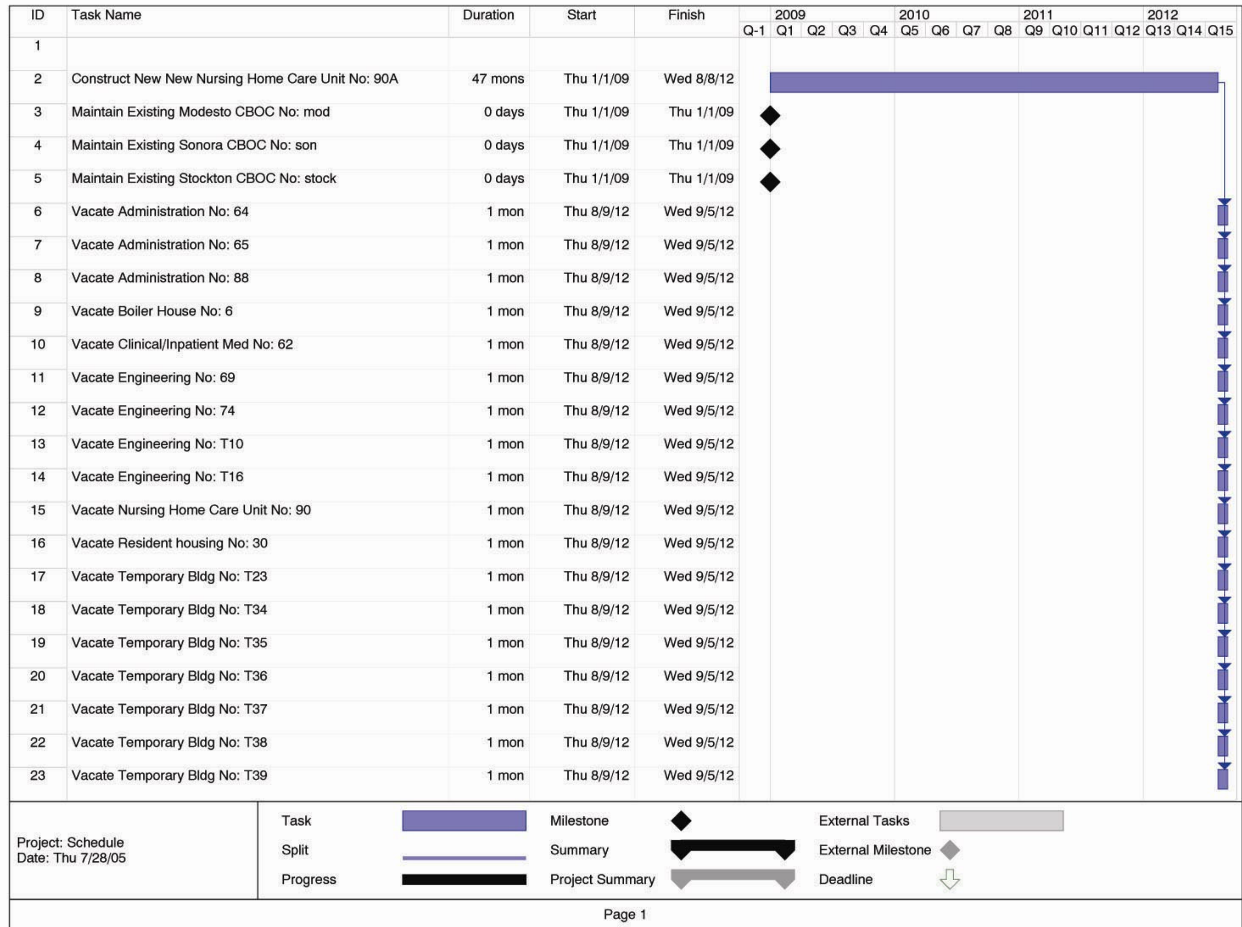
ID	Task Name
1	
2	Renovate Nursing Home Care Unit No: 90 - Phase 1
3	Renovate Nursing Home Care Unit No: 90 - Phase 2
4	Renovate Administration No: 64
5	Renovate Administration (Kitchen) No: 65
6	Renovate Boiler House No: 6
7	Vacate Balance of Campus

Figure 8: BPO 2 (New NHCU On-Site in Parcel 3 (Upper Campus))



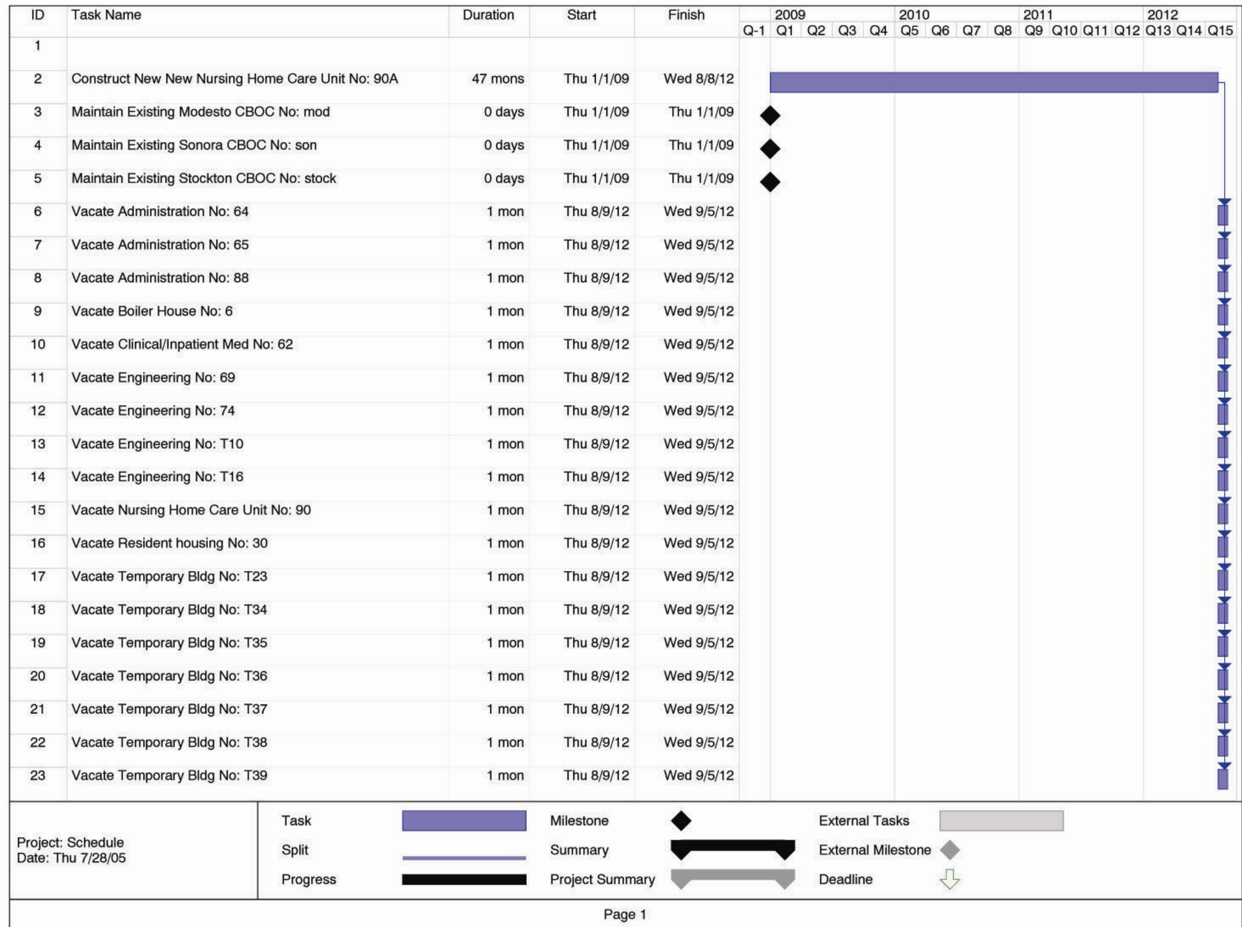
ID	Task Name	Duration	Start	Finish
1				
2	Construct New New Nursing Home Care Unit No: 90A	47 mons	Thu 1/1/09	Wed 8/8/12
3	Maintain Existing Modesto CBOC No: mod	0 days	Thu 1/1/09	Thu 1/1/09
4	Maintain Existing Sonora CBOC No: son	0 days	Thu 1/1/09	Thu 1/1/09
5	Maintain Existing Stockton CBOC No: stock	0 days	Thu 1/1/09	Thu 1/1/09
6	Vacate Administration No: 64	1 mon	Thu 8/9/12	Wed 9/5/12
7	Vacate Administration No: 65	1 mon	Thu 8/9/12	Wed 9/5/12
8	Vacate Administration No: 88	1 mon	Thu 8/9/12	Wed 9/5/12
9	Vacate Boiler House No: 6	1 mon	Thu 8/9/12	Wed 9/5/12
10	Vacate Clinical/Inpatient Med No: 62	1 mon	Thu 8/9/12	Wed 9/5/12
11	Vacate Engineering No: 69	1 mon	Thu 8/9/12	Wed 9/5/12
12	Vacate Engineering No: 74	1 mon	Thu 8/9/12	Wed 9/5/12
13	Vacate Engineering No: T10	1 mon	Thu 8/9/12	Wed 9/5/12
14	Vacate Engineering No: T16	1 mon	Thu 8/9/12	Wed 9/5/12
15	Vacate Nursing Home Care Unit No: 90	1 mon	Thu 8/9/12	Wed 9/5/12
16	Vacate Resident housing No: 30	1 mon	Thu 8/9/12	Wed 9/5/12
17	Vacate Temporary Bldg No: T23	1 mon	Thu 8/9/12	Wed 9/5/12
18	Vacate Temporary Bldg No: T34	1 mon	Thu 8/9/12	Wed 9/5/12
19	Vacate Temporary Bldg No: T35	1 mon	Thu 8/9/12	Wed 9/5/12
20	Vacate Temporary Bldg No: T36	1 mon	Thu 8/9/12	Wed 9/5/12
21	Vacate Temporary Bldg No: T37	1 mon	Thu 8/9/12	Wed 9/5/12
22	Vacate Temporary Bldg No: T38	1 mon	Thu 8/9/12	Wed 9/5/12
23	Vacate Temporary Bldg No: T39	1 mon	Thu 8/9/12	Wed 9/5/12

Figure 9: BPO 3 (New NHCU On-Site In Parcel 1 (Lower Campus))



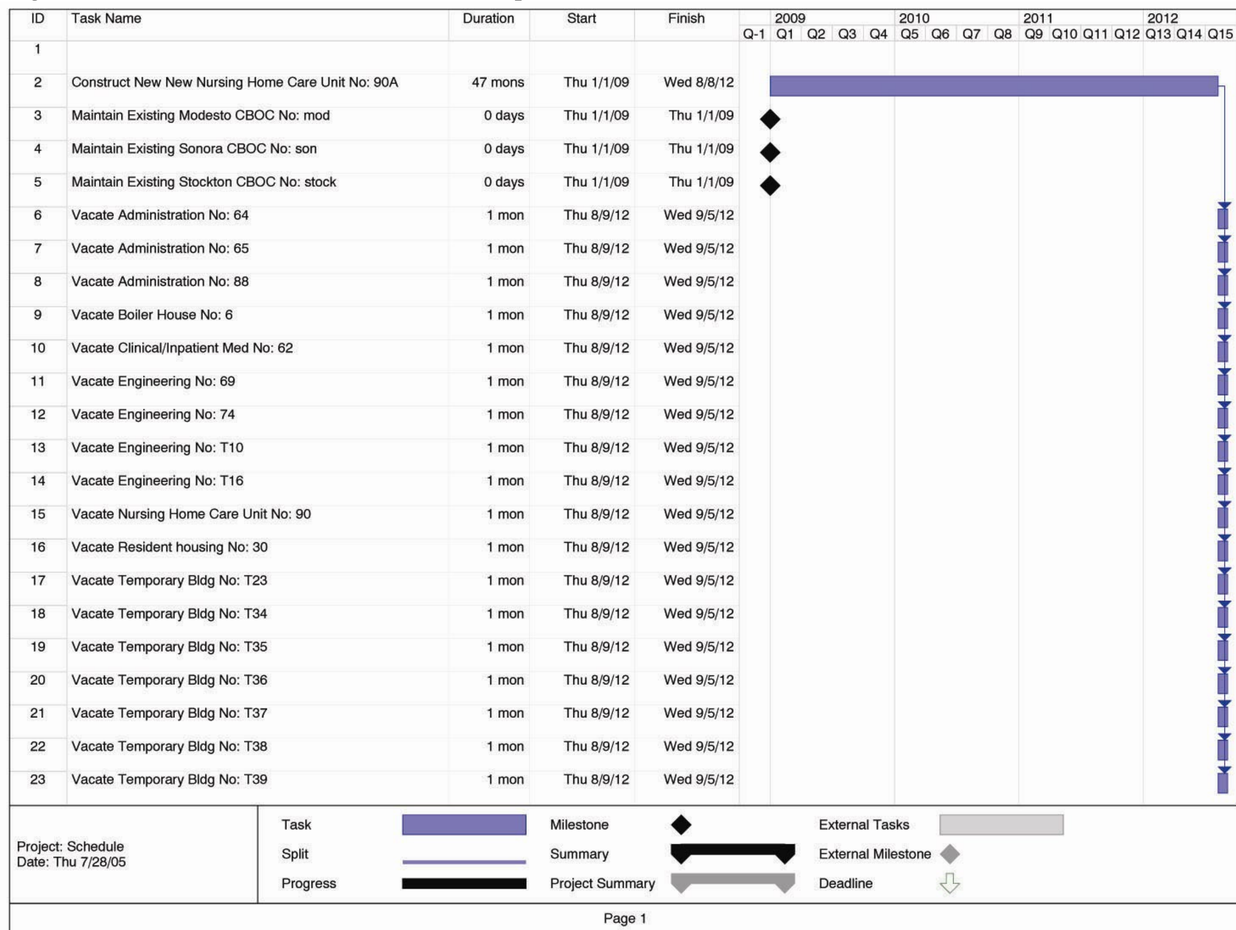
ID	Task Name	Duration	Start	Finish
1				
2	Construct New New Nursing Home Care Unit No: 90A	47 mons	Thu 1/1/09	Wed 8/8/12
3	Maintain Existing Modesto CBOC No: mod	0 days	Thu 1/1/09	Thu 1/1/09
4	Maintain Existing Sonora CBOC No: son	0 days	Thu 1/1/09	Thu 1/1/09
5	Maintain Existing Stockton CBOC No: stock	0 days	Thu 1/1/09	Thu 1/1/09
6	Vacate Administration No: 64	1 mon	Thu 8/9/12	Wed 9/5/12
7	Vacate Administration No: 65	1 mon	Thu 8/9/12	Wed 9/5/12
8	Vacate Administration No: 88	1 mon	Thu 8/9/12	Wed 9/5/12
9	Vacate Boiler House No: 6	1 mon	Thu 8/9/12	Wed 9/5/12
10	Vacate Clinical/Inpatient Med No: 62	1 mon	Thu 8/9/12	Wed 9/5/12
11	Vacate Engineering No: 69	1 mon	Thu 8/9/12	Wed 9/5/12
12	Vacate Engineering No: 74	1 mon	Thu 8/9/12	Wed 9/5/12
13	Vacate Engineering No: T10	1 mon	Thu 8/9/12	Wed 9/5/12
14	Vacate Engineering No: T16	1 mon	Thu 8/9/12	Wed 9/5/12
15	Vacate Nursing Home Care Unit No: 90	1 mon	Thu 8/9/12	Wed 9/5/12
16	Vacate Resident housing No: 30	1 mon	Thu 8/9/12	Wed 9/5/12
17	Vacate Temporary Bldg No: T23	1 mon	Thu 8/9/12	Wed 9/5/12
18	Vacate Temporary Bldg No: T34	1 mon	Thu 8/9/12	Wed 9/5/12
19	Vacate Temporary Bldg No: T35	1 mon	Thu 8/9/12	Wed 9/5/12
20	Vacate Temporary Bldg No: T36	1 mon	Thu 8/9/12	Wed 9/5/12
21	Vacate Temporary Bldg No: T37	1 mon	Thu 8/9/12	Wed 9/5/12
22	Vacate Temporary Bldg No: T38	1 mon	Thu 8/9/12	Wed 9/5/12
23	Vacate Temporary Bldg No: T39	1 mon	Thu 8/9/12	Wed 9/5/12

Figure 10: BPO 4 (New off-site NHCU Collocated with VA CBOC))



ID	Task Name	Duration	Start	Finish
1				
2	Construct New New Nursing Home Care Unit No: 90A	47 mons	Thu 1/1/09	Wed 8/8/12
3	Maintain Existing Modesto CBOC No: mod	0 days	Thu 1/1/09	Thu 1/1/09
4	Maintain Existing Sonora CBOC No: son	0 days	Thu 1/1/09	Thu 1/1/09
5	Maintain Existing Stockton CBOC No: stock	0 days	Thu 1/1/09	Thu 1/1/09
6	Vacate Administration No: 64	1 mon	Thu 8/9/12	Wed 9/5/12
7	Vacate Administration No: 65	1 mon	Thu 8/9/12	Wed 9/5/12
8	Vacate Administration No: 88	1 mon	Thu 8/9/12	Wed 9/5/12
9	Vacate Boiler House No: 6	1 mon	Thu 8/9/12	Wed 9/5/12
10	Vacate Clinical/Inpatient Med No: 62	1 mon	Thu 8/9/12	Wed 9/5/12
11	Vacate Engineering No: 69	1 mon	Thu 8/9/12	Wed 9/5/12
12	Vacate Engineering No: 74	1 mon	Thu 8/9/12	Wed 9/5/12
13	Vacate Engineering No: T10	1 mon	Thu 8/9/12	Wed 9/5/12
14	Vacate Engineering No: T16	1 mon	Thu 8/9/12	Wed 9/5/12
15	Vacate Nursing Home Care Unit No: 90	1 mon	Thu 8/9/12	Wed 9/5/12
16	Vacate Resident housing No: 30	1 mon	Thu 8/9/12	Wed 9/5/12
17	Vacate Temporary Bldg No: T23	1 mon	Thu 8/9/12	Wed 9/5/12
18	Vacate Temporary Bldg No: T34	1 mon	Thu 8/9/12	Wed 9/5/12
19	Vacate Temporary Bldg No: T35	1 mon	Thu 8/9/12	Wed 9/5/12
20	Vacate Temporary Bldg No: T36	1 mon	Thu 8/9/12	Wed 9/5/12
21	Vacate Temporary Bldg No: T37	1 mon	Thu 8/9/12	Wed 9/5/12
22	Vacate Temporary Bldg No: T38	1 mon	Thu 8/9/12	Wed 9/5/12
23	Vacate Temporary Bldg No: T39	1 mon	Thu 8/9/12	Wed 9/5/12

Figure 11: BPO 5 (New NHCU on Independent Site)



ID	Task Name	Duration	Start	Finish
1				
2	Construct New New Nursing Home Care Unit No: 90A	47 mons	Thu 1/1/09	Wed 8/8/12
3	Maintain Existing Modesto CBOC No: mod	0 days	Thu 1/1/09	Thu 1/1/09
4	Maintain Existing Sonora CBOC No: son	0 days	Thu 1/1/09	Thu 1/1/09
5	Maintain Existing Stockton CBOC No: stock	0 days	Thu 1/1/09	Thu 1/1/09
6	Vacate Administration No: 64	1 mon	Thu 8/9/12	Wed 9/5/12
7	Vacate Administration No: 65	1 mon	Thu 8/9/12	Wed 9/5/12
8	Vacate Administration No: 88	1 mon	Thu 8/9/12	Wed 9/5/12
9	Vacate Boiler House No: 6	1 mon	Thu 8/9/12	Wed 9/5/12
10	Vacate Clinical/Inpatient Med No: 62	1 mon	Thu 8/9/12	Wed 9/5/12
11	Vacate Engineering No: 69	1 mon	Thu 8/9/12	Wed 9/5/12
12	Vacate Engineering No: 74	1 mon	Thu 8/9/12	Wed 9/5/12
13	Vacate Engineering No: T10	1 mon	Thu 8/9/12	Wed 9/5/12
14	Vacate Engineering No: T16	1 mon	Thu 8/9/12	Wed 9/5/12
15	Vacate Nursing Home Care Unit No: 90	1 mon	Thu 8/9/12	Wed 9/5/12
16	Vacate Resident housing No: 30	1 mon	Thu 8/9/12	Wed 9/5/12
17	Vacate Temporary Bldg No: T23	1 mon	Thu 8/9/12	Wed 9/5/12
18	Vacate Temporary Bldg No: T34	1 mon	Thu 8/9/12	Wed 9/5/12
19	Vacate Temporary Bldg No: T35	1 mon	Thu 8/9/12	Wed 9/5/12
20	Vacate Temporary Bldg No: T36	1 mon	Thu 8/9/12	Wed 9/5/12
21	Vacate Temporary Bldg No: T37	1 mon	Thu 8/9/12	Wed 9/5/12
22	Vacate Temporary Bldg No: T38	1 mon	Thu 8/9/12	Wed 9/5/12
23	Vacate Temporary Bldg No: T39	1 mon	Thu 8/9/12	Wed 9/5/12

Assessment Drivers

The Livermore study is unique due to the Secretary's CARES Decision of May 2004 to relocate a significant portion of the current Livermore Division healthcare services to other VA facilities. Although nursing home services will continue to be provided in the Livermore area, outpatient care will be transferred to clinics in the Livermore area. Sub-acute and low volume specialties will be collocated at the Palo Alto VAMC. Due to a planning decision made by VA, Livermore's NHCU capacity of 120-beds will be maintained over the forecast period.

These long-term healthcare trends for the Livermore campus, together with three major drivers, were considered for this study. These drivers represent factors particularly noticeable at the Livermore campus that must be balanced in the development and evaluation of business plan options. They are:

1. There are opportunities to improve access to healthcare services by moving them closer to where greater numbers of veterans live
2. Significant surplus building stock will be created at the Livermore Division as a result of the Secretary's decision to relocate healthcare services

3. The Livermore Division campus is located in a desirable recreational and wine making region, southeast of San Francisco and appears to have significant potential for a range of private and institutional redevelopment uses.

Further explanation of the drivers is found below.

1. **Improving Access -** Livermore Division is located in the South Coast market and serves veterans in both the South and North markets of VISN 21. The two markets have comparable numbers of enrolled veterans. The Livermore area and the East Bay counties of the North Coast market have growing populations of older veterans requiring nursing home services. Access to the Livermore Division is constrained by its semi-rural setting, which is not serviced by public transport and requires patients and visitors to arrive by car or other special modes of transport, such as charter buses provided by Veterans Services Organizations (VSOs). Although this capital planning study did not examine access in terms of drive-times, this study considered opportunities to locate the NHCU facility in an area with high enrolled veteran population, as well as convenience to public transportation (e.g., bus, train).

2. **Surplus Land and Buildings** - According to the Secretary's Decision Document of May 2004, only the NHCU workload will be retained at the Livermore Division. All other healthcare services will be relocated to other VA facilities. Notwithstanding the increased space needs associated with modernizing the NHCU, the Livermore Division accommodates the current and projected level of building space. By 2023, the Livermore division will have surplus building stock of at least 225,000 square feet.

   Although the NHCU buildings are in good condition, the NHCU requires moderate capital expenditures to meet modern, safe, and secure standards. In addition, because the current NHCU was constructed without providing space for essential administrative and logistical functions, continued use of this building means that a number of other buildings on the campus must also be maintained to provide these functions. As a result, renovated facilities will not provide the level of operating efficiencies that would be realized in a new integrated facility. Constructing a new NHCU on the Livermore campus requires a significant level of capital expenditure compared to renovating the existing buildings, but would make more of the campus available for re-use.

3. **Re-Use Potential** - Livermore Division is located within a desirable recreational and wine making area, within one hour of San Francisco, Oakland and San Jose airports. A market assessment completed by the re-use contractor has found that the Livermore campus will likely have numerous potential bidders (private and institutional), with a high probability of success for enhanced-use lease opportunities. Re-use proceeds associated with the redevelopment of portions or all of the Livermore Division campus have the potential to partially offset the capital investment needed for land acquisition and the construction costs of a new facility. Placement of a new NHCU on the campus will impact the potential re-uses of the site, since some individual parcels (e.g., Parcel 4) may be easier to market than others and will have correspondingly higher levels of re-use proceeds. There are no significant environmental constraints to re-use and redevelopment of the site. However,

some 30% of the 112-acre Livermore campus is not suited for re-use/redevelopment, because of topographical constraints.

Assessment Results

The following section summarizes the results of applying discriminating criteria to each BPO and comparing them to the baseline in accordance with the Evaluation System for BPOs (Table 10). Subsequent sections describe the reactions of the Local Advisory Panel and Stakeholders to these BPOs and Team PwC's overall recommendations for each BPO.

Table 14: Baseline Assessment

Assessment Criteria	Description of Impact
Healthcare Quality	
Modern, safe, and secure environment	The baseline BPO will utilize existing infrastructure and campus support, including portions of various buildings. These buildings (90, 88, 69, 64 and 6) have received ratings between 4.2 and 5 based on the VA CAI database. The buildings and site require various upgrades to comply with current building codes and VA standards of care to be considered modern, safe, and secure.
Ensures forecast healthcare need is appropriately met.	A decision has been made by VA to maintain existing nursing home bed capacity at 120 beds through 2023. VA expects to contract with regional nursing home providers above this 120-bed capacity, as needed, to accommodate volume.
Use of VA Resources	
Operating cost effectiveness	Renovations to the facilities should improve facility operating costs from the current state. However, given the original design limitations of the existing facilities, renovations to achieve a modern, safe, and secure environment do not realize all of the efficiencies in staffing, supplies, heating, and power available under new construction alternatives.
Level of capital expenditure estimated	Moderate capital expenditure is required to renovate and upgrade facilities to modern, safe and secure standards.
Level of re-use proceeds	There are no re-use parcels available in the baseline.
Cost avoidance opportunities	In the baseline, it is assumed that the $6.3 million identified in the CAI database identified by the facility as essential maintenance would be fully expended. Also in the baseline, the NHCU will utilize existing infrastructure and campus support facilities.
Overall cost effectiveness	Not applicable for the baseline.
Ease of Implementation Ease of BPO implementation	The baseline BPO presents implementation risk in terms of the following major risk areas: ▪ Continuity of care, since renovation of the NHCU may impact ability to provide uninterrupted care.

Assessment Criteria	Description of Impact
Ability to Support VA Programs	
DoD sharing	No DoD sharing arrangements are expected in the baseline
One-VA integration	The baseline environment does not further One-VA integration nor has any requirement to coordinate with other VA administrations been identified.
Special considerations	The baseline does not impact DoD contingency planning, Homeland security needs, or emergency need projections.
Overall Attractiveness	Not applicable for the baseline.

Table 15 provides an overall summary of the BPOs assessed for comparative purposes.

Table 15: BPO Assessment Summary *

Assessment Summary	BPO 2	BPO 3	BPO 4	BPO 5
	New NHCU on Site in Parcel 3 (Upper Campus)	New NHCU on Site in Parcel 1 (Lower Campus)	New Off-Site NHCU Collocated with CBOC	New NHCU on Independent Site
Healthcare Quality				
Modern, safe, and secure environment	↑	↑	↑	↑
Ensures forecast healthcare need is appropriately met.	↔	↔	↔	↔
Use of VA Resources				
Operating cost effectiveness	-	-	-	-
Level of capital expenditures estimated	↓↓↓↓	↓↓↓↓	↓↓↓↓	↓↓↓↓
Level of re-use proceeds	↑↑↑	↑↑↑	↑↑↑	↑↑↑
Cost avoidance opportunities	-	-	-	-
Overall cost effectiveness	-	-	-	-
Ease of Implementation				
Riskiness of BPO implementation	↑	↓	↑	↑
Ability to Support VA Programs				
DoD sharing	↔	↔	↔	↔
One-VA integration	↔	↔	↔	↔
Special considerations	↔	↔	↔	↔
Overall Attractiveness	↑↑	↑↑	↑↑	↑↑

* BPOs 6 and 7 are not included in the Assessment Summary Table. They were created during the second LAP meeting at the suggestion of the LAP and, therefore, only the initial screening criteria of access, quality, and cost were applied to determine if the BPOs have the potential to meet or exceed the CARES objectives. If BPO 6 or BPO 7 is selected for Stage II, a more detailed analysis will be completed.

BPO 6: Two New NHCUs Collocated with CBOCs in both the Central Valley and the East Bay

The initial screening criteria of access, quality, and cost were applied to the new BPOs (BPO 6 and BPO 7) to determine if these BPOs, created by the LAP, have the potential to meet or exceed the CARES objectives.

Table 16: Screening Results for BPO 6

Criteria	Screening Result
Access	Provides increased access, as NHCUs are closer to not just one, but two areas of high veteran population density, specifically, the Central Valley and East Bay.
Quality	This BPO has marginal potential to improve quality. The new construction for nursing care in two distinct sites, collocated with new ambulatory/outpatient services, will meet, if not exceed, standards of modern, safe, and secure. However, this may be off-set due to the limited scale of service provided in a free-standing NHCU where patient volumes due to bed capacity may not meet VA standards of care.
Cost	This BPO, by providing not one but two distinct NHCUs, will likely be lower in overall operational cost-effectiveness and higher in ongoing maintenance costs, yielding diminished operating efficiency for clinical services. Higher capital costs inclusive of site acquisition costs are also expected for two distinct campuses. As with BPOs 4 and 5, there are better re-use proceeds than the baseline through making the entire Livermore Division campus available to non-VA re-use and redevelopment.

BPO 7: New NHCU Collocated with CBOC in East Bay – both NHCU and CBOC to be on Livermore Campus

Table 17: Screening Results for BPO 7

Criteria	Screening Result
Access	Since the NHCU will remain on the campus, this BPO will provide the same level of access for nursing home care as the baseline. Access will increase with the relocation of low volume specialty care and sub-acute care to the Palo Alto VAMC, and *may* decrease for those outpatients seeking care at the contemplated "East Bay Clinic" site in moving this facility from an East Bay site to the existing Livermore Division campus, out of a market of high veteran population density.
Quality	This BPO improves quality since the new construction for nursing home care and ambulatory/outpatient services will meet VA's enhanced standards of modern, safe, and secure.
Cost	This BPO will likely be similar to BPOs 2 and 3 in overall operational cost-effectiveness. This BPO will most likely achieve improved operating efficiency for clinical services, higher capital costs, lower on-going maintenance costs, and similar re-use proceeds(depending on parcel selected) than the baseline.

Local Advisory Panel and Stakeholder Reactions/Concerns

Local Advisory Panel Feedback

The Livermore LAP consists of six members: Al Perry (Chair), Ellen Shibata, M.D., William Ed Schnoonover, Beverly Finley, Tom Vargas, and Guy Houston. Two of the members are VA staff, the rest are representatives of the community, veteran service organization, and where appropriate, medical affiliates and the Department of Defense.

At the second LAP meeting on September 14, 2005, following the presentation of public comments, the LAP conducted its deliberation on the BPOs.

The LAP recommended two new BPOs:

1) Build two new nursing homes and collocate with CBOCs in the Central Valley and East Bay (BPO 6)
2) Build the new nursing home and the proposed East Bay Clinic on the Livermore campus (BPO 7)

The reasoning behind the LAP's recommendations can be explained as follows:

BPO 6

- The LAP wanted to ensure that placement of the NHCU will be close to the highest veteran population areas

BPO 7

- The LAP wanted to maintain services on the pastoral campus
- The LAP believed that this BPO improved access due to enhanced travel routes- despite more distance from their home of record

Table 18 presents the results of LAP deliberations. Overall the LAP shared the concerns of the public with regards to maintaining services and addressing veterans' access and travel-time issues. The LAP agreed that Livermore's beautiful campus should be preserved if possible, but were open to consideration of other options which would address the issues of access and travel-time, provide new state of the art facilities, and collocate the NHCU with other VA services.

Table 18: LAP BPO Voting Results

BPO	Label	Yes	No
1	Baseline	0	5
2	New NHCU On-Site in Parcel 3 (Upper Campus)	1	4
3	New NHCU On-Site in Parcel 1 (Lower Campus)	0	5
4	New Off-Site NHCU Collocated with CBOC	5	0
5	New NHCU on Independent Site	4	1
6*	Two New NHCUs Collocated with New CBOCs in the Central Valley and East Bay	5	0
7*	Construct New NHCU Collocated with New CBOC on the Livermore Division Campus	3	2

* New option proposed by LAP

Stakeholder Feedback on BPOs

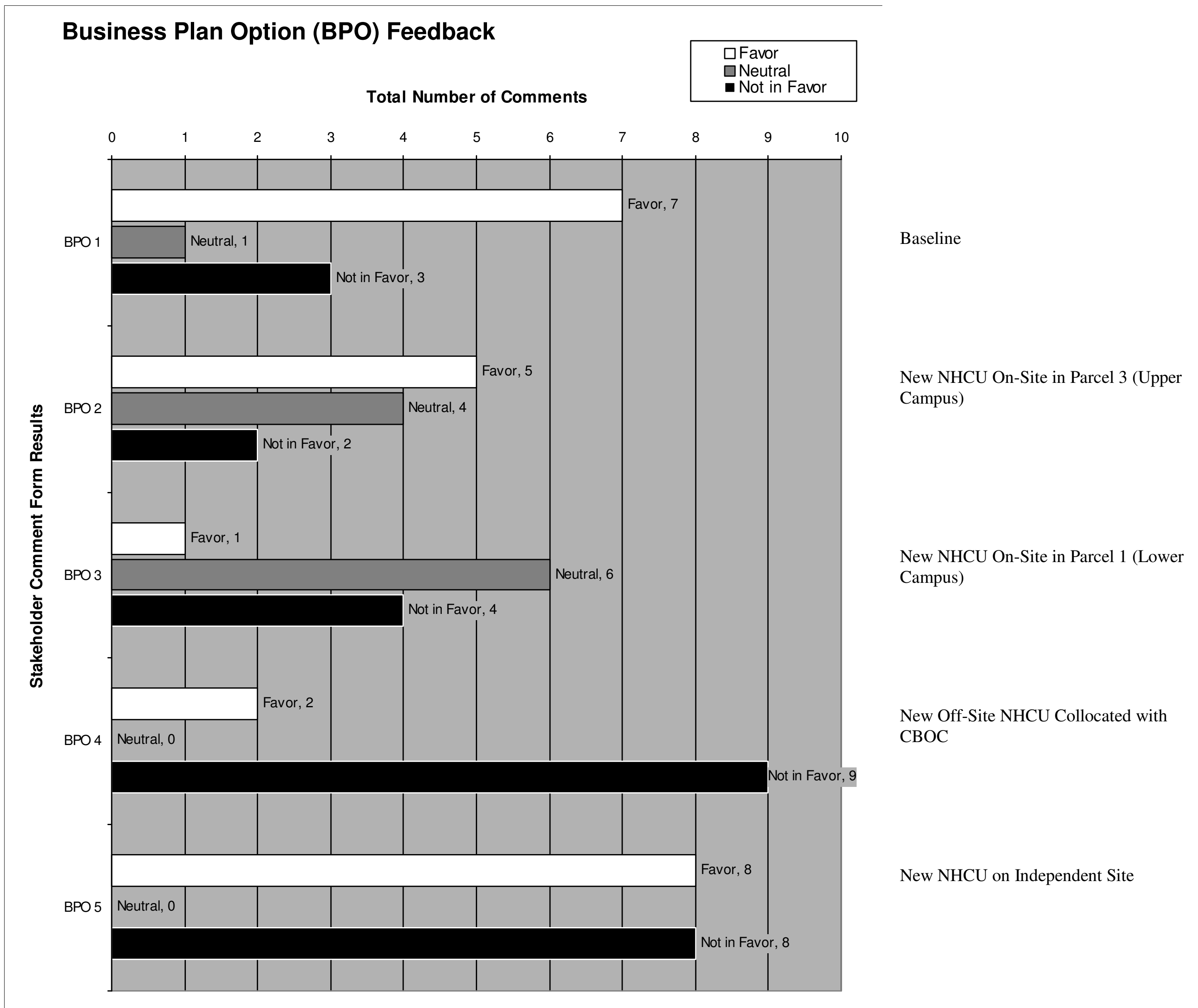
In addition to raising specific concerns, stakeholders were provided with the opportunity to provide feedback regarding the specific BPOs presented at the second LAP meeting. Through the VA CARES website and comment forms distributed at the public meeting, stakeholders were able to indicate if they "favor", are "neutral", or are "not in favor" of each of the BPOs. The results of this written and electronic feedback are provided in Figure 12.

Although only a small number of comment forms were received, a considerable number of veterans, veteran advocates, elected officials, and other interested parties provided oral testimony to the second LAP meeting. All expressed strong concern about maintaining future services to veterans in the Livermore area. There was a range of views expressed about the merits of maintaining the existing campus. Many stakeholders expressed their desire to maintain the current facility. Others testified that access to care could be enhanced through options that collocate a NHCU with outpatient services in the Central Valley, East Bay, or other nearby locations.

Figure 12: Stakeholder Feedback on BPOs[12]

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

The feedback received from the Options Comment Forms for the Livermore study site is as follows:



[12] Stakeholder feedback is reflected in this chart only for the BPOs which were presented by Team PwC at the LAP meeting (BPOs 1-5), and not the ones created by the LAP at the second public meeting. Any stakeholder feedback regarding additional options was captured in the open text boxes on the comment forms.

BPO Recommendations for Assessment in Stage II

Team PwC's recommendation of BPOs to be further assessed in Stage II was determined based on several factors. Team PwC considered the pros and cons of each BPO, together with the results of assessments against discriminating criteria to determine the overall attractiveness of each BPO. Views and opinions of the LAP and oral and written testimony received from veterans and other interested groups were also considered. All of these inputs contributed to the selection of the BPOs to be recommended for further study in Stage II, which are summarized in Table 19 with pros and cons identified for each option.

The BPOs recommended for further study share some key similarities. All of them would provide an attractive solution to upgrading the NHCU to modern, safe, and secure standards.

Table 19: BPO Recommendations

BPO	Pros	Cons	Rationale
BPOs Recommended by Team PwC for Further Study			
Baseline	• Least amount of capital expenditure required • Maintains current, attractive, pastoral campus cited by stakeholders as beneficial to patients' well-being and healing.	• Renovation of the NHCU may impact ability to provide uninterrupted care and renovations may not be able to modify the existing NHCU to meet all current code requirements given physical constraints of the building or potential topographical constraints • Operating inefficiencies and higher maintenance costs persist for older buildings	• The baseline is the BPO against which all other BPOs will be compared
BPO 2: New NHCU on Site in Parcel 3 – Upper Livermore Division Campus	• New construction eliminates recurring maintenance costs for aging existing buildings • Consolidates campus footprint into a state-of-the-art, stand-alone NHCU building and integrates all requisite support functions • Maintains current, attractive, pastoral campus cited by stakeholders as beneficial to patients' well-being and healing • Less risky than the baseline as continuity of care and infrastructure issues are managed by transitioning NHCU patients into new facility, and new facility will meet all current VA standards. • Permits potential reuse/redevelopment of parcels 1, 2 and 4	• Although the BPO permits re-use/redevelopment of the majority of the site, Parcel 3 is among the preferred parcels for re-use because it is currently clear of all structures • Significant level of investment required compared to the baseline with site preparation, construction and project management costs • Though central within the Livermore catchment area, the parcel is not located within an area of high veteran population and thus is less convenient to patients and family members.	• Less risky than the baseline • Eliminates recurring maintenance costs for aging existing buildings • Permits potential reuse/redevelopment of a significant portion of the campus
BPO 4: New Off-site NHCU Collocated with VA Community Based Outpatient Clinic (CBOC)	• New state-of-the-art construction eliminates recurring maintenance costs for aging existing buildings and integrates requisite support functions in one facility • Collocates NHCU with CBOC for greater VA presence and possible integration of VA resources. • Less risky than the baseline as continuity of care and infrastructure issues are managed by transitioning NHCU patients into new facility, and new facility will meet all current VA standards • Permits re-use/redevelopment of entire campus	• Very significant level of investment required compared to the baseline due to site acquisition expense and other unforeseeable project costs with new development. • Abandons current pastoral LVD campus, cited by stakeholders as beneficial to patient healing and well-being, for an unknown site.	• Less risky than the baseline • Eliminates recurring maintenance costs for aging existing buildings • Permits potential reuse/redevelopment of the entire campus

BPO	Pros	Cons	Rationale
BPO 5: New NHCU on Independent Site	• New construction eliminates recurring maintenance costs for aging existing buildings • Consolidates NHCU into a state-of-the-art, stand-alone building with all requisite support functions • Less risky than the baseline as continuity of care and infrastructure issues are managed by transitioning NHCU patients into new facility, and new facility will meet all current VA standards • Permits re-use/redevelopment of entire campus	• Very significant level of investment required compared to the baseline due to site acquisition expense, and other unforeseeable project costs. • Abandons current pastoral LVD campus, cited by stakeholders as beneficial to patient healing and well-being, for an unknown site	• Less risky than the baseline • Eliminates recurring maintenance costs for aging existing buildings • Permits potential reuse/redevelopment of entire campus
BPOs Not Recommended by Team PwC for Further Study			
BPO 3: New NHCU on Site in Parcel 1 – Lower Livermore Division Campus	• New construction eliminates recurring maintenance costs for aging existing buildings • Consolidates campus footprint into a state-of-the-art, stand-alone NHCU building and integrates all requisite support functions • Maintains current, attractive, pastoral campus cited by stakeholders as beneficial to patients' well-being and healing. • Permits potential reuse/redevelopment of parcels 2, 3 and 4	• More risky than the baseline. Although risks for continuity of care and security are less than the baseline, the compliance and infrastructure risks associated with abatement of the percolation ponds and the extension of the City's sewer line are greater giving this BPO more risk than the baseline and BPO 2 • Though central within the Livermore catchment area, Parcel 1 is not located within an area of high veteran population density and thus is less convenient to patients and family members • Very significant level of investment required compared to the baseline • Perceived as the least preferred parcel on the current campus for continued VA use and relocation of NHCU functions.	• Risks associated with this BPO make it less desirable than BPO 2

BPO	Pros	Cons	Rationale
BPO 6: Two New NHCUs Collocated with CBOC in both the Central Valley and East Bay	• New construction eliminates recurring maintenance costs for aging existing buildings • Consolidates NHCU into a state-of-the-art, stand-alone building with all requisite support functions • Collocates NHCU with CBOC for greater VA presence and possible integration of VA resources. • Provides increased access as NCHUs are closer to not just one, but two areas of high veteran population density • Potentially less risk than the baseline as continuity of care and infrastructure issues are managed by transitioning NHCU patients into new facilities once deemed for occupancy, and new facilities will meet all current VA standards, *but* may have issue of concurring construction projects and incremental contract management issues, site acquisition/procurement issues. • Permits re-use/redevelopment of entire campus	• Very significant capital expenditure and operating costs, as compared to baseline, in connection with building and maintaining two stand-alone facilities versus one, inclusive of incremental site acquisition and project management expenses • Abandons current pastoral LVD campus, cited by stakeholders as beneficial to patient healing and well-being, for not one but two unknown sites • Inconsistent with VA construction guidance in determining minimum bed capacity for free-standing NHCUs	• Inconsistent with VA construction guidance in determining minimum bed capacity for free-standing NHCUs

BPO	Pros	Cons	Rationale
BPO 7: New NHCU Collocated with "East Bay CBOC" on Livermore Campus[*]	• New construction eliminates recurring maintenance costs for aging existing buildings • Consolidates campus footprint into a state-of-the-art, stand-alone NHCU building and integrates all requisite support functions • Collocates NHCU with CBOC for greater VA presence and possible integration of VA resources.	• Greater risk than the baseline associated with relocating the CBOC functions, planned and slated for introduction in an East Bay community, convenient to a center of high veteran population density, to the Livermore campus. • This BPO is inconsistent with the Secretary's Decision to move outpatient services closer to where patients live • Access may decrease by locating the CBOC on the existing Livermore campus rather than the contemplated East Bay site, which is an area of high veteran population density • Significant level of investment required compared to the baseline associated with the abandoning of plans to develop CBOC in East Bay and relocate to Livermore, and associated project management and construction of new facilities on the current campus.	• This BPO is inconsistent with the Secretary's Decision to move outpatient services closer to where patients live

[*] According to VA definitions, CBOC-like services provided at a VA medical center campus are defined as 'multi-specialty clinic' programs. However, for consistency in terminology and in understanding the intent of this BPO, the CBOC term is used in reference to mutli-specialty clinic programs proposed for the Livermore campus.

Appendix A - Assessment Tables

BPO 1: Baseline

Assessment Criteria	Description of Impact
Healthcare Quality	
Modern, safe, and secure environment	The baseline BPO will utilize existing infrastructure and campus support, including portions of various buildings. These buildings (90, 88, 69, 64 and 6) have received ratings between 4.2 and 5 based on the VA CAI database. The buildings and site require various upgrades to comply with current building codes and VA standards of care to be considered modern, safe, and secure.
Ensures forecast healthcare need is appropriately met.	A decision has been made by VA to maintain existing nursing home bed capacity at 120 beds through 2023. VA expects to contract with regional nursing home providers above this 120-bed capacity, as needed, to accommodate volume.
Use of VA Resources	
Operating cost effectiveness	Renovations to the facilities should improve facility operating costs from the current state. However, given the original design limitations of the existing facilities, renovations to achieve a modern, safe, and secure environment do not realize all of the efficiencies in staffing, supplies, heating, and power available under new construction alternatives.
Level of capital expenditure estimated	Moderate capital expenditure is required to renovate and upgrade facilities to modern, safe and secure standards.
Level of re-use proceeds	There are no re-use parcels available in the baseline.
Cost avoidance opportunities	In the baseline, it is assumed that the $6.3 million identified in the CAI database identified by the facility as essential maintenance would be fully expended. Also in the baseline, the NHCU will utilize existing infrastructure and campus support facilities.
Overall cost effectiveness	Not applicable for the baseline.
Ease of Implementation Ease of BPO implementation	The baseline BPO presents implementation risk in terms of the following major risk areas: Continuity of care, since renovation of the NHCU may impact ability to provide uninterrupted care.
Ability to Support VA Programs	
DoD sharing	No DoD sharing arrangements are expected in the baseline
One-VA integration	The baseline environment does not further One-VA integration nor has any requirement to coordinate with other VA administrations been identified.
Special considerations	The baseline does not impact DoD contingency planning, Homeland security needs, or emergency need projections.
Overall Attractiveness	Not applicable for the baseline.

BPO 2: New NHCU On-Site in Parcel 3 (Upper Campus)

Assessment of BPO 2	Comparison to Baseline	Description of Impact
Healthcare Quality		
Modern, safe, and secure environment	↑	New construction improves adherence to modern, safe, and secure standards. A new NHCU will also meet all VA nursing home standards.
Ensures forecast healthcare need is appropriately met.	↔	A decision has been made by VA to maintain the current nursing home capacity at 120 beds through 2023. VA expects to contract with regional nursing home providers, as needed, to accommodate incremental patient volumes not met by this capacity.
Use of VA Resources		
Operating cost effectiveness	-	New construction eliminates recurring maintenance costs for aging existing buildings, and consolidates support functions into a stand-alone NHCU building; however, the BPO has the potential to require materially the same operating costs as the baseline BPO (+/- 5%).
Level of capital expenditures estimated	↓↓↓↓	Construction of new NHCU results in a very significant level of investment required compared to the baseline (≥ 200%).
Level of re-use proceeds	↑↑↑	Additional re-use potential is afforded by making parcels 1, 2 and 4 available for re-use. This results in significantly higher level of re-use proceeds compared to the baseline (e.g., 2 or more times)
Cost avoidance opportunities	-	Although recurring maintenance costs for existing NHCU and support buildings will be eliminated, maintenance costs for the new consolidated facility will not account for significant cost avoidance opportunities.
Overall cost effectiveness	-	The level of investment for new construction is high, but relative to operating costs over the 30-year period, the overall cost effectiveness is not materially different than the baseline.

Assessment of BPO 2	Comparison to Baseline	Description of Impact
Ease of Implementation		
Ease of BPO implementation	↑	Less risky than the baseline in terms of the following major risk categories: • Continuity of Care and Infrastructure: New construction will result in less disruption than renovation • Security: New construction will meet all current code requirements.
Ability to Support VA Programs		
DoD sharing	↔	No material impact is expected since no DoD relationships are expected. However, the BPO does not preclude any potential collaboration between VA and DoD.
One-VA integration	↔	No material impact is expected that would affect One-VA integration since there are no significant VBA or NCA relationships in the baseline which could be disrupted. Furthermore, the BPO neither precludes nor enhances future, potential VBA or NCA relationships.
Special considerations	↔	No material impact expected in terms of special considerations since the capital plan neither precludes nor enhances DoD contingency planning, Homeland Security needs, or emergency preparedness.
Overall Attractiveness	↑↑	This BPO is likely to offer a solution that at least maintains access and improves quality for a similar net present cost as the baseline. Therefore, BPO 2 is attractive compared to the baseline.

BPO 3: New NHCU On-Site in Parcel 1 (Lower Campus)

Assessment of BPO 3	Comparison to Baseline	Description of Impact
Healthcare Quality		
Modern, safe, and secure environment	↑	New construction improves adherence to modern, safe, and secure standards. A new NHCU will also meet all VA nursing home standards.
Ensures forecast healthcare need is appropriately met.	↔	A decision has been made by VA to maintain the current nursing home capacity at 120 beds through 2023. VA expects to contract with regional nursing home providers, as needed, to accommodate incremental patient volumes not met by this capacity.
Use of VA Resources		
Operating cost effectiveness	-	New construction eliminates recurring maintenance costs for aging existing buildings, and consolidates support functions into a stand-alone NHCU building; however, the BPO has the potential to require materially the same operating costs as the baseline BPO (+/- 5%).
Level of capital expenditures estimated	↓↓↓↓	Construction of new NHCU results in a very significant level of investment required compared to the baseline (≥ 200%).
Level of re-use proceeds	↑↑↑	Additional re-use potential is afforded by making parcels 2, 3 and 4 available for re-use. This results in significantly higher level of re-use proceeds compared to the baseline (e.g., 2 or more times)
Cost avoidance opportunities	-	Although recurring maintenance costs for existing NHCU and support buildings will be eliminated, maintenance costs for the new consolidated facility will not account for significant cost avoidance opportunities.
Overall cost effectiveness	-	The level of investment for new construction is high, but relative to operating costs over the 30-year period, the overall cost effectiveness is not materially different than the baseline.
Ease of Implementation		
Ease of BPO implementation	↓	Less risky than the baseline in terms of the following major risk categories: • Continuity of Care and Infrastructure: New construction will result in less disruption than renovation • Security: New construction will meet all current code requirements. However, the BPO is more risky to implement

Assessment of BPO 3	Comparison to Baseline	Description of Impact
		as compared to the baseline in terms of: • Compliance and infrastructure risks associated with abatement of the percolation ponds and the extension of the City's sewer line. Overall, the risk associated with BPO 3 is expected to be higher than the baseline.
Ability to Support VA Programs		
DoD sharing	↔	No material impact is expected since no DoD relationships are expected. However, the BPO does not preclude any potential collaboration between VA and DoD.
One-VA integration	↔	No material impact is expected that would affect One-VA integration since there are no significant VBA or NCA relationships in the baseline which could be disrupted. Furthermore, the BPO neither precludes nor enhances future, potential VBA or NCA relationships.
Special considerations	↔	No material impact expected in terms of special considerations since the capital pan neither precludes nor enhances DoD contingency planning, Homeland Security needs, or emergency preparedness.
Overall Attractiveness	↑↑	This BPO is likely to offer a solution that at least maintains access and improves quality for a similar net present cost as the baseline. Therefore, BPO 3 is attractive compared to the baseline.

BPO 4: New Off-Site NHCU Collocated with CBOC

Assessment of BPO 4	Comparison to Baseline	Description of Impact
Healthcare Quality		
Modern, safe, and secure environment	↑	New construction improves adherence to modern, safe, and secure standards. A new NHCU will also meet all VA nursing home standards.
Ensures forecast healthcare need is appropriately met.	↔	A decision has been made by VA to maintain the current nursing home capacity at 120 beds through 2023. VA expects to contract with regional nursing home providers, as needed, to accommodate incremental patient volumes not met by this capacity.
Use of VA Resources		
Operating cost effectiveness	-	New construction eliminates recurring maintenance costs for aging existing buildings, and consolidates support functions into a stand-alone NHCU building; however, the BPO has the potential to require materially the same operating costs as the baseline BPO (+/- 5%).
Level of capital expenditures estimated	↓↓↓↓	Construction of new NHCU results in a very significant level of investment required compared to the baseline (≥ 200%).
Level of re-use proceeds	↑↑↑	Vacates entire campus (Parcels 1, 2, 3, and 4) allowing re-use of the existing buildings and site. This results in significantly higher level of re-use proceeds compared to the baseline (e.g., 2 or more times)
Cost avoidance opportunities	-	Although recurring maintenance costs for existing NHCU and support buildings will be eliminated, maintenance costs for the new consolidated facility will not account for significant cost avoidance opportunities.
Overall cost effectiveness	-	The level of investment for new construction is high, but relative to operating costs over the 30-year period, the overall cost effectiveness is not materially different than the baseline.
Ease of Implementation		
Ease of BPO implementation	↑	Less risky than the baseline in terms of the following major risk categories: • Continuity of Care and Infrastructure: New construction will result in less disruption than renovation • Security: New construction will meet all current code requirements.

Assessment of BPO 4	Comparison to Baseline	Description of Impact
Ability to Support VA Programs		
DoD sharing	↔	No material impact is expected since no DoD relationships are expected. However, the BPO does not preclude any potential collaboration between VA and DoD.
One-VA integration	↔	No material impact is expected that would affect One-VA integration since there are no significant VBA or NCA relationships in the baseline which could be disrupted. Furthermore, the BPO neither precludes nor enhances future, potential VBA or NCA relationships.
Special considerations	↔	No material impact expected in terms of special considerations since the capital pan neither precludes nor enhances DoD contingency planning, Homeland Security needs, or emergency preparedness.
Overall Attractiveness	↑↑	This BPO is likely to offer a solution that at least maintains access and improves quality for a similar net present cost as the baseline. Therefore, BPO 4 is attractive compared to the baseline.

BPO 5: New NHCU on Independent Site

Assessment of BPO 5	Comparison to Baseline	Description of Impact
Healthcare Quality		
Modern, safe, and secure environment	↑	New construction improves adherence to modern, safe, and secure standards. A new NHCU will also meet all VA nursing home standards.
Ensures forecast healthcare need is appropriately met.	↔	A decision has been made by VA to maintain the current nursing home capacity at 120 beds through 2023. VA expects to contract with regional nursing home providers, as needed, to accommodate incremental patient volumes not met by this capacity.
Use of VA Resources		
Operating cost effectiveness	-	New construction eliminates recurring maintenance costs for aging existing buildings, and consolidates support functions into a stand-alone NHCU building; however, the BPO has the potential to require materially the same operating costs as the baseline BPO (+/- 5%).
Level of capital expenditures estimated	↓↓↓↓	Construction of new NHCU coupled with potential site acquisition expense results in a very significant level of investment required compared to the baseline (≥ 200%).
Level of re-use proceeds	↑↑↑	Vacates entire campus (parcels 1, 2, 3, and 4) allowing re-use of the existing buildings and site. Significantly higher level of re-use proceeds compared to baseline (e.g., 2 or more times)
Cost avoidance opportunities	-	Although recurring maintenance costs for existing NHCU and support buildings will be eliminated, maintenance costs for the new consolidated facility will not account for significant cost avoidance opportunities.
Overall cost effectiveness	-	The level of investment for new construction is high, but relative to operating costs over the 30-year period, the overall cost effectiveness is not materially different than the baseline.
Ease of Implementation		
Ease of BPO implementation	↑	Less risky than the baseline in terms of the following major risk categories: • Continuity of Care and Infrastructure: New construction will result in less disruption than renovation • Security: New construction will meet all current code requirements.

Assessment of BPO 5	Comparison to Baseline	Description of Impact
Ability to Support VA Programs		
DoD sharing	↔	No material impact is expected since no DoD relationships are expected. However, the BPO does not preclude any potential collaboration between VA and DoD.
One-VA integration	↔	No material impact is expected that would affect One-VA integration since there are no significant VBA or NCA relationships in the baseline which could be disrupted. Furthermore, the BPO neither precludes nor enhances future, potential VBA or NCA relationships.
Special considerations	↔	No material impact expected in terms of special considerations since the capital pan neither precludes nor enhances DoD contingency planning, Homeland Security needs, or emergency preparedness.
Overall Attractiveness	↑↑	This BPO is likely to offer a solution that at least maintains access and improves quality for a similar net present cost as the baseline. Therefore, BPO 5 is attractive compared to the baseline.

Appendix B - Glossary

Acronyms

AFB	Air Force Base
AMB	Ambulatory
BPO	Business Plan Option
CAI	Capital Asset Inventory
CAP	College of American Pathologists
CARES	Capital Asset Realignment for Enhanced Services
CBOC	Community Based Outpatient Clinic
CIC	CARES Implementation Category
DoD	Department of Defense
FTEE	Full Time Employee Equivalent
GFI	Government Furnished Information
HEDIS	Health Plan Employer Data and Information Set
ICU	Intensive Care Unit
IP	Inpatient
JCAHO	Joint Commission on Accreditation of Healthcare Organizations
OP	Outpatient
MH	Mental Health
MOU	Memorandum of Understanding
N/A	Not Applicable
NFPA	National Fire Protection Association
PTSD	Post Traumatic Stress Disorder

SOW	Statement of Work
VA	Department of Veterans Affairs
VACO	VA Central Office
VAMC	Veterans Affairs Medical Center
VBA	Veterans Benefits Administration
VHA	Veterans Health Administration
VISN	Veterans Integrated Service Network

Definitions

Access	Access is the determination of the numbers of actual enrollees who are within defined travel time parameters for primary care, acute hospital care, and tertiary care after adjusting for differences in population and density and types of road.
Alternative Business Plan Options	Business Plan Options generated as alternatives to the baseline Business Plan Option providing other ways VA could meet the requirements of veterans at the Study Site.
Ambulatory Services	Services to veterans in a clinic setting that may or not be on the same station as a hospital, for example, a Cardiology Clinic. The grouping as defined by VA also includes several diagnostic and treatment services, such as Radiology.
Baseline Business Plan Option	The Business Plan Option for VA which does not change any element of the way service is provided in the study area. "Baseline" describes the current state projected out to 2013 and 2023 without any changes to facilities or programs or locations and assumes no new capital expenditure (greater than $1 million). Baseline state accounts for projected utilization changes, and assumes same or better quality, and necessary maintenance for a safe, secure, and modern healthcare environment.

Business Plan Option (BPO)	The options developed and assessed by Team PwC as part of the Stage I and Stage II Option Development Process. A business plan option consists of a credible healthcare plan describing the types of services, and where and how they can be provided and a related capital plan, and an associated reuse plan.
Capital Asset Inventory (CAI)	The CAI includes the location and planning information on owned buildings and land, leases, and agreements, such as enhanced-use leases, enhanced sharing agreements, outleases, donations, permits, licenses, inter- and intra-agency agreements, and ESPC (energy saving performance contracts) in the VHA capital inventory.
CARES Implementation Category (CIC)	One of 25 categories under which workload is aggregated in VA demand models. *(See Workload)*
Clinic Stop	A visit to a clinic or service rendered to a patient.
Clinical Inventory	The listing of clinical services offered at a given station.
Code	Compliance with auditing/reviewing bodies such as JCAHO, NFPA Life Safety Code or CAP.
Community Based Outpatient Clinic (CBOC)	An outpatient facility typically housing clinic services and associated testing. A CBOC is VA operated, contracted, or leased and is geographically distinct or separate from the parent medical facility.
Cost Effectiveness	A program is cost-effective if, on the basis of life-cycle cost analysis of competing alternatives, it is determined to have the lowest costs expressed in present value terms for a given amount of benefits.
Domiciliary	A VA facility that provides care on an ambulatory self-care basis for veterans disabled by age or diseases who are not in need of acute hospitalization and who do not need the skilled nursing services provided in a nursing home.
Enhanced Use Lease	A lease of real property to non-government entities, under the control and/or jurisdiction of the Secretary of Veterans Affairs, in which monetary or "in-kind" consideration (i.e., the provision of goods, facilities, construction, or services of the benefit to the Department) is received. Unlike traditional federal leasing authorities in which generated proceeds must be deposited into a general treasury account, the enhanced-use leasing authority provides that all proceeds (less any costs than can be reimbursed) are returned to medical care appropriations.

Good Medical Continuity	A determination that veterans being cared for a given condition will have access to the appropriate array of primary, secondary, and tertiary care services required to treat that condition.
Initial Screening Criteria	A series of criteria used as the basis of the assessment of whether or not a particular Business Plan Option has the potential to meet or exceed the CARES objectives.
Inpatient Services	Services provided to veterans in the hospital or an inpatient unit, such as a Surgical Unit or Spinal Cord Injury Unit.
Market Area	Geographic areas or boundaries (by county or zip code) served by that Network's medical facilities. A Market Area is of a sufficient size and veteran population to benefit from coordinated planning and to support the full continuum of healthcare services. (*See Sector)*
Mental Health Indicators	See the end of this document.
Multispecialty Clinic	A VA medical facility providing a wide range of ambulatory services such as primary care, specialty care, and ancillary services usually located within a parent VA facility.
Nursing Home	The term "nursing home care" means the accommodation of convalescents or other persons who are not acutely ill and not in need of hospital care, but who require nursing care and related medical services, if such nursing care and medical services are prescribed by, or are performed under the general direction of, persons duly licensed to provide such care. Such term includes services furnished in skilled nursing care facilities, in intermediate care facilities, and in combined facilities. It does not include domiciliary care.
Primary Care	Healthcare provided by a medical professional with whom a patient has initial contact and by whom the patient may be referred to a specialist for further treatment. *(See Secondary Care and Tertiary Care)*
Re-use	An alternative use for underutilized or vacant facility space or VA owned land.
Risk	Any barrier to the success of a Business Planning Option's transition and implementation plan or uncertainty about the cost or impact of the plan.

Secondary care — Medical care provided by a specialist or facility upon referral by a primary care physician that requires more specialized knowledge, skill, or equipment than the primary care physician has. *(See Primary Care and Tertiary Care)*

Sector — Within each Market Area are a number of sectors. A sector is one or more contiguous counties. *(See Market Area)*

Stakeholder — A person or group who has a relationship with VA facility being examined or an interest in what VA decides about future activities at the facility.

Tertiary care — High specialized medical care usually over an extended period of time that involves advanced and complex procedures and treatments performed by medical specialists. *(See Primary Care and Secondary Care)*

Workload — The amount of CIC units by category determined for each market and facility by the Demand Forecast.

Mental Health Indicators

Indicator	Description
New Dx Dep - F/U X3 (mdd6n)	Percentage of patients with a new diagnosis of depression who have at least three clinical follow-up visits in the 12 acute periods after diagnosis (current PM)
New Dx Dep - Meds (mdd7n)	Percentage of patients with a new diagnosis of depression who have medication for at least 84 days in the acute treatment period (current PM)
Homeless Dchg Indep (fnct2n)	Percentage of veterans discharged from a domiciliary care for homeless veterans (DCHV), grand and per diem program, or healthcare for homeless veterans community-based contract residential care program to independent living
Screen for Alcohol (sa3)	Percentage of patients screened for high risk alcohol use with the AUDIT-C instrument (past and current PM)
Screen for MHICM (mhc1)	Percentage of psychiatry patients with high utilization of inpatient psychiatry services who are screened for mental health intensive care case management (past and current PM)
Screen for PTSD (ptsd1)	Percentage of all veterans screened for post traumatic stress disorder (PTSD) in the previous 12 months (SI)
SUD Cont of Care (sa5)	Percentage of patients entering specialty substance abuse treatment who maintain continuity of care for at least 90 days (past and current PM)