



**Capital Asset Realignment  
for Enhanced Services  
(CARES)**

**Stage II Final Report  
Site: Montrose – Castle Point**

**August 2007**

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

VA has also contracted with another government contractor, S&S/ACG Joint Venture, to develop reuse options for this study site. S&S/ACG Joint Venture issued its reports, *Phase 2 & 3 Combined Report: General Reuse/Redevelopment Option(s) Castle Point Campus of the VA Hudson Valley Health Care System* and *Phase 3 Report General Reuse/Redevelopment Options Franklin Delano Roosevelt Campus of the VA Hudson Valley Healthcare System*, which to the VA's Office of Asset Enterprise Management. As directed by VA, PwC has included information from its report in relevant parts of its analysis. PwC was not engaged to review and, therefore, makes no representation regarding the sufficiency of nor takes any responsibility for any of the information provided 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 Executive Summary

CARES is 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 reuse of all or portions of the current real property inventory owned by VA. While most VA Medical Centers (VAMCs) have received approval to proceed with plans consistent with the CARES objectives, the Secretary of Veterans Affairs' May 2004 CARES Decision Document determined that additional study was necessary for the Montrose / Castle Point VAMCs.

The purpose of this preliminary report is to present the results of Stage II of the CARES study process for Montrose and Castle Point. In Stage II, Team PwC and S&S/ACG Joint Venture (independent contractor to VA on reuse referred to as OGC) conducted a detailed assessment of short-listed Business Plan Options (BPOs) in order to provide VA decision makers with an evaluation of each BPO and its relative strengths and weaknesses. A separate implementation plan featuring risk mitigation strategies is developed for each BPO.

A number of key drivers were considered in the development and evaluation of BPOs:

- The number of enrolled Priority 1-6 veterans is expected to decline by 21% by 2023
- The VA will continue to operate 164 nursing home beds
- Overall utilization for domiciliary services declines over the projected study period
- Both campuses consist largely of buildings and infrastructure that are not ideally suited for the provision of modern health care services
- Each of the existing facilities are aged; Montrose was built 59 years ago while Castle Point was built in the 1920s with renovations/new construction in the 1950s and 1980s
- Substantial vacant buildings and/or unused land create significant potential for reuse at Montrose and Castle Point

The Secretary of VA approved the following short-listed BPOs for detailed study in Stage II:

- **BPO 1:** Baseline at Montrose and Castle Point
- **BPO 2:** Montrose - Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus)
- **BPO 4:** Montrose - Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station (Site of Buildings 13 and 14)
- **BPO 7:** Castle Point - Construct All New Facilities West of Existing Buildings
- **BPO 10:** Castle Point - Build New Nursing Home and Renovate Existing Facility
- **BPO 11A:** Montrose - Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location  
Castle Point - Construct Replacement Facility (similar to BPO 7)
- **BPO 11B:** Montrose - Relocate Residential Treatment Programs to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location  
Castle Point - Renovate Existing Facilities and Build New Nursing Home and Domiciliary Facilities (similar to BPO 10)

The BPOs were compared against the Baseline option using five categories of evaluation criteria: Capital Planning, Use of VA Resources, Re-Use, Ease of Implementation and Ability to Support Other VA Programs. Parallel to the evaluation, Team PwC solicited input from a Local Advisory Panel and other interested stakeholders regarding their comments and concerns for each BPO. Stakeholders expressed a strong preference for the current provision of services between Montrose and Castle Point, and voiced strong concerns about all options, including the baseline, as per the Secretary's 2004 decision they involve a shift of services from Montrose to Castle Point. The LAP echoed this sentiment, but also voiced support for options that provided new clinical facilities.

There are relative strengths and weaknesses for each of the business plan options. The Baseline option (BPO 1) accommodates the projected healthcare demand by renovating existing buildings to meet modern, safe and secure standards, where conditions allow. The renovations in the Baseline achieve a more modern, safe and secure healthcare environment than is currently provided. However, this option does not take advantage of the numerous benefits to patients and staff of new, state-of-the-art clinical facilities. Additionally, it requires the highest capital investment cost, has the longest duration at both Montrose and Castle Point, results in the most underutilized and vacant space, and has a high degree of complexity at Montrose and Castle Point due to renovation and construction phases and relocation of services and patients.

BPO 2-7 is very similar to BPO 11A with the only difference being that in BPO 11A, residential treatment programs are moved from Montrose to Castle Point. These options have several advantages over the other BPOs. They are the shortest BPOs to implement, result in the lowest underutilized and vacant space at Montrose and Castle Point, and are the least complex BPOs based on construction phasing and patient moves. In financial terms, BPO 2-7 has the lowest net present cost, assuming that inpatient and nursing home facilities remain at Montrose while new Castle Point facilities are constructed. However, the capital costs net of reuse proceeds are slightly higher than options involving BPOs 10 and 11B. In terms of stakeholder reaction, veterans expressed a strong preference for the current division of services between Montrose and Castle Point, and therefore were more likely to support BPO 7-2 as it maintains the domiciliary at Montrose. The LAP favored options which provide new clinical facilities.

BPOs 2-10 and 4-10 are very similar to BPO 11B with the only difference being that in BPO 11B, residential treatment programs are moved from Montrose to Castle Point. These options have several advantages over the other BPOs. They are the shortest BPOs to implement at Montrose, result in the lowest underutilized space at Montrose, eliminate vacant space at both campus, and have the lowest operating, capital investment and net present costs. These BPOs have the lowest degree of complexity at Montrose based on renovation and construction phasing and patient moves. However, these options have several disadvantages over the other BPOs. These options have a longer duration at Castle Point than BPOs 7 and 11A. They have significant management challenges and risks associated with contracting out for inpatient psychiatry and nursing home care over an extended period of time. If an alternative implementation strategy is followed and inpatient and nursing home facilities remain at Montrose while new Castle Point facilities are constructed, BPOs 2-10 and 4-10 are \$51-56M

higher in net present cost than BPO 7-2. In terms of stakeholder reaction, veterans expressed a strong preference for the current division of services between Montrose and Castle Point, and therefore were more likely to support BPO 2-10 and 4-10 as they maintain the domiciliary at Montrose. .

The combination of BPOs 4 and 7 has several advantages over the other BPOs. It is the shortest duration at Montrose and Castle Point, results in the lowest underutilized and vacant space at both campuses and is the least complex option combination based on construction phasing and patient moves. The only relative disadvantage of this option combination is that capital costs net of reuse proceeds are slightly higher than options involving BPOs 10 and 11B. In terms of stakeholder reaction, veterans expressed a strong preference for the current division of services between Montrose and Castle Point, and therefore were more likely to support BPO 7-4 as it maintains the domiciliary at Montrose. The LAP favored options which provide new clinical facilities.

## **2.0 Introduction and Background**

### **Purpose of Report**

The Capital Asset Realignment for Enhanced Services (CARES) study process consists of a planning phase and two study phases, Stage I and Stage II. In Stage I, Team PricewaterhouseCoopers (Team PwC) developed and assessed a broad range of potentially viable business plan options (BPOs) that met the forecast healthcare needs for the study sites. Several of the studies involved a reuse analysis prepared by S&S/ACG Joint Venture. Based upon an initial assessment of these BPOs, Team PwC recommended up to six BPOs to be taken forward for further development and assessment in Stage II, and the Department of Veterans Affairs (VA) selected the specific BPOs to be studied further. In Stage II, Team PwC and S&S/ACG Joint Venture conducted a more detailed assessment of the short-listed BPOs in order to provide VA decision makers with an evaluation of each BPO and its relative strengths and weaknesses. This preliminary report, together with the separate Reuse reports (Phase 3 Report: General Reuse/Redevelopment Options Montrose Campus of the VA Hudson Valley Health Care System and the Phase 3 Report: General Reuse/Redevelopment Options Castle Point Campus of the VA Hudson Valley Health Care System) summarizes the work done by Team PwC and S&S/ACG Joint Venture in Stage II. Additionally, a separate implementation plan featuring risk mitigation strategies has been developed for each BPO.

### **Project Overview**

CARES is 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 reuse of all or portions of the current real property inventory owned by VA. While most VA Medical Centers (VAMCs) have received approval to proceed with plans consistent with the CARES objectives, the Secretary of Veterans Affairs' May 2004 CARES Decision Document determined that additional study was necessary for Montrose and Castle Point.

The 2004 Secretary's Decision Document determined that:

- VA will implement a consolidation of services between the Montrose and Castle Point campuses that will enhance patient care and make more effective use of VA healthcare resources.
- The consolidation will transfer acute psychiatry, long-term psychiatry, and nursing home beds from the Montrose campus to the Castle Point campus.
- To accomplish this consolidation, VA will augment the mission at the Castle Point campus with new construction and reduce the footprint on the Montrose campus through an enhanced use lease for assisted living and other compatible uses or divestiture of property



- By consolidating these services at Castle Point, VA can build one new state-of-the-art and appropriately sized nursing home designed to provide high quality nursing home care services
- VA will continue to provide outpatient, domiciliary, and residential rehabilitation services at the Montrose campus
- The Plan will make sure that the realignment decision for the excess VA property at the Montrose campus will consider, but will not be limited to, an existing enhanced use lease proposal for an assisted living complex. The potential for collaboration with the National Cemetery Administration also will be considered in the Master Plan. Any reuse or disposal of property on the Montrose Campus will serve to enhance the Department's mission.

Following a period of data gathering and analysis conducted under VA-approved guidelines, Team PwC presented its Stage I report to VA. A summary of this report is available online at <http://www.va.gov/cares>. The report describes options consistent with the mandates of the Secretary's May 2004 decision for the Montrose / Castle Point study sites. After examining the BPOs presented in the Stage I report, the Secretary determined and directed that BPOs 1 (Baseline), 2, 4, 11A, and 11B at Montrose and BPOs 1 (Baseline), 7, 10, 11A, and 11B at Castle Point (summarized below) be further analyzed in Stage II of the study process.

In Stage II, the BPOs were compared against the Baseline option using a set of agreed-upon evaluation criteria that are described in the following methodology summary section as well as in the detailed Stage II methodology (Appendix B). The Baseline is the BPO under which there would not be significant change in either the location or type of services provided in the study site. In the Baseline BPO, the Secretary's Decision and forecasted healthcare demand and trends from the demand forecast for 2023 are applied to the current healthcare provision solution for the study site. Additionally, capital improvements required to meet modern, safe, and secure standards, where existing conditions permit, are factored into the current state assessment.

Team PwC and the reuse site teams conducted a preliminary evaluation of each BPO. In order to obtain further input into the tradeoff evaluation of the options, Team PwC convened an Independent Review Panel (IRP) to provide an in-process review of the Stage II analysis, which included a balanced review of the tradeoffs considered in developing the evaluation of each BPO. The IRP challenged and validated the assessment findings and evaluation of each BPO, with consideration to stakeholder input. The BPOs were first assessed against the evaluation criteria using a quantitative scale in order to numerically discriminate between each BPO. The evaluation results were then used by site teams and the IRP to discuss the relative strengths and weaknesses of each BPO and in turn to develop the implementation plans. This report contains the evaluation results for each BPO and a tradeoff discussion of their relative merits. The Stage II results will be presented to the Secretary to make a final decision on a set of capital and reuse proposals.

## **Study Drivers**

Over the course of Stage I, three major drivers affecting the planning of the Montrose and Castle Point study sites were identified. These drivers represent factors of considerable importance at the study sites that must be balanced in the development and evaluation of BPOs. They are:

1. Declines in enrolled Priority 1-6 veterans through 2023.
2. Both campuses consist largely of buildings and infrastructure that do not conform to modern health facility standards.
3. Significant opportunity to right size facilities at both sites to meet projected demand.
4. Substantial vacant buildings and unused land create significant reuse potential at the Montrose campus.

These three drivers are described further below.

**Healthcare Demand** - The number of enrolled Priority 1-6 veterans is expected to decline by 21% by 2023. In terms of utilization of healthcare services, acute inpatient bed need is projected to decrease by 18% over the study period, while outpatient visits (including radiology and pathology) are projected to decrease by 7%. The two inpatient programs that will experience an increase in demand are psychiatry and substance abuse. The number of nursing home beds will remain constant over the projected study period. However, utilization of domiciliary services declines. Cardiology and urology services will experience increases in utilization while the remaining ambulatory care services will decrease in demand. Utilization of outpatient mental health services is projected to remain relatively constant through 2023.

**Need to Modernize Healthcare Facilities** – The Secretary's Decision requires consolidation of all inpatient and nursing home services on the Castle Point campus. With the exception of one patient care building completed in 1989, the buildings on the Castle Point campus require either substantial renovation or replacement to accommodate the psychiatry and nursing home patients now cared for on the Montrose campus. In addition, the domiciliary at Montrose also requires either substantial renovation or replacement, as do the buildings on both campuses in which ambulatory care is provided. However, this consolidation presents the opportunity to upgrade all of the facilities on the Castle Point campus to improve compliance with modern, safe, and secure facility standards.

**Better Use of VA Resources** – There is significant opportunity to right size facilities at both sites to meet projected demand. This can result in significant cost avoidance opportunities at Montrose because so many of the buildings are currently vacant or will become so when patient services are transferred to the Castle Point campus. Disposition would reduce future maintenance costs. Although significant new construction costs are required at Castle Point, operating efficiencies can still be achieved.

**Re-Use Potential** – Analysis of the reuse potential for the Montrose campus indicates that it is reasonably well located for a variety of reuse purposes. Several years ago, a coalition of local interests submitted a plan for an Enhanced-Use Lease development which provides tangible

evidence of residential reuse potential. A 252-bed New York State Veterans Nursing Home was completed in 2001 on land which was previously part of the Montrose campus. A portion of the campus overlooks or borders the Hudson River, although the State of New York is seeking an easement along the facility's 2,500 feet of river frontage as part of the Hudson River Valley Greenway, a project to provide local opportunities for recreation and public access to the Hudson River. Similarly, the NCA has expressed interest in obtaining 20 acres on the site for a columbarium, although no firm commitments regarding timing have been made. The BPOs have been constructed in such a manner as to allow consideration of a specific location for the columbarium in Stage II.

**Summary of Stage I BPOs**

**BPOs Recommended by Team PwC for Further Study**

The BPOs recommended for further study share some key similarities. All of them would:

- Provide an attractive solution to providing Nursing Home care services in a modern, safe and secure setting
- Right-size the campus for future demand
- Maintain or improve veteran access to healthcare
- Eliminate recurring maintenance costs for aging buildings
- Allow potential reuse/redevelopment of unused buildings and land

*Table 1: BPOs Recommended by Team PwC for Further Study*

<b>BPO 1: Baseline</b>
<p>In the baseline, very limited new construction is planned over the forecast period. Capital investments will be made to renovate and maintain existing buildings in order to meet modern, safe, and secure standards. Ten buildings are vacated at Castle Point (Buildings 1, 2, 3, 4, 5, 6, 34, 45, 46, and 48), and the remaining buildings are renovated or expanded to handle inpatient workload transferred from Montrose.</p> <p><u>Montrose:</u> Outpatient and domiciliary services remain at Montrose. Acute psychiatry, long-term psychiatry, and nursing home beds move from Montrose (reducing footprint through renovation and consolidation) to Castle Point. Domiciliary care is consolidated into Buildings 52 and 28 in phased renovations. Under the baseline, no buildings are demolished, while most buildings on the campus would be vacant. Parcels 1, 2, 3 (75%), 4 (75%), 5, 6, and 7 are available for reuse. Potential reuses include senior residential, institutional or office and local retail. Parking is adequate for projected future workload.</p> <p><u>Castle Point:</u> Renovate existing buildings containing inpatient, outpatient, and nursing home services in phased renovations. Spinal Cord Injury relocates from Castle Point to the Bronx VAMC in 2013. Construct new space to accommodate workload relocated from Montrose. Keep existing support buildings including the fire station (Building 19), the sewage treatment plant, and the boiler (Building 35). Vacate ten buildings (Quarters Building, Buildings 1, 2, 3, 4, 5, 6, 45, the leased childcare (Building 46), and the old boiler plant (Building 34)). No reuse studies were conducted for this campus. Parking will need to be expanded to accommodate a greater number of visitors and employees.</p>
<b>BPO 2: At Montrose, Construct New Domiciliary and Ambulatory Care Facility West of Fire Station (North Campus)</b>
<p>This BPO would place outpatient mental health and medical clinics and domiciliary services in new construction west of the fire station (Building 19) on the northeastern part of the campus. Buildings 16, 19, 20, and 24 will be retained to provide the necessary support services to the Montrose VAMC. This BPO anticipates the demolition</p>

<p>of the water towers, and that all other existing buildings and infrastructure (including the water distribution system and waste water treatment plant) would be available for reuse opportunities when the new facility is complete. Parking is adequate for projected future workload.</p> <p>Parcels 1, 2, 3, 4 (50%), 5, 6, and 7 are available for reuse.</p>
<p><b>BPO 7: At Castle Point, Construct All New Facilities West of Existing Buildings</b></p> <p>This BPO would construct a new multistory, 564,000 square foot building on vacant land west of the existing buildings at Castle Point. This new building would accommodate all inpatient, outpatient, and nursing home services. All other existing patient care buildings on the campus would be vacated when this new facility is complete. Parking will need to be expanded to accommodate a greater number of visitors and employees.</p> <p>No reuse studies were conducted for this campus.</p>
<p><b>BPO 8: At Castle Point, Construct All New Facilities South of Existing Buildings</b></p> <p>This BPO would construct a new multistory, 564,000 square foot building on vacant land south of the existing patient care buildings on the site of the existing Quarters Buildings at Castle Point. The Quarters Buildings and Building 46 would be demolished. This new building would accommodate all inpatient, outpatient, and nursing home services. All other existing patient care buildings on the campus would be vacated when this new facility is complete. Parking will need to be expanded to accommodate a greater number of visitors and employees.</p> <p>No reuse studies were conducted for this campus.</p>
<p><b>BPO 9: At Castle Point, Construct All New Facilities on Western Campus Adjacent to River Road South</b></p> <p>This BPO would construct a new multistory, 564,000 square foot building on vacant land on the western side of the campus adjacent to River Road South. This new building would accommodate all inpatient, outpatient, and nursing home services. All other existing patient care buildings on the campus would be vacated when this new facility is complete. Parking will need to be expanded to accommodate a greater number of visitors and employees.</p> <p>No reuse studies were conducted for this campus.</p>
<p><b>BPO 11: At Montrose, Construct New Outpatient Building, Transfer Domiciliary to Castle Point, and Close Fire Station.</b></p> <p>This BPO was created during the second LAP meeting and envisions that services transferred to the Castle Point campus from Montrose would also include domiciliary services. This BPO would make more of the Montrose campus available for reuse and allows closure of the Montrose fire station, which would result in annual operating savings.</p>

**BPOs Not Recommended for Further Study**

The BPOs which Team PwC eliminated from further consideration were BPOs 3, 4, 5, 6, and 10. This is because BPOs 3, 4 and 5 have a higher implementation risk related to some new construction on currently used site, which could negatively affect continuity of care at Montrose without realizing additional benefits in implementation speed, reuse potential, or modernity, safety, and security of future environment of care. BPO 6 has a higher implementation risk given potential inadequacy of land to accommodate facilities and adjacent parking for ambulatory and outpatient care along Route 9. BPO 10 was eliminated because BPOs 7, 8, and 9 offer the same benefits with lower implementation risk and capital expenditure.

*Table 2: Stage II Study BPOs Not Recommended for Further Study*

<p><b>BPO 3: At Montrose, Construct New Domiciliary and Ambulatory Care Facility East of Fire Station (North Campus)</b></p> <p>This BPO would place outpatient mental health and medical clinics and domiciliary services in new construction east of the fire station (Building 19) on the northeastern part of the campus. Buildings 16, 17, 18, and 24 will be demolished to provide space for this new facility. This BPO anticipates that all other existing buildings and</p>
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infrastructure (including the water distribution system and waste water treatment plant) would be available for reuse opportunities when the new facility is complete. Parking is adequate for projected future workload.

Parcels 1, 2, 3 (85%), 4 (75%), 5, 6, and 7 are available for reuse. Potential reuses include senior residential, institutional or office, and local retail.

**BPO 4: At Montrose, Construct New Domiciliary and Ambulatory Care Facility South of Fire Station (Site of Buildings 13 and 14)**

This BPO would place outpatient mental health and medical clinics and domiciliary services in new construction south of the fire station on the site of Buildings 13 and 14. Buildings 13 and 14 will be demolished to provide the necessary space for the new facilities. This BPO anticipates that all other existing buildings and infrastructure (including the water distribution system and waste water treatment plant) would be available for reuse opportunities when the new facility is complete. Parking is adequate for projected future workload.

Parcels 1, 2, 3 (80%), 4, 5, 6, and 7 are available for reuse.

**BPO 5: At Montrose, Construct New Domiciliary on Northwest Campus, New Ambulatory Care Facility North of Fire Station**

This BPO would place outpatient mental health and medical clinics in new construction on the northern campus in the area of existing domiciliary (Building 52) and construct a new domiciliary building in the northwestern part of the campus by the residential quarters. Building 52 will be demolished to provide the necessary space for the outpatient building. This BPO anticipates that all other existing buildings and infrastructure (including the water distribution system and waste water treatment plant) would be available for reuse opportunities when the new facility is complete. Parking is adequate for projected future workload.

Parcels 1, 2, 3 (90%), 4 (50%), 5, 6, and 7 are available for reuse. The percentage of land available for reuse in Parcel 3 is higher due to the location of the new facilities outside the core of this parcel.

**BPO 6: At Montrose, Construct New Domiciliary on Northwest Campus, New Ambulatory Care Facility at Campus Entrance**

This BPO would place outpatient mental health and medical clinics in new construction on the northeastern campus near the campus entrance off Route 9A and construct a new domiciliary building in the northwestern part of the campus by the residential quarters. This BPO anticipates that all other existing buildings and infrastructure (including the water distribution system and waste water treatment plant) would be available for reuse opportunities when the new facility is complete. Parking is adequate for projected future workload, although the location of existing parking is not ideal for the new outpatient facility.

Parcels 2, 3, 4 (50%), 5, 6, and 7 are available for reuse.

**BPO 10: At Castle Point, Renovate and Build New Nursing Home on Northeastern Campus**

This BPO would replace the nursing home services in the area of the existing nursing home (Buildings 19, 20, and 21). It would renovate nearly 300,000 square feet in the remaining buildings. The new construction and renovated buildings would accommodate all inpatient, outpatient, and nursing home services. Other existing patient care buildings on the campus would be vacated when this new facility is complete. Parking will need to be expanded to accommodate a greater number of visitors and employees.

No reuse studies were conducted for this campus.

## **Secretary's Stage I Decision**

The Secretary reviewed the Team PwC Stage I report and the recommendations of the LAP, instructing Team PwC to proceed into Stage II of the analysis. The Secretary's 2004 Decision Document made the decision to consolidate services between the Montrose and Castle Point campuses that will enhance patient care and make more effective use of VA healthcare resources. The Secretary has directed Team PwC to develop a Master Plan that includes the transfer acute psychiatry, long-term psychiatry, and nursing home beds from the Montrose campus to the Castle Point campus.

The Secretary recommended that BPOs 1, 2, 4, and 11 at Montrose and BPOs 1, 7, 10, and 11 at Castle Point proceed into Stage II. The LAP added BPO 11 which proposes to transfer the domiciliary unit to Castle Point in addition to the psychiatric and nursing home care units. This differs from the May 2004 Decision, however, the LAP's recommendation was driven by their view that greater operational efficiencies could be achieved if Montrose was not a 24 hour residential facility and that consolidating all mental health services at Castle Point would improve continuity of care. BPOs 2 and 7 were supported by stakeholders, the LAP, and PwC and they propose little disruption to the campus and patient care. BPO 4 offers patient accessibility from the main entrance and campus road. BPO 10 provides a mix of new and renovated facilities to deliver patient care.

## **Full Description of Stage II BPOs**

Following the Secretary's Stage I decision announcement, Team PwC and S&S/ACG Joint Venture met with local VA representatives to review each BPO selected by the Secretary for further study. The purpose of these meetings was to:

- Understand the Secretary's recent decisions
- Clarify the Secretary's decision regarding changes to healthcare service delivery, facilities and availability of land/buildings for reuse
- Refine the BPO descriptions and site maps to take into account any information concerning the facility or the application of Stage II study assumptions
- Clarify the BPO descriptions for ease of understanding and consistency

For evaluation purposes, the refined BPOs were paired to create complete option combinations for both the Montrose and Castle Point campuses. The refined BPO descriptions of the option combinations being considered for Montrose and Castle Point in Stage II are the following:

*Table 3: Stage II Study BPOs*

<b>BPO 1 – Baseline</b>
<i>MONTROSE: Current workload projected to 2023 without any changes to facilities or programs except for nursing home and psychiatry (which under the Secretary's decision relocate to Castle Point.) Outpatient Mental Health, medical clinics, and residential treatment programs (domiciliary) services remain at Montrose.</i>
Capital investments will be made to renovate and maintain existing buildings and infrastructure in order

to meet modern, safe and secure standards.

While there may be reuse potential of underutilized land and vacant buildings, reuse was not studied under this BPO.

The key constraints for modernization at Montrose are the physical limitations of the existing buildings to accommodate state of the art healthcare delivery in addition to the disruption to patients and staff during construction.

Note:

As buildings and land become vacant over the forecast period, the contractor for the programming and design phase of the project should identify in a project schedule the reuse potential of land parcel and vacant building availability.

*CASTLE POINT: Renovate existing buildings containing inpatient and outpatient services in phased renovations. Construct new space to accommodate inpatient psychiatry and nursing home services relocated from Montrose to Castle Point.*

Capital investments will be made to renovate and maintain existing buildings and infrastructure in order to meet modern, safe and secure standards.

- Retain existing support buildings, fire station, and sewage treatment plant
- Buildings 12 and 34 will be demolished

While there may be reuse potential of underutilized land and vacant buildings, reuse was not studied under this BPO.

The key constraints for modernization at Castle Point are the physical limitations of the existing buildings to accommodate state of the art healthcare delivery in addition to the disruption to patients and staff during construction. Providing a single level for nursing home residents' rooms on a sloping site also will provide building design challenges.

Note:

As buildings and land become vacant over the forecast period, the contractor for the programming and design phase of the project should identify in a project schedule the reuse potential of land parcel and vacant building availability.

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**BPO 2 and BPO 7**

*BPO 2 - MONTROSE: Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus)*

This BPO would place Outpatient Mental Health, medical clinics, and residential treatment programs in new construction east of the fire station on the northeastern part of the campus.

Most other existing buildings and infrastructure (including the water distribution system and waste water treatment plant) would be available for reuse opportunities.

Parcels 1, 2, 3, 5, 6, & 7 and portions of parcel 4 are available for reuse.

The key opportunity offered by this BPO is construction of all new facilities on the Montrose campus.

Note:

As buildings and land become vacant over the forecast period, the contractor for the programming and design phase of the project should identify in a project schedule the reuse potential of land parcel and vacant building availability.

*BPO 7 - CASTLE POINT: Construct Replacement Facility West of Existing Buildings*

Construct a replacement facility on vacant land west of the existing buildings. Accommodate all inpatient, ambulatory care, and nursing home services including services relocated from Montrose (inpatient psychiatry and nursing home.)

Inpatient Spinal Cord Injury services are relocated to Bronx VAMC and outpatient Spinal Cord Injury services remain on campus.

Expand and improve parking. Maintain water and sewage treatment capacity, and fire station capability. All other buildings on the campus will be vacated.

Reuse was not studied in Stage I. Reuse opportunities for available land and buildings are being studied in Stage II.

The key opportunity offered by this BPO is construction of all new facilities on the Castle Point campus.

Note: As buildings and land become vacant over the forecast period, the contractor for the programming and design phase of the project should identify in a project schedule the reuse potential of land parcel and vacant building availability.

**BPO 4 at BPO 7**

*BPO 4 - MONTROSE: Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station (Site of Buildings 13 and 14)*

Place Outpatient Mental Health, medical clinics, and residential treatment programs in new construction south of the fire station on the site of Buildings 13 and 14. Buildings 12, 13, 14 and 15 will be demolished to provide the necessary space for the new facilities.

All other existing buildings and infrastructure (including the water distribution system and waste water treatment plant) would be available for reuse opportunities.

Parcels 1, 2, 4, 5, 6, & 7 and portions of parcel 3 are available for reuse.

The key opportunity offered by this BPO is construction of all new facilities on the Montrose campus.

Note:

As buildings and land become vacant over the forecast period, the contractor for the programming and design phase of the project should identify in a project schedule the reuse potential of land parcel and vacant building availability.

*BPO 7 - CASTLE POINT: Construct Replacement Facility West of Existing Buildings*

Construct a replacement facility on vacant land west of the existing buildings. Accommodate all inpatient, ambulatory care, and nursing home services including services relocated from Montrose (inpatient psychiatry and nursing home.)

Inpatient Spinal Cord Injury services are relocated to Bronx VAMC and outpatient Spinal Cord Injury services remain on campus.

Expand and improve parking. Maintain water and sewage treatment capacity, and fire station capability. All other buildings on the campus will be vacated.

Reuse was not studied in Stage I. Reuse opportunities for available land and buildings are being studied in Stage II.



The key opportunity offered by this BPO is construction of all new facilities on the Castle Point campus.

Note: As buildings and land become vacant over the forecast period, the contractor for the programming and design phase of the project should identify in a project schedule the reuse potential of land parcel and vacant building availability.

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**BPO 2 and BPO 10**

*BPO 2 - MONTROSE: Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus)*

This BPO would place Outpatient Mental Health, medical clinics, and residential treatment programs in new construction east of the fire station on the northeastern part of the campus.

Most other existing buildings and infrastructure (including the water distribution system and waste water treatment plant) would be available for reuse opportunities.

Parcels 1, 2, 3, 5, 6, & 7 and portions of parcel 4 are available for reuse.

The key opportunity offered by this BPO is construction of all new facilities on the Montrose campus.

Note:

As buildings and land become vacant over the forecast period, the contractor for the programming and design phase of the project should identify in a project schedule the reuse potential of land parcel and vacant building availability.

*BPO 10 - CASTLE POINT: Build New Nursing Home and Renovate Existing Facility*

All current services at Castle Point will remain on campus with the exception of Inpatient Spinal Cord Injury services (which are relocated to Bronx VAMC.) Outpatient Spinal Cord Injury services remain on campus.

Build replacement nursing home to accommodate existing Castle Point services and those nursing home beds relocated from Montrose.

Renovate buildings to accommodate existing Castle Point inpatient and ambulatory care services and inpatient psychiatry transferred from Montrose. Expand and improve parking.

Reuse was not studied in Stage I. Reuse opportunities for available land and buildings are being studied in Stage II.

The key constraints for modernization at Castle Point are the physical limitations of the existing buildings to accommodate state of the art healthcare delivery in addition to the disruption to patients and staff during construction. Providing a single level for nursing home residents' rooms on a sloping, wooded site also will provide building design challenges.

Note:

As buildings and land become vacant over the forecast period, the contractor for the programming and design phase of the project should identify in a project schedule the reuse potential of land parcel and vacant building availability.

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**BPO 4 and BPO 10**

*BPO 4 - MONTROSE: Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station (Site of Buildings 13 and 14)*

Place Outpatient Mental Health, medical clinics, and residential treatment programs in new construction south of the fire station on the site of Buildings 13 and 14. Buildings 12, 13, 14 and 15 will be demolished to provide the necessary space for the new facilities.

All other existing buildings and infrastructure (including the water distribution system and waste water treatment plant) would be available for reuse opportunities.  
Parcels 1, 2, 4, 5, 6, & 7 and portions of parcel 3 are available for reuse.

The key opportunity offered by this BPO is construction of all new facilities on the Montrose campus.

Note:

As buildings and land become vacant over the forecast period, the contractor for the programming and design phase of the project should identify in a project schedule the reuse potential of land parcel and vacant building availability.

*BPO 10 - CASTLE POINT: Build New Nursing Home and Renovate Existing Facility*

All current services at Castle Point will remain on campus with the exception of Inpatient Spinal Cord Injury services (which are relocated to Bronx VAMC.) Outpatient Spinal Cord Injury services remain on campus.

Build replacement nursing home to accommodate existing Castle Point services and those nursing home beds relocated from Montrose.

Renovate buildings to accommodate existing Castle Point inpatient and ambulatory care services and inpatient psychiatry transferred from Montrose. Expand and improve parking.

Reuse was not studied in Stage I. Reuse opportunities for available land and buildings are being studied in Stage II.

The key constraints for modernization at Castle Point are the physical limitations of the existing buildings to accommodate state of the art healthcare delivery in addition to the disruption to patients and staff during construction. Providing a single level for nursing home residents' rooms on a sloping, wooded site also will provide building design challenges.

Note: As buildings and land become vacant over the forecast period, the contractor for the programming and design phase of the project should identify in a project schedule the reuse potential of land parcel and vacant building availability.

**BPO 11A**

*MONTROSE: Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location*

At Montrose, construct a new building for ambulatory care services east of former fire station. All other services (inpatient psychiatry, nursing home and residential treatment programs) are relocated to Castle Point. Expand and improve parking.

The analysis and proposed capital plan for BPO 11A & 11B at Montrose are identical.

The key opportunity offered by this BPO is construction of all new facilities on the Montrose campus.

Note:

As buildings and land become vacant over the forecast period, the contractor for the programming and design phase of the project should identify in a project schedule the reuse potential of land parcel and vacant building availability.

*CASTLE POINT: Construct Replacement Facility (Similar to BPO 7)*

At Castle Point (similar to BPO 7), construct a replacement facility on vacant land west of the existing buildings. Accommodate all inpatient, ambulatory care, and nursing home services including services relocated from Montrose (inpatient psychiatry, nursing home and residential treatment programs.) Inpatient Spinal Cord Injury services are relocated to Bronx VAMC and Outpatient Spinal Cord Injury services remain on campus.

Reuse was not studied in Stage I at Castle Point. Reuse opportunities for available land and buildings at both campuses are being studied in Stage II.

The key constraints for execution of this option are the same as for BPO 10 with the additional parameter of constructing a new domiciliary facility on the slope northwest of the existing main campus and connecting to the other new facilities through a new multi-level pedestrian connector.

Note:

As buildings and land become vacant over the forecast period, the contractor for the programming and design phase of the project should identify in a project schedule the reuse potential of land parcel and vacant building availability.

**BPO 11B**

*MONTROSE: Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location*

At Montrose, construct a new building for ambulatory care services east of former fire station. All other services (inpatient psychiatry, nursing home and residential treatment programs) are relocated to Castle Point. Expand and improve parking.

The analysis and proposed capital plan for BPO 11A & 11B at Montrose are identical.

The key opportunity offered by this BPO is construction of all new facilities on the Montrose campus.

Note: As buildings and land become vacant over the forecast period, the contractor for the programming and design phase of the project should identify in a project schedule the reuse potential of land parcel and vacant building availability.

*CASTLE POINT: Renovate Existing Facilities and Build New Nursing Home (similar to BPO 10)*

All current services at Castle Point will remain on campus with the exception of Inpatient Spinal Cord Injury services (which are relocated to Bronx VAMC.) Outpatient Spinal Cord Injury services remain on campus.

Build replacement nursing home to accommodate existing Castle Point services and those nursing home beds relocated from Montrose.

Renovate buildings to accommodate existing Castle Point inpatient and ambulatory care services and inpatient psychiatry. Accommodate residential treatment programs transferred from Montrose.

Reuse was not studied in Stage I at Castle Point. Reuse opportunities for available land and buildings at both campuses are being studied in Stage II.

The key constraints for execution of this option are the same as for BPO 10 with the additional parameter of constructing a new domiciliary facility on the slope southwest of the existing main campus and connecting to building 15H through a new subgrade pedestrian connector.

Note:

As buildings and land become vacant over the forecast period, the contractor for the programming and design phase of the project should identify in a project schedule the reuse potential of land parcel and vacant building availability.

The physical requirements for each of these BPOs are intended to provide an acceptable level of quality consistent with established VA standards, together with consolidation of functions through renovation and/or through construction of new freestanding buildings. Renovations to existing buildings will take several phases spread over several years since many of the existing buildings are occupied (fully or partially) and occupants will have to be relocated during renovation.

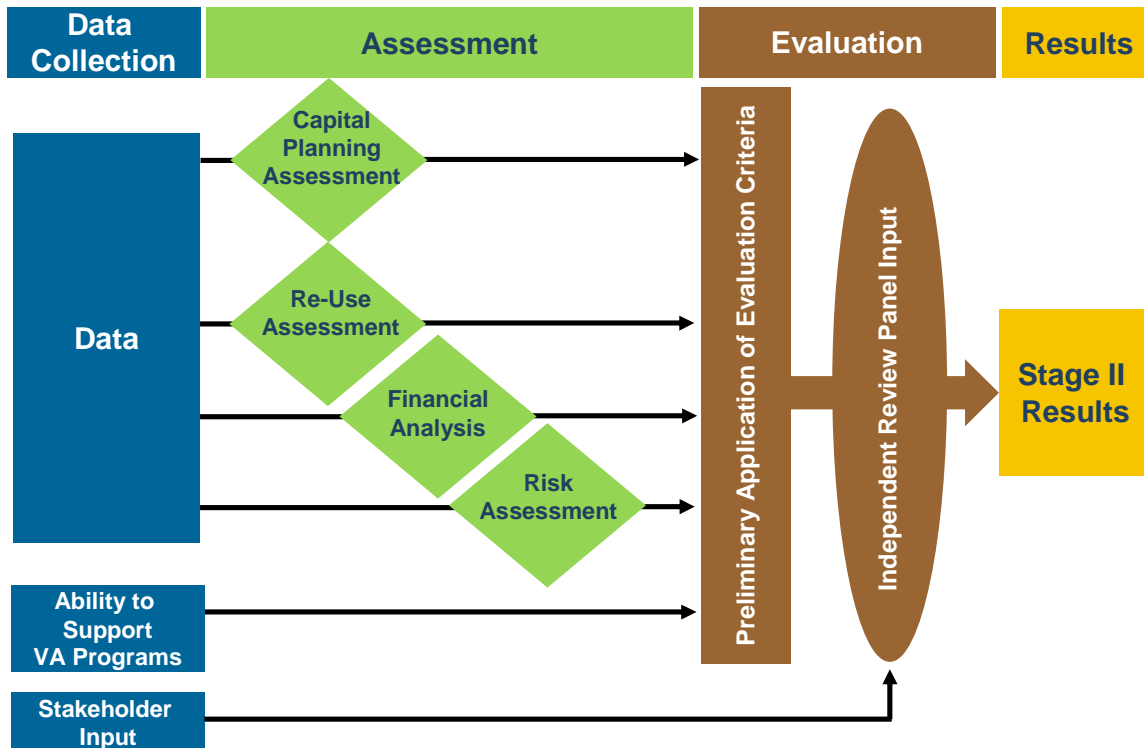
### 3.0 Summary of Stage II Methodology

#### Overview

This section provides an overview of the methodology employed by Team PwC in Stage II of the CARES study. The detailed Stage II Study Methodology is included in Appendix B of the report. In Stage II, Team PwC and S&S/ACG Joint Venture conducted a more detailed assessment of the BPOs selected by the Secretary for further study. Team PwC and S&S/ACG Joint Venture collected additional data on a set of evaluation criteria and conducted additional capital planning, reuse, and financial analysis for each BPO. The results are used to assess each BPO and to evaluate the relative strengths and weaknesses of each BPO.

The Stage II study process consists of four primary steps, Data Collection, Assessment, Evaluation, and Stage II Results, as depicted in the figure below.

Figure 1: A diagram of the Overview of Stage II Methodology



The data collection process was used to augment study data gathered in Stage I. This data provided the inputs to the BPO assessment. Parallel to the data gathering activities, Team PwC solicited input from stakeholders on their comments and concerns for each BPO.

The Assessment step involved conducting more detailed analyses of the short-listed BPOs across each evaluation category.

During the Evaluation step the BPOs were compared against the Baseline option using five categories of evaluation criteria:

- Capital Planning
- Use of VA Resources
- Ability to Support Other VA Programs
- Reuse
- Ease of Implementation

The following table lists the criteria used to measure each evaluation criteria together with the indicators.

*Table 4: Stage II Evaluation Criteria and Indicators*

Evaluation Criteria	Indicator
<b>Capital Planning</b>	
Timeliness of completion	Total duration (Years to complete)
Timeliness of urgent corrections	Duration (Years to correct code deficiencies, focusing on seismic deficiencies as identified in the CAI)
Consolidation of underutilized space	% Underutilized space
Consolidation of vacant space	% Vacant space
<b>Reuse</b>	
Market potential for reuse	Market potential for reuse
Financial feasibility	Financial feasibility
VA mission enhancement	VA mission enhancement
Execution risk	Execution risk
<b>Use of VA Resources</b>	
Total operating costs	Total operating costs (\$)
Total capital investment costs	Total capital investment costs (\$)
Net present cost	Net present cost (\$)
Total considerations	Total considerations (reuse revenues, in-kind, etc.) (\$)
Total annual savings	Total annual savings (\$)
<b>Ease of Implementation</b>	
Reuse considerations	Community support
	Legal / regulatory
Capital planning considerations	Size and complexity of capital plan
	Number and frequency of patient moves (quantity of clinical buildings altered)
	Number of historic buildings altered (total historic buildings altered)
<b>Ability to Support Other VA Programs</b>	
DoD sharing	MOUs impacted by BPO
One VA integration	VBA and NCA impacted by BPO
Specialized VA programs	Specialized Care/COE impacted by BPO
Enhancement of services to veterans	Services in kind

Team PwC and S&S/ACG Joint Venture site teams conducted a preliminary evaluation of each BPO. To obtain greater input into the tradeoff evaluation of the options, Team PwC convened an independent review panel (IRP) to provide an in-process review of the Stage II analysis, including a review of the strengths and weaknesses that were identified for each business plan option. The IRP challenged and validated the assessment findings and evaluation of each BPO.

The BPOs were evaluated against the evaluation criteria using a quantitative scale in order to discriminate between the BPOs. The evaluation results were used by site teams to discuss the relative strengths and weaknesses of each BPO.

Implementation plans will be developed for all Stage II BPOs. The purpose of each plan will be to provide a roadmap for the local site teams for implementing the BPO, noting critical transition and implementation activities. The plan will highlight key milestones associated with implementation functions such as budgeting and funding, procurement, contracting for care, construction, human resource transition, as well as building activation and occupancy. The plan will help to appropriately sequence the implementation activities accounting for dependencies among the various functions.

This report contains the evaluation results for each BPO and a tradeoff discussion of the strengths and weaknesses of each BPO. The Stage II results will be presented to the Secretary to make a final decision on a set of capital and reuse proposals.

## 4.0 Capital Planning Analysis

### Location

The Montrose and Castle Point Veterans Affairs Medical Centers (VAMCs) are part of the Hudson Valley Health Care System. The Montrose campus is located in northern Westchester County, New York and is 25 highway miles south of Castle Point. Both VAMCs are a part of Veterans Integrated Service Network (VISN) 3, which comprises three markets: Long Island, Metro New York, and New Jersey. Montrose VAMC and Castle Point VAMC are in the Metro New York market.

### Current State - Montrose

#### *Size*

The Franklin Delano Roosevelt Campus is located along the banks of the Hudson River in northern Westchester County, NY. The buildings on the campus vary in age, but most of the buildings on the campus are 60 years old and sit on approximately 189 acres. There are 49 buildings on the campus totaling approximately 1.5 M building gross square feet (BGSF) including out lease and vacant space located on the campus based on data provided by Hudson Valley Health Care System.

#### *Age*

Construction of the oldest buildings on the campus dates from the early 1930s with a series of additional construction projects and significant renovations thereafter.

#### *Construction type*

The central part of the VAMC campus has consistent architecture (brick mid-twentieth century Georgian Revival) and a symmetrical layout on a relatively level site. Grade-level all-weather corridors connect the administrative and support buildings with the clinical buildings that surround 2 courtyards.

#### *Original Use*

The original Montrose VAMC was built for a capacity of 1,984 hospital beds, and presently operates 291 beds.

#### *Current Configuration, use and capacity*

Services provided at Montrose are primarily psychiatry, psychosocial residential and nursing home services in addition to a full service outpatient clinic. In addition to the central courtyard, surface parking is available in small lots scattered on the site.



Montrose VA Representatives have discussed with the State of New York the possible conveyance of an easement along the Hudson River for use as a public walkway. Nearby trails are part of the growing Hudson River Valley Greenway system, which envisions a network of hiking trails up and down the Hudson River from New York City to Saratoga County.

### *Future Use*

The Secretary's May 2004 decision specified that:

- VA will implement a consolidation of services between the Montrose and Castle Point campuses that will enhance patient care and make more effective use of VA health care resources
- The consolidation will transfer acute psychiatric, long-term psychiatric and nursing home beds from the Montrose to the Castle Point campus
- To accomplish this consolidation, VA will augment the mission at the Castle Point campus with new construction and reduce the footprint on the Montrose campus which will allow for reuse opportunities
- By consolidating these services at Castle Point, VA can build one new state-of-the-art and appropriately sized nursing home designed to provide high quality nursing home care services
- VA will continue to provide outpatient, domiciliary (also referred to as residential rehabilitation) services at the Montrose campus. The exception is BPO 11A and BPO11B that consider relocation of domiciliary services to Castle Point.

While all occupied buildings on campus are well maintained, the useful life of these buildings for providing clinical services has been exceeded. Relatively low floor-to-floor heights, narrow and inflexible floor plates, narrow buildings, and aging mechanical/electrical systems severely restrict the possibility of renovating these buildings to achieve the modern, safe, and secure definitions as defined in this study. This is a significant element in the analysis of all BPOs considering renovations to existing buildings.

### *Facility Condition Assessment*

Based on a review of available documents provided by the Montrose VAMC and from the other government contractor, a site history and environmental analysis for the Montrose VAMC site was compiled.

The campus was constructed by VA. All of the buildings were constructed for the current hospital use. Most of the buildings were built between 1947 and 1950. Most of the buildings are reinforced concrete structures and have well maintained brick exterior walls and slate roofs. Four buildings with flat built-up roofs will need roof replacement within several years (Buildings 19, 20, 27, and 52.) None of the buildings located on the facility have histories other than those associated with the VAMC.

Thirteen of the buildings are sprinklered. Contracts are currently underway to install sprinklers in two of the 12 un-sprinklered buildings. The buildings are primarily handicapped accessible through the connecting corridor system. Only five buildings (Buildings 11, 16, 18, 20, and 27) are accessible through their own entries. Four buildings (Buildings 17, 19, 28, and 52) are not handicap accessible. The steam distribution system is in poor condition. Water connections are made to the municipal system at multiple points, and water storage tanks needed for capacity/pressurization need replacement.

Upgrades to comply with current VA standards and applicable building codes will be necessary even on the buildings that rate relatively high since issues such as single bed rooms, private bathrooms accessible from within a patient room, and other quality of healthcare environment issues are not addressed in the rating for “life safety”. In addition, most mechanical systems are at the end of their useful life and will require replacement or major overhaul. This is a significant element in the BPO 1 Baseline analysis.

VA's Capital Asset Inventory (CAI) database provides an assessment of many buildings on the site. This evaluation data for existing conditions at the time of the survey was provided for use in this project. There were 5 components of the functional evaluation: Layout, Adjacencies, Code Compliance, Accessibility and Privacy. Evaluations for each component were performed by floor on a 1-5 basis, with 5 being the optimum score and graduations in tenths, as determined by the evaluation team. Assessment data as provided by the VA was compiled and averaged for each building as a measure to evaluate the complexity of renovation required for a particular building. A building “de-optimization value” is then assigned to the building based on the average score as identified in the De-Optimization Table in the approved assumptions. From this measure, 25 of the buildings received average functionality ratings above "3", 5 of the buildings received average ratings below "3", while the remainder of the buildings have not been rated by VA.

*Montrose Data on Size and Dates of Construction and Renovation*

The table below shows date of construction, renovation, number of floors, and total gross area (gross square feet or GSF) of each building on the site as exported from the CAI database:

Table 5: Montrose Existing Departmental Distribution by Building<sup>1</sup>

Building	Building Name/Function	Year Built	Year of Reno.	Total Floors	Building Total GSF	provided 2/27/07 by Hudson Valley	
1	Administration	1947		4	57,446	Building 1	Administration
2	Theater	1947		2	22,160	Building 2	Administration
3	Outpatient Building	1947		3	43,569	Building 3	Outpatient
4	Acute Building	1947		3	42,950	Building 4	Inpatient
5	Kitchen & Dining Hall	1947	1982	2	51,455	Building 5	Administration
6	Nursing Home Care Unit	1947		3	43,054	Building 6	Inpatient
7	Administrative	1947		3	43,992	Building 7	Vacant
8	Vacant	1947		3	49,324	Building 8	Vacant
9	Vacant	1947		3	47,752	Building 9	Vacant
10	Vacant	1947		3	47,510	Building 10	Vacant
11	Vacant	1947		3	34,540	Building 11	Vacant
12	Administration Offices	1947		3	46,572	Building 12	Mental Health Outpatient
13	Residential treatment	1947	1997	3	48,084	Building 13	Vacant
14	Psychiatry	1947		3	49,312	Building 14	Vacant
15	NHCU	1947		3	47,241	Building 15	Inpatient
16	Engineering/Rehab	1947		1	32,221	Building 16	Administration
17	Warehouse	1947		3	21,489	Building 17	Warehouse
18	Vacant Leased	1947		2	17,605	Building 18	Outleased (Keon)
19	Fire House / Grounds & Transp't'n	1947		1	9,065	Building 19	Garage
20	Boiler Plant	1947	1993	1	7,133	Building 20	Boiler Plant
21	Storage	1950		2	1,156		
23	Storage	1950		1	1,200		
24	Paint Shop	1950		1	3,780		
25	Recreation & Canteen	1947		3	36,640	Building 25	Vacant
26	Pool/Gym	1950	1994	1	23,842	Building 26	Gymnasium
27	Chapel	1947		1	10,758	Building 27	Chapel
28	Residential Treatment	1947		3	19,360	Building 28	Inpatient
29	Child Care&Non-housekeeping Qtrs	1947		3	33,194	Building 29	Quarters
30	Quarters	1950		3	34,645	Building 30	Apartments
31	Housekeeping Qtrs	1947		2	3,664		
31A	Director's Garage	1950		1	846		
33	Paint Storage	1950		1	739		
34	Water Tower	1950			1,256		
36	Wastewater Treatment	1950		1	2,867	Building 36	Administration/Sewer Plant
37	Greenhouse	1950		1	1,750		
38	Chlorination Chamber	1950		1	207		
39	Greenhouse	1947		1	1,248		
44	Engineering	1950		1	285		
45	Concession & Shelter House	1936	1959	1	1,563		
46	Boat House (Bath House)	1941	1959	1	2,709		
48	Women's Rest Room	1959		1	177		

<sup>1</sup> Source: VA Capital Asset Inventory (CAI) Database

Building	Building Name/Function	Year Built	Year of Reno.	Total Floors	Building Total GSF	provided 2/27/07 by Hudson Valley	
49	Garage & Storage	1960		1	1,320		
52	Domiciliary	1960		3	30,290	Building 52	Inpatient
53	Oxygen Storage Building	1962		1	220		
55	Bus Shelter	1962		1	120		
56	Greenhouse	1950		1	260		
57	Eng Trickling Filter	1950		1	5,026		
58	Secondary Settling Tank	1950		1	500		
59	Contact Chamber	1950		1	240		
66	Engineering Storage	1995		1	3,360		
CC	Connecting Corridors	1950		1	24,758		

*Montrose Site Plan*

The current site plan, as depicted in the figure below, shows the present campus configuration and locations of buildings. The building color indicates the departmental group (zone) of the primary occupants of each building based on descriptions provided in the CAI per and as assigned to departmental groups (Building Zones) from the “Department to Zones Table” in the assumptions and as indicated by the color key.

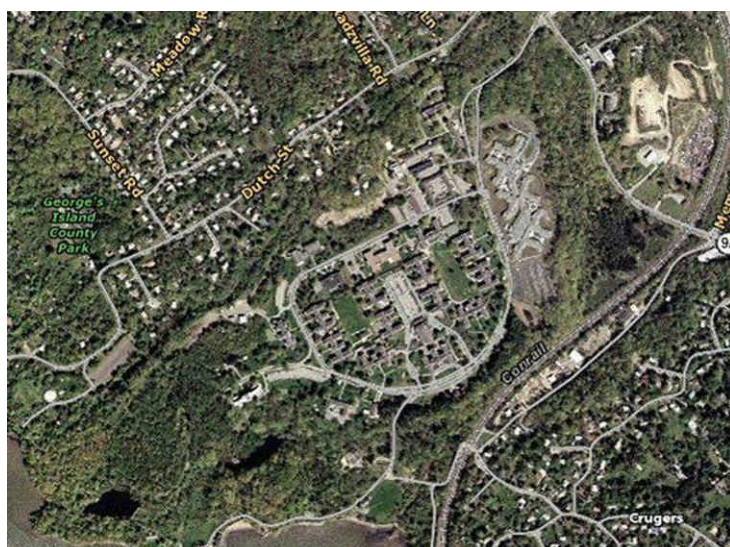
- Functional Distribution on the Site:** Based on the VA's Capital Asset Inventory (CAI) database, nursing home functions are located generally in the central portion of the campus in buildings 6 and 15 with support in building 5 and out lease programs in buildings 4 and 13. Domiciliary functions are located in the northern portion of the site in buildings 28 and 52. The existing fire station (building 19) is located between the domiciliary and other clinical functions at the perimeter of the logistics cluster of buildings. Ambulatory services area is located in proximity to the central parking area in buildings 2, 3 and 12 with related support in buildings 26 and 56. The majority of buildings surrounding the west courtyard (buildings 7, 8, 9, 10 and 11) are vacant. The main administrative functions are located in Building 1 at the formal axis on the central portion of the site. The balance of the buildings on site are used for various administrative and/or logistical functions.

Figure 2: A diagram of the Existing Building Distribution on the Montrose campus



- **Topography and Landscape:** Much of the Montrose campus is landscaped and forms an attractive park-like setting. The campus incorporates mature trees, established shrub plantings, and well maintained turf areas. Moreover, the Montrose VAMC has unobstructed access to approximately 2,500 feet of Hudson River frontage. Approximately 11 acres along the riverfront are relatively level. The river area has a newly renovated sea wall with over-the-water handicap-accessible walkways, picnic areas, gazebos and ponds. About 60 acres of the existing site are currently undeveloped. Much of this area is covered by woods with very steep slopes in places, generally sloping downward in a southwesterly direction. The land also includes two unnamed natural ponds, each about an acre in size. The westernmost pond drains west to the adjacent Westchester County parkland while the other pond, still west of center within the VAMC, drains south. Vehicular circulation is by a network of paved roads with numerous curves that follow the contours of the site and clusters of mature trees. The roadways encircle the campus and wind through the southern portion of the site towards the Hudson River.

*Figure 3: A diagram of the aerial photograph of the Montrose campus*



- **Historic Buildings:** There are 25 existing buildings designated in the CAI as historic structures. In addition, there are several other buildings on the campus that were built over 50 years ago, and are designated as eligible for historic designation due to their age. A total of 43 buildings and structures on the site are considered as historically eligible by the VA, although none are listed on the National Register of Historic Places.
- **Reuse of Historic Buildings:** Except for BPO 1 (Baseline) most of the existing buildings and eligible historic buildings are designated for reuse or demolition. Where a BPO calls for renovation of an existing building, Historically Eligible buildings may require a four-year process for approval to demolish or substantially alter their structural character.

- Vacant Space: There is currently approximately 379,000 square feet of vacant building space on the campus.

#### *CAI Scores and optimal use of the buildings*

- Existing average building scores: According to VA's Capital Asset Inventory (CAI) database, the average condition assessment scores of existing buildings are 3.0 (per the evaluation scoring as described above.) In general the lower the average building score, the greater the amount of area required for renovation. Floor plates that are too narrow and floor to floor heights that are too compressed demand more area to achieve the desired outcomes. Moreover, as the average score reduces, the likelihood of achieving the modern, safe and secure environment is diminished.
- Low scores require more space: The majority of buildings that are proposed for renovation will require a high level of renovation to achieve the modern, safe and secure status as defined for this project. The extent of proposed renovation for an existing building is based on the average condition assessment scores and other factors as described in the Stage II Assumptions. As a result, new construction will be more likely to achieve optimal projected areas because the floor width, structural enclosure, engineering systems and egress paths may be designed to the present standard of care rather than to a previous delivery model (that required less area.) Clinical areas have the greatest demands for control of the environment, therefore, new construction or existing buildings with scores greater than 4.0 are recommended for these types of spaces. Administrative and support functions are a less demanding environment and as such existing buildings with average scores greater than 3.0 are targeted for these functions.
- Scores address life safety, ADA and basic functional relationships: Several upgrades to existing buildings are required to comply with current VA standards, JCAHO Accreditation Standards and applicable building codes. This is due to the fact that the rating does not address all aspects of modern care delivery practice such as modifications to accommodate single bed rooms, private bathrooms accessible from within a patient room and other quality of health care environment issues.
- Specific additional issues at Montrose: Specific additional issues at Montrose: Due to the age of most existing buildings, structural bay size, small and narrow floor plates, low floor to floor heights and lack of single bedrooms, more area is required for renovation of projected functions than the same functions in a new facility where these conditions can be designed to meet current standards of care.

Several environmental considerations were identified for the Montrose VAMC campus. Documentation is available regarding the design and construction issues associated with The Hudson River designation as a CEA (Critical Environmental Area.). Similar documentation is available for various environmental hazard corrections and/or surveys that have occurred throughout the history of the property (including lead-based paint surveys, sub grade storage tanks, etc.). No outstanding environmental hazard areas have been identified in GFI data as currently pending or outstanding on the campus.

The extent of resolution to correct these issues varies per BPO. However, design and construction consideration is given to all issues as part of the proposed BPO decriptions to correct all deficiencies and provide a modern, safe and secure environment for patient care on the designated VA parcel. Resolution of issues located on Reuse parcels will be the responsibility of the reuse contractor.

The facility operates a sewage treatment plant on the property. The plant is located on the southwestern portion of the VA property. The plant has been present since the construction of the hospital facility. The Montrose campus possesses a State Pollutant Discharge Elimination System (SPDES) permit issued by the New York State Department of Environmental Conservation (NYSDEC) for the discharge of treated waste water to the Hudson River. Upgrades of the treatment plant have been completed as regulations have become more stringent. However, replacement of the sewer system is proposed. An overview of the sewer system’s parameters is provided in the following paragraph.

The existing campus sewer system requires replacement. An overview of the existing sewer plant buildings and proposed replacement parameters is provided in the following table. Following completion of the utility replacement, the sewer plant will be included in the reuse parcel areas.

*Table 6: Montrose Sewer System*

Description				
<b>Total buildings:</b>		6	Buildings	
<b>Total building area:</b>		10,052	BGSF	
<b>Total land area impacted:</b>		290,255	GSF	
<b>Total length of pipe:</b>		2,982	Linear Feet	
Special construction:				
<ul style="list-style-type: none"> <li>▪ Verify connection to outflow source</li> <li>▪ No special construction identified</li> </ul>				
Comments				
<ul style="list-style-type: none"> <li>▪ Scope includes sanitary &amp; storm water systems to match proposed VA capacity</li> <li>▪ The majority of the finished system and all utility buildings will reside on reuse parcels upon completion of renovations.</li> <li>▪ Design and detailed transitional phasing are beyond the scope of this project.</li> </ul>				
No	Building Name	Area	Comments	
36	Wastewater Treatment	3,268	BGSF	
38	Chlorination Chamber	447	BGSF	
54	Water Tower	571	BGSF	
57	<i>Eng. Trickling House</i>	5,026	BGSF	Added to analysis
58	<i>Secondary Settling Tank</i>	500	BGSF	Added to analysis
59	<i>Contact Chamber</i>	240	BGSF	Added to analysis
	Total:	10,052	BGSF	



The present Fire Station and Transportation Hub buildings are of inadequate size to accommodate current fire-fighting vehicles and buses for patient transport. Both of these functions are critical to support of current and proposed activities on the campus. As a result, the projected area need has been increased as follows for these services:

- Fire Station, 12,285 BGSF
  - Transportation Hub, 5,424 BGSF
- 
- Asbestos: All buildings containing asbestos and will require abatement and disposal during major renovations. Where buildings containing hazardous materials are identified for demolition, similar appropriate abatement and disposal practices are required. An asbestos survey of the VAMC site was completed in 2003 with the exception of Buildings 8, 9, 10, and 11 since they are not currently used. However, asbestos containing materials have previously been identified in those locations. Buildings 4 and 6 have been mostly abated according to VA, but asbestos containing materials appear to be present in all facility structures with the exception of Building 15.
  - Seismic: There are 31 buildings on the Montrose campus identified as having seismic “non-exempt” or higher status. Of those identified 20 are designated as “high Risk”. Where these buildings are identified for renovation, seismic deficiencies that require correction are included as part of the high renovation factor and associated construction duration to correct. Seismic corrections are incorporated into the renovations and will not additionally impact patient disruption.
  - Complexity of Renovations: Based on the Secretary’s decision of BPOs to be considered in Stage II, renovations to existing buildings are minimal with the exception of BPO 1 (Baseline.) Renovations of the existing buildings (primarily in BPO 1) will be complex due to the extent of upgrades required and the age of the buildings. It will be faster and less disruptive if an entire building can be renovated at once. As a result, approximately 17,000 BGSF of renovated area in Building 7 have been assigned for staging of functions (primarily domiciliary) to minimize disruption to patient care areas. For renovations to existing buildings projected for Ambulatory Care and related functions in BPO 1, areas in existing buildings with vacant space are renovated, functions are relocated and renovations begin on those areas vacated. This sequence requires the design phase of the process to coordinate renovation start and occupancy dates for several buildings over the course of the construction period.

Similarly, since the relocation of nursing home functions to the Castle Point campus is contingent on completion of new nursing home facilities on that campus (for all BPOs), coordination of construction activities and occupancy schedules is required for both campuses. Proposed construction schedules for the Montrose BPOs are based on an assumed relocation of nursing home patients to Castle Point by July 2014. Where the occupancy date for relocation of nursing home services from the Montrose campus is later than this date, demolition of existing buildings providing nursing home and support activities will be delayed. These delays will result in increased maintenance costs and the potential for additional renovations to consolidate services or maintain utility and services routes through other buildings available for reuse or demolition.

*Projected space requirements*

- Space requirements are derived from projected workload: The workload values projected to 2023 form the basis of the projected space requirements. The Projected Departmental Area Need in Departmental Gross Square Feet (DGSF) indicates existing departmental area, projected workload volumes and associated projected area need for the campus. (Factors used in generating the projected area need are indicated in the Stage II Assumptions.) In addition to the workload projected area need, the Fire Station and Transportation Hub (as mentioned above), Hudson Valley representatives requested various department-specific adjustments to the projected areas. The resulting projected area need and associated distribution to departmental groups is summarized in the following table.

*Table 7: Projected Montrose campus area need with adjustments (BPOs 1, 2 and 4)*

Zone Name	Acute Care	Nursing Home	Domiciliary	Rehab	Behav. Health	Ambulatory	Research	Admin	Logistics	Out Lease	Totals
Projected BGSF	21,397	3,420	40,131	0	33,924	76,715	4,472	118,025	47,334	415,645	761,063

Eliminating the out lease value from the projected need yields a projected area need for BPOs 1, 2 and 4 at Montrose of 345,418 BGSF.

For BPO 11A and 11B, the description relocates domiciliary services from Montrose to the Castle Point Campus. Assuming the projected area need will be similar to the corresponding workload relocation, the resulting projected area need and associated distribution to departmental groups for BPO 11A and 11 B may be summarized in the table below.

*Table 8: Projected Montrose campus area need with adjustments (BPOs 11A and 11B)*

Zone Name	Acute Care	Nursing Home	Domiciliary	Rehab	Behav. Health	Ambulatory	Research	Admin	Logistics	Out Lease	Totals
Projected BGSF	5,562	1,104	715	0	33,508	73,518	4,464	118,019	47,092	415,637	699,619

Eliminating the out lease value from the projected need yields a projected area need for BPOs 11A and 11B at Montrose of 283,982 BGSF.

## **Current State – Castle Point**

### *Size*

The buildings at Castle Point total 508,000 BGSF including out lease and vacant space. There are 51 buildings on the campus arranged in linear groups and connected by enclosed walkways on approximately 115 acres.

### *Age*

The original buildings were built in the early 1920s. Construction of new support buildings has been ongoing since then. The original generator building was built in 1950; the boiler building was built in 1980, and a new wing was built in 1989.

### *Construction type*

Most of the buildings are concrete, some with masonry load-bearing walls, and have brick or concrete exterior walls in average condition. Most of the roofs are asphalt or membrane in average condition, with some needing repairs. Surface parking occurs in parking lots interspersed among the buildings. The patient care and nursing home buildings are fully sprinklered, are handicap accessible, and have accessible patient rooms with private and shared accessible toilets. The steam distribution system is in poor condition.

### *Original Use*

The Castle Point VAMC was originally built for 600 tuberculosis beds and now operates 122 inpatient and nursing home beds as well as ambulatory and behavioral health services.

### *Current Configuration, use and capacity*

Based on review of the data provided, the current campus provides Acute Care and Ambulatory Care services in several buildings including buildings 16, 17, 18, 15E and 15H at the central portion of the main campus. Behavioral Health services are provided in building 21 to the northern portion of the main campus. The balance of the campus buildings support administrative and logistics services.

### *Future Use*

The Secretary's May 2004 decision specified that:

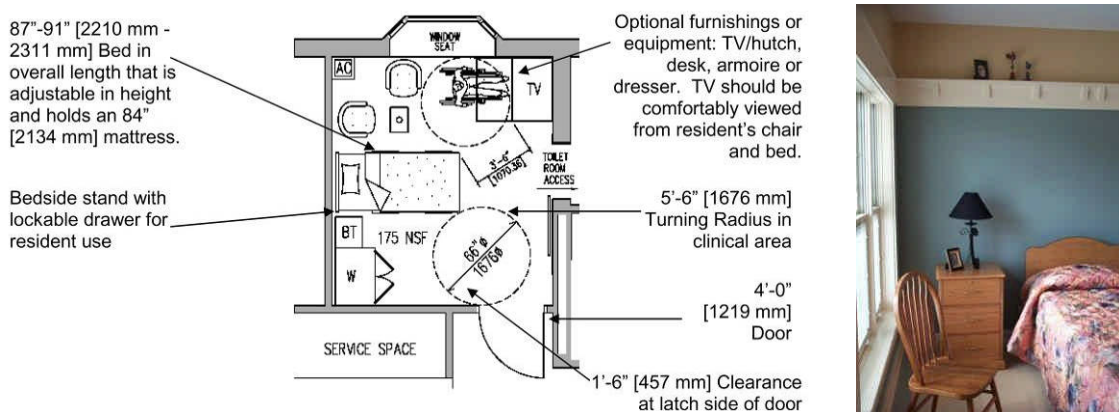
- VA will implement a consolidation of services between the Montrose and Castle Point campuses that will enhance patient care and make more effective use of VA health care resources
- The consolidation will transfer acute psychiatric, long-term psychiatric and nursing home beds from the Montrose to the Castle Point campus
- To accomplish this consolidation, VA will augment the mission at the Castle Point campus with new construction and reduce the footprint on the Montrose campus which will allow for reuse opportunities

- By consolidating these services at Castle Point, VA can build one new state-of-the-art and appropriately sized nursing home designed to provide high quality nursing home care services
- VA will continue to provide outpatient, domiciliary (also referred to as residential rehabilitation) services at the Montrose campus. The exception is BPO 11A and BPO11B that consider relocation of domiciliary services to Castle Point.

While all occupied buildings on campus are well maintained and score high in Facility Assessment Scores, the useful life of these buildings for providing clinical services will soon be exceeded. Relatively low floor-to-floor heights, narrow and inflexible floor plates, narrow buildings, and aging mechanical/electrical and primary campus utility systems restrict the possibility of renovating these buildings to achieve the modern, safe, and secure definitions as defined in this study.

The future design of a nursing home has multiple benefits to patients. These include individual private bedrooms and bathrooms (see the following figure), single-level plan configurations with groupings of “residential neighborhoods” rather than “long corridors of rooms”, increased area for support facilities for supplies and equipment, comfortable and attractive private bedroom areas (see the figure below), convenient physical access to amenities and custom variations of plans to accommodate special needs.

*Figure 4: A Diagram of the Sample Private Bedroom/Bathroom Floor Plan and Private Bedroom*



### Facility Condition Assessment

VA's Capital Asset Inventory (CAI) database provides an assessment of many buildings on the site. This evaluation data for existing conditions at the time of the survey was provided for use in this project. There were 5 components of the functional evaluation: Layout, Adjacencies, Code Compliance, Accessibility and Privacy. Evaluations for each component were performed by floor on a 1-5 basis, with 5 being the optimum score and graduations in tenths, as determined by the evaluation team. Assessment data as provided by the VA was compiled and averaged for each building as a measure to evaluate the complexity of renovation required for a particular building. A building “de-optimization value” is then assigned to the building based on the average score as identified in the De-Optimization Table in the approved assumptions. From this measure, there are no buildings that score less than 3.0. Only 1 building (building 20 at 3.9)

scores between 3.1 - 4.0 and is designated as not favorable for renovation to a *clinical* occupancy. The remaining buildings that have been rated score above 4.0 with the majority rating at 4.5. These high average scores allow for a high level optimization in renovated space.

*Castle Point Data on Size and Dates of Construction and Renovation*

The following table shows date of construction, renovation, number of floors, and total gross area (gross square feet or GSF) of each building on the site as exported from the CAI database. Many of the older buildings have water problems in basements and floors which are partially below grade. Water intake is from the Hudson River and from eight wells.

*Table 9: Castle Point Existing Departmental Distribution by Building*<sup>23</sup>

Building	Building Name/Function	Year Built	Year of Reno.	Total Floors	Building Total GSF	Provided 2/27/07 by Hudson Valley	
1	Vacant Quarters	1923		3	5,062	Building 1	Quarters
2	Quarters	1923		4	5,024	Building 2	Quarters
3	Quarters	1923		4	5,024	Building 3	Quarters
4	Quarters	1923		4	5,024	Building 4	Quarters
5	Quarters	1923		3	5,358	Building 6	Quarters Garage
6	Garage/Storage	1923		1	1,705	Building 5	Quarters
7	Vacant Admin.	1922		4	20,133	Building 7	Outleased (INS)
8	Research	1922		3	12,897	Building 8	Admin
9	Administration	1922		4	27,123	Building 9	Admin
12	Fire Station/Police Station	1922		1	4,366	Building 12	Storage
13	Education Building	1923		2	11,993	Building 13	Education
15E	Patient Care	1923		4	58,979	Building 15E	75% Outpatient/25% Inpatient
15H	HamiltonFish Wing	1989		4	44,678	Building 15H	50% Inpatient/50% Admin.-Outpatient
16	Patient Care	1923		4	39,453	Building 16	Kitchen
17	Patient Care	1923		4	16,580	Building 17	Outpatient
18	Patient Care	1923		4	51,256	Building 18	Outpatient
19	NHCU	1923		3	28,228	Building 19	Admin
20	NHCU	1923		3	42,523	Building 20	NHCU
21	NHCU	1923		3	37,073	Building 21	Mental Health Outpatient
						Building 23	Elevator lobby
34	Storage/Old Boiler Plant	1923			10,421	Building 34	Old Boiler Plant
35	Boiler Plant/Chiller Plant	1980			14,423	Building 35	Boiler/Chiller Plant
35A	Boiler						
44	Warehouse/Carpenter Shop	1923		1	8,113	Building 44	Warehouse
45	Quarters	1923		4	5,991	Building 45	Quarters
46	Child Care Center	1923		4	7,125	Building 46	Day Care Ctr
48	Garage for Director's Qtrs.	1923		1	288	Building 48	Quarters Garage
57	Sewage Treatment Plant	1950	1993		2,480	Building 57	Sewer Plant
59	Generator Building	1950			250	Building 59	Generator Building
59A	Generator Bldg	1982			225	Building 59A	Generator Building

<sup>2</sup> Source: VA Capital Asset Inventory (CAI) Database

<sup>3</sup> Source: VA Capital Asset Inventory Database

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61	Recreation			1	947	Building 61	Picnic Pavilion
65	Storage			1	187	Building 65	Settling Tank
66	Sewage						
67	Storage			1	265	Building 67	Pump House
69	Storage			1	1,967	Building 69	Picnic Pavilion
71	Storage			1	179	Building 71	Transformer Bldg
72	Elevator					Building 72	Elevator lobby
73	Engineering Storage	1965		1	1,000	Building 73	Equipment Storage
75	Sand Storage	1990			1,000	Building 75	Sand Storage
80	Generator Building	1982			200	Building 80	Generator Building
						Building 81	Trash holding station
82	Generator Building	1982			200	Building 82	Generator Building
86	Engineering Storage	1965		1	300	Building 86	Storage
87	Engineering Storage	1965		1	202	Building 87	Storage
88	Labor Shop	1965		2	5,005	Building 88	Labor Shop
89	Linen Hut	1965		1	4,000	Building 89	Warehouse
90	Engineering Storage	1965		1	252	Building 90	Storage
91	Generator Building	1982			200	Building 91	Generator Building
92	Generator Building	1982			200	Building 92	Generator Building
93	Generator Building	1982			200	Building 93	Generator Building
94	Generator Building	1982			200	Building 94	Generator Building
95	Generator Building	1982			200	Building 95	Generator Building
96	Generator Building	1982			200		
98	Water Treatment Plant				3,136	Building 98	Water Plant
						Building 100	Incinerator
101	Sani-Pak	1991			10,000	Building 101	Sani-Pak
						Building 102	Pump House
						Building 105	Storage
						Building 107	Storage
						Building 108	Storage
						Building 109	Storage
111	Multipurpose	1996		1	6,284	Building 111	Admin
						Building 113	Firehouse Garage
						Storage Build.	Storage

### *Castle Point Site Plan*

The current site plan, in the figure below, shows the present campus configuration and locations of buildings. The building color indicates the departmental group (zone) of the primary occupants of each building based on descriptions provided in the CAI per and as assigned to departmental groups (Building Zones) from the “Department to Zones Table” in the assumptions and as indicated by the color key.

### Functional Distribution on the Site:

- Topography and Landscaping: The Castle Point campus is composed of woodlands with a grass-covered southwestern slope from the main campus and scattered trees in the lowlands. The campus incorporates mature trees, established shrub plantings, and well maintained turf areas. There are partial vistas of the Hudson River from the upper elevations of the site. Approximately 6 acres along the riverfront are relatively level. There are 4 general clusters of buildings on the campus:
  - The main campus (in the northeastern portion of the site) composed of buildings serving Acute Care, Ambulatory Care, Administration and associated support services.
  - The former quarters buildings (in southeastern portion of the site) presently housing support and out leased functions
  - The sewer plan (in the south central portion of the site.)
  - The water plan (in the north central portion of the site.)

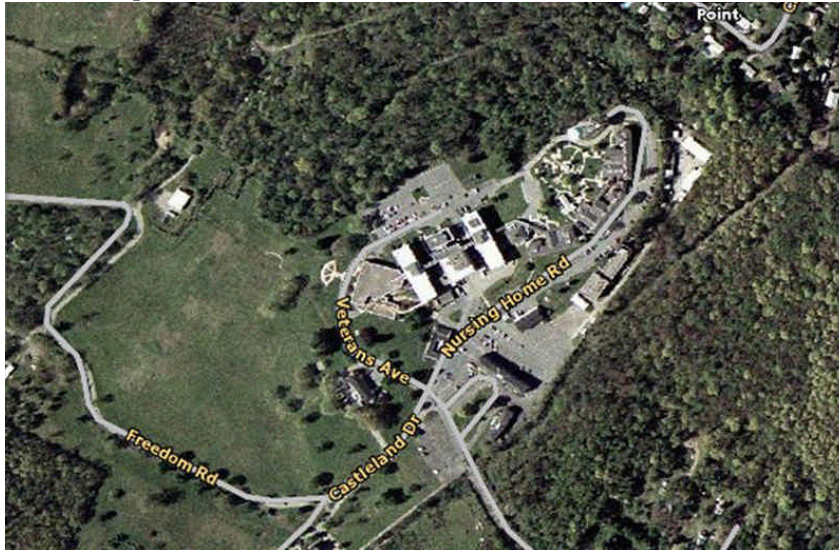
Figure 5: A Diagram of the Current Site Plan – Castle Point





- Vehicular circulation is by a network of 3 undulating paved roadways that follow the contours of the site. Upon entering the campus from the east, a roadway to the north encircles the main campus and the majority of parking area returning to the original intersection from the west. A roadway to the south descends to lower elevations, accessing additional parking and a cluster of former residential quarters buildings then weaves westward through the site towards the Hudson River. Access to the sewer and water utility buildings occurs at the mid elevations of the site.

*Figure 6: A diagram of the aerial photograph of the primary building cluster on the Castle Point campus*



- Historic Buildings: There are no listed historical buildings or parcels located on the campus of the Castle Point VAMC, yet many of the buildings are over 50 years ago, and though most are not considered structurally or historically significant, they are eligible for historic designation due to their age. A total of 26 buildings and structures on the site are considered as historically eligible by the VA, but are not listed on the National Register of Historic Places.
- Reuse of Historic Buildings: Where a BPO calls for renovation of an existing building, Historically Eligible buildings may require a four-year process for approval to demolish or substantially alter their structural character.
- Vacant Space: There is currently approximately 68,700 BGSF of vacant space in the campus buildings. This space is generally distributed in small amounts in buildings throughout the campus. There is no significant collection of vacant space in any single building in proximity to the primary clinical services that may be easily renovated for expansion and/or staging.

### *CAI Scores and optimal use of the buildings*

- Existing average building scores: According to VA's Capital Asset Inventory (CAI) database, the average condition assessment scores of existing buildings are 3.0 (per the evaluation scoring as described above.) In general the lower the average building score, the greater the amount of area required for renovation. Floor plates that are too narrow and floor to floor heights that are too compressed demand more area to achieve the desired outcomes. Moreover, as the average score reduces, the likelihood of achieving the modern, safe and secure environment is diminished.
- Low scores require more space: The majority of buildings that are proposed for renovation will require a high level of renovation to achieve the modern, safe and secure status as defined for this project. The extent of proposed renovation for an existing building is based on the average condition assessment scores and other factors as described in the Stage II Assumptions. As a result, new construction will be more likely to achieve optimal projected areas because the floor width, structural enclosure, engineering systems and egress paths may be designed to the present standard of care rather than to a previous delivery model (that required less area.) Clinical areas have the greatest demands for control of the environment, therefore, new construction or existing buildings with scores greater than 4.0 are recommended for these types of spaces. Administrative and support functions are a less demanding environment and as such existing buildings with average scores greater than 3.0 are targeted for these functions.
- Scores address life safety, ADA and basic functional relationships: Several upgrades to existing buildings are required to comply with current VA standards, JCAHO Accreditation Standards and applicable building codes. This is due to the fact that the rating does not address all aspects of modern care delivery practice such as modifications to accommodate single bed rooms, private bathrooms accessible from within a patient room and other quality of health care environment issues.
- Specific additional issues at Castle Point: Due to the age of most existing buildings, structural bay size, small and narrow floor plates, low floor to floor heights and lack of single bedrooms, require more area for renovation of projected functions than the same functions in a new facility where these conditions can be designed to meet current standards of care.

Similar to the Montrose campus, the present Fire Station and Transportation Hub buildings are of inadequate size to accommodate current fire-fighting vehicles and buses for patient transport. Both of these functions are critical to support of current and proposed activities on the campus. As a result, the projected area need has been increased as follows for these services:

- Fire Station, 12,285 BGsf
- Transportation Hub, 5,424 BGsf

The existing campus water system requires replacement. An overview of the existing water plant buildings and proposed replacement parameters is provided in the table below.

*Table 10: Castle Point Water System*

Description				
<b>Total buildings:</b>		7	Buildings	
<b>Total building area:</b>		10,053	BGSF	
<b>Total land area impacted:</b>		224,455	GSF	
<b>Total length of pipe:</b>		2,014	Linear Feet	
Special construction:				
<ul style="list-style-type: none"> <li>▪ Construct &amp; integrate 2<sup>nd</sup> 300,000 gal. water tower</li> <li>▪ Replace pumps, valves &amp; associated fixtures in utility buildings</li> <li>▪ Verify connection to water source</li> </ul>				
Comments				
<ul style="list-style-type: none"> <li>▪ Design and detailed transitional phasing are beyond the scope of this project.</li> </ul>				
No.	Building Name	Area	Comments	
36	Unidentified	3,664	BGSF	
41	Pump House	594	BGSF	
42	Unidentified	1,520	BGSF	
50	Unidentified	2,790	BGSF	
62	Unidentified	139	BGSF	
63	Unidentified	1,305	BGSF	
84	Unidentified	41	BGSF	
Total:		10,053	BGSF	

The existing campus sewer system requires replacement. An overview of the existing sewer plant buildings and proposed replacement parameters is provided in the following table.

*Table 11: Castle Point Sewer System*

Description				
<b>Total buildings:</b>		7	Buildings	
<b>Total building area:</b>		8,123	BGSF	
<b>Total land area impacted:</b>		156,426	GSF	
<b>Total length of pipe:</b>		1,874	Linear Feet	
Special construction				
<ul style="list-style-type: none"> <li>▪ Verify connection to outflow source</li> <li>▪ No special construction identified</li> </ul>				
Comments				
<ul style="list-style-type: none"> <li>▪ Scope includes sanitary &amp; storm water systems to match proposed VA capacity</li> <li>▪ Design and detailed transitional phasing are beyond the scope of this project.</li> </ul>				
No.	Building Name	Area	Comments	
57	Sewer Plant	1,638	BGSF	
58	Unidentified	2,012	BGSF	
66	Unidentified	573	BGSF	
67	Pump House	196	BGSF	
68	Unidentified	3,422	BGSF	
80	Generator Building	199	BGSF	
85	Unidentified	83	BGSF	
Total:		8,123	BGSF	

- Asbestos: All buildings containing asbestos will require abatement and disposal during major renovations. Where buildings containing hazardous materials are identified for demolition, similar appropriate abatement and disposal practices are required. Where these building are projected for renovation or demolition, costs are included for correction.
- Seismic: There are 12 buildings on the Castle Point campus identified as having seismic “non-exempt” or higher status. Where these buildings are identified for renovation, seismic deficiencies that require correction are included as part of the high renovation factor and associated construction duration to correct. Seismic corrections are incorporated into the renovations and will not additionally impact patient disruption.
- Complexity of Renovations: Based on the Secretary’s decision of BPOs to be considered in Stage II, renovations to existing buildings will be substantial for BPOs 1, 10 and 11B. Renovations of the existing buildings will be extremely complex due to the extent of upgrades required and present full occupancy of all buildings. The sequence to construct new space, relocate all or portions of existing buildings and initiate renovations requires the design phase of the process to coordinate renovation start and occupancy dates for several buildings over the course of the construction period. This will extend the construction schedule for all patient care areas.
- Similarly, since the relocation of nursing home functions from the Montrose campus is contingent on completion of new nursing home facilities (for all BPOs), coordination of construction activities and occupancy schedules is required for both campuses. BPOs 7 and 11A target an occupancy date for all or portions of new nursing home facilities by July 2014. Due to the extensive phasing required for renovations, demolition and relocations, BPOs 1, 10 and 11B extend the nursing home occupancy date well beyond the target date and will impose delays to the implementation plan on the Montrose campus. These delays will result in increased maintenance costs and the potential for additional renovations to consolidate services or maintain utility and services routes through other buildings available for reuse or demolition.
- Site preparation for the water and sewer replacement projects as well as BPOs 10 and 11B will require substantial clearing of woodlands to accommodate the new construction. This will also add to the overall construction duration and associated costs.

*Projected space requirements*

- Space requirements are derived from projected workload: The workload values projected to 2023 form the basis of the projected space requirements. The Projected Departmental Area Need in Departmental Gross Square Feet (DGSF) indicates existing departmental area, projected workload volumes and associated projected area need for the campus. (Factors used in generating the projected area need are indicated in the Stage II Assumptions.) In addition to the workload projected area need, the Fire Station and Transportation Hub (as mentioned above), Hudson Valley representatives requested various department-specific adjustments to the projected areas. The resulting projected area need and associated distribution to departmental groups is summarized in the following table.

*Table 12: Projected Castle campus area need with adjustments (BPOs 1, 7 and 10)*

Zone Name	Acute Care	Nursing Home	Domiciliary	Rehab	Behav. Health	Ambulatory	Research	Admin	Logistics	Out Lease	Totals
Projected BGSF	76,283	124,870	11,042	0	10,978	144,369	101	103,532	64,555	91,861	627,591

Eliminating the out lease value from the projected need yields a projected area need for BPOs 1, 7 and 10 at Montrose of 535,730 BGSF.

For BPO 11A and 11B, the description relocates domiciliary services from Montrose to the Castle Point Campus. Assuming the projected area need will be similar to the corresponding workload relocation, the resulting projected area need and associated distribution to departmental groups for BPO 11A and 11B may be summarized in the table below.

*Table 13: Projected Castle Point campus area need with adjustments (BPOs 11A and 11B)*

Zone Name	Acute Care	Nursing Home	Domiciliary	Rehab	Behav. Health	Ambulatory	Research	Admin	Logistics	Out Lease	Totals
Projected BGSF	98,318	124,882	51,394	0	10,988	142,931	101	103,535	64,575	91,861	688,585

Eliminating the out lease value from the projected need yields a projected area need for BPOs 11A and 11B at Castle Point of 596,724 BGSF.

## **BPO 1 – Baseline at Montrose**

### *BPO Description*

*Current workload projected to 2023 without any changes to facilities or programs except for nursing home and psychiatry (which under the Secretary's decision relocate to Castle Point.) Outpatient Mental Health, medical clinics, and residential treatment programs (domiciliary) services remain at Montrose.*

Capital investments will be made to renovate and maintain existing buildings and infrastructure in order to meet modern, safe and secure standards.

While there may be reuse potential of underutilized land and vacant buildings, reuse was not studied under this BPO.

The key constraints for modernization at Montrose are the physical limitations of the existing buildings to accommodate state of the art healthcare delivery in addition to the disruption to patients and staff during construction.

#### Note:

As buildings and land become vacant over the forecast period, the contractor for the programming and design phase of the project should identify in a project schedule the reuse potential of land parcel and vacant building availability.

### *Analysis of Capital Planning Outputs*

- **Site Plan:** The Projected BPO 1 (Baseline) Site Plan, in the following figure, illustrates the proposed campus configuration and locations of buildings.
- **Building Color Code:** Similar to the Existing Current Stage Site Plan, the building color indicates the Departmental Group (Zone) of the primary occupants for each building. Matching the building color key used for the Existing Current State Site Plan, the proposed building color indicates the predominant occupancy of the building. Refer to the Legend regarding the Departmental Groups (Zone) contained therein.
- **Site Impact during Construction:** Site area calculations for cost estimating purposes are based on land area assigned to specific functions (such as for replacement piping in the utility replacement), new or replaced recreation areas (although none are identified for either of these sites), new or repaved parking areas as determined by projected need and adjacency to new or renovated buildings as defined by the BPO site plan. Where existing parking areas are not needed, the calculation provides for their demolition and replacement with turf. Restoration of existing or installation of new walkways and internal campus vehicular circulation paths are also included in the calculation. For this BPO the total site impact area total for cost calculations is approximately 46 acres excluding affected parking and building footprints.

Figure 7: A Diagram of the Projected BPO 1(Baseline) Site Plan



- **Campus Area and Uses:** The BPO 1 (Baseline) campus configuration as indicated on the site plan is summarized in the following table. There is no dedicated exterior recreation area defined. However, there is sufficient land available for recreational activities. The area totals for primary activities on the portions of the site to be retained exclusively for VA-related functions are indicated in the Campus Area Total below.

*Table 13: Campus Area Total Acreage - BPO 1 (Baseline)*

Campus Area	Acres
Recreation	0
Parking	~ 6
Building & Landscape	~ 183
BPO Total (total of above)	~ 189
Existing Campus Total	~ 189

- **Land Parcels Available for Re-Use:** BPO 1 (Baseline) assumptions do not allow land parcels to be designated for reuse.
- **Buildings Available for Re-Use:** The Baseline does not identify specific buildings for reuse. Where buildings are not required to accommodate the projected area need, they are marked for reuse or demolition and may be considered for reuse prior to the designated demolition date.
- **Relocation of Functions:** In BPO 1 (Baseline), maintaining occupancy through renovation of existing buildings and reducing vacant space therein is achieved to the extent possible. A portion of Building 7 is designated a staging space (primarily for interim domiciliary functions) during the construction phasing sequence.

The existing campus sewer system and associated buildings will be replaced as the initial phase of this BPO.

The phasing of renovations to Building 5 as well as vacancy/renovations to Buildings 6 and 15 are contingent on occupancy of the new nursing home building at the Castle Point campus. Food services (for domiciliary) will remain in building 5 with renovations coordinated with other logistical and administrative functions assigned to the building.

The location of clinical functions will be concentrated around the eastern courtyard with new parking areas constructed between the existing building and roadway. The primary administrative functions will move from Building 1 to renovated space in building 15. Building 3 will provide outpatient behavioral health services.

The location of domiciliary services will remain in the northeastern portion of the campus. However, buildings 28 and 52 will be completely renovated.

An expansion to the existing fire station (building 19) to accommodate current fire protection equipment as well as a transportation hub for minibuses (used for transporting patients to/from other VA campuses.) Other key campus engineering buildings and the



balance of logistical & administrative functions will be located in buildings 56, 26, 5, 20, 24 and 17.

The remaining existing buildings located on the campus will be vacated and designated for demolition or reuse.

The below table indicates the projected area need as assigned to each building on the campus. Departmental Group area totals are provided for each building.

*Table 14: Functional Distribution - BPO 1 (Baseline)*

Number	Building Name	Building Group	Existing BGSF	Proposed BGSF
1	Administration		0	57,445
1	Administration	Acute Care	9,419	0
1	Administration	Administration	20,506	0
1	Administration	Ambulatory Services	13,453	0
1	Administration	Behavioral Health	226	0
1	Administration	Domiciliary	226	0
1	Administration	Logistics	9,632	0
1	Administration	Nursing Home	1,640	0
1	Administration	Out Lease	2,344	0
10	Vacant		0	47,511
10	Vacant	Out Lease	47,510	0
11	Vacant		0	34,540
11	Vacant	Out Lease	34,540	0
12	Administration Offices	Acute Care	94	3,659
12	Administration Offices	Administration	6,027	8,070
12	Administration Offices	Ambulatory Services	3,106	26,029
12	Administration Offices	Behavioral Health	7,248	5,156
12	Administration Offices	Domiciliary	94	0
12	Administration Offices	Logistics	5,227	3,659
12	Administration Offices	Nursing Home	94	0
12	Administration Offices	Out Lease	24,274	0
12	Administration Offices	Research	408	0
13	Residential treatment	Acute Care	119	3,750
13	Residential treatment	Administration	841	8,619
13	Residential treatment	Ambulatory Services	3,418	26,680
13	Residential treatment	Behavioral Health	119	5,285
13	Residential treatment	Domiciliary	18,165	0
13	Residential treatment	Logistics	2,207	3,750
13	Residential treatment	Nursing Home	119	0
13	Residential treatment	Out Lease	23,097	0
14	Psychiatry		0	238
14	Psychiatry	Acute Care	34,184	3,425
14	Psychiatry	Administration	2,092	6,511
14	Psychiatry	Ambulatory Services	4,713	29,238
14	Psychiatry	Behavioral Health	88	5,790

CARES STAGE II FINAL REPORT – MONTROSE-CASTLE POINT

Number	Building Name	Building Group	Existing BGSF	Proposed BGSF
14	Psychiatry	Domiciliary	88	0
14	Psychiatry	Logistics	1,470	4,110
14	Psychiatry	Nursing Home	137	0
14	Psychiatry	Out Lease	3,420	0
14	Psychiatry	Research	3,120	0
15	NHCU		0	52
15	NHCU	Acute Care	33	0
15	NHCU	Administration	9,680	27,615
15	NHCU	Ambulatory Services	2,308	14,413
15	NHCU	Behavioral Health	33	0
15	NHCU	Domiciliary	33	0
15	NHCU	Logistics	1,053	80
15	NHCU	Nursing Home	17,034	0
15	NHCU	Out Lease	17,034	0
15	NHCU	Research	33	5,082
16	Engineering/Rehab		0	32,221
16	Engineering/Rehab	Ambulatory Services	18,211	0
16	Engineering/Rehab	Logistics	11,000	0
16	Engineering/Rehab	Out Lease	3,010	0
17	Warehouse	Acute Care	593	3,886
17	Warehouse	Administration	0	17,602
17	Warehouse	Logistics	20,303	0
17	Warehouse	Nursing Home	593	0
19	Fire House / Grounds & Transp'rt'n	Logistics	9,065	9,065
2	Theater		0	22,160
2	Theater	Administration	275	0
2	Theater	Ambulatory Services	16,011	0
2	Theater	Logistics	1,100	0
2	Theater	Out Lease	4,774	0
20	Boiler Plant	Logistics	0	7,133
21	Storage		0	1,156
21	Storage	Acute Care	29	0
21	Storage	Administration	29	0
21	Storage	Ambulatory Services	29	0
21	Storage	Behavioral Health	29	0
21	Storage	Domiciliary	29	0
21	Storage	Logistics	925	0
21	Storage	Nursing Home	29	0
21	Storage	Out Lease	29	0
21	Storage	Research	29	0
23	Storage		0	1,200
23	Storage	Logistics	1,200	0
24	Paint Shop	Acute Care	94	0
24	Paint Shop	Administration	94	0
24	Paint Shop	Ambulatory Services	94	0
24	Paint Shop	Behavioral Health	94	0

CARES STAGE II FINAL REPORT – MONTROSE-CASTLE POINT

Number	Building Name	Building Group	Existing BGSF	Proposed BGSF
24	Paint Shop	Domiciliary	94	0
24	Paint Shop	Logistics	3,024	3,780
24	Paint Shop	Nursing Home	94	0
24	Paint Shop	Out Lease	94	0
24	Paint Shop	Research	94	0
25	Recreation & Canteen		0	36,640
25	Recreation & Canteen	Acute Care	56	0
25	Recreation & Canteen	Administration	2,009	0
25	Recreation & Canteen	Ambulatory Services	34,407	0
25	Recreation & Canteen	Behavioral Health	56	0
25	Recreation & Canteen	Domiciliary	56	0
25	Recreation & Canteen	Nursing Home	56	0
26	Pool/Gym	Acute Care	86	0
26	Pool/Gym	Administration	0	23,842
26	Pool/Gym	Ambulatory Services	23,498	0
26	Pool/Gym	Behavioral Health	86	0
26	Pool/Gym	Domiciliary	86	0
26	Pool/Gym	Nursing Home	86	0
27	Chapel		0	10,758
27	Chapel	Administration	10,758	0
28	Residential Treatment	Domiciliary	19,360	19,360
29	Child Care & Non-housekeeping Qtrs		0	33,194
29	Child Care & Non-housekeeping Qtrs	Administration	29,190	0
29	Child Care & Non-housekeeping Qtrs	Ambulatory Services	2,002	0
29	Child Care & Non-housekeeping Qtrs	Out Lease	2,002	0
3	Outpatient Building	Acute Care	945	0
3	Outpatient Building	Administration	9,609	19,432
3	Outpatient Building	Ambulatory Services	20,123	0
3	Outpatient Building	Behavioral Health	4,780	24,138
3	Outpatient Building	Domiciliary	39	0
3	Outpatient Building	Logistics	5,288	0
3	Outpatient Building	Nursing Home	39	0
30	Quarters		0	34,645
30	Quarters	Administration	33,957	0
30	Quarters	Domiciliary	688	0
31	Housekeeping Qtrs		0	3,664
31	Housekeeping Qtrs	Administration	3,664	0
31A	Director's Garage		0	845
31A	Director's Garage	Administration	846	0
33	Paint Storage		0	739
33	Paint Storage	Acute Care	18	0
33	Paint Storage	Administration	18	0
33	Paint Storage	Ambulatory Services	18	0
33	Paint Storage	Behavioral Health	18	0
33	Paint Storage	Domiciliary	18	0
33	Paint Storage	Logistics	591	0

CARES STAGE II FINAL REPORT – MONTROSE-CASTLE POINT

Number	Building Name	Building Group	Existing BGSF	Proposed BGSF
33	Paint Storage	Nursing Home	18	0
33	Paint Storage	Out Lease	18	0
33	Paint Storage	Research	18	0
36	Wastewater Treatment	Acute Care	1	0
36	Wastewater Treatment	Ambulatory Services	1	0
36	Wastewater Treatment	Behavioral Health	1	0
36	Wastewater Treatment	Domiciliary	1	0
36	Wastewater Treatment	Logistics	1	2,867
36	Wastewater Treatment	Nursing Home	1	0
37	Greenhouse		0	1,750
37	Greenhouse	Ambulatory Services	1,750	0
38	Chlorination Chamber	Logistics	0	207
39	Greenhouse		0	1,248
39	Greenhouse	Ambulatory Services	1,248	0
4	Acute Building		0	42,950
4	Acute Building	Acute Care	3,223	0
4	Acute Building	Administration	3,001	0
4	Acute Building	Ambulatory Services	2,591	0
4	Acute Building	Behavioral Health	53	0
4	Acute Building	Domiciliary	53	0
4	Acute Building	Logistics	1,032	0
4	Acute Building	Nursing Home	598	0
4	Acute Building	Out Lease	32,395	0
44	Engineering		0	285
44	Engineering	Logistics	285	0
45	Concession & Shelter House		0	1,563
46	Boat House (Bath House)		0	2,709
46	Boat House (Bath House)	Ambulatory Services	2,709	0
48	Women's Rest Room		0	177
49	Garage & Storage		0	1,320
49	Garage & Storage	Acute Care	33	0
49	Garage & Storage	Administration	33	0
49	Garage & Storage	Ambulatory Services	33	0
49	Garage & Storage	Behavioral Health	33	0
49	Garage & Storage	Domiciliary	33	0
49	Garage & Storage	Logistics	1,056	0
49	Garage & Storage	Nursing Home	33	0
49	Garage & Storage	Out Lease	33	0
49	Garage & Storage	Research	33	0
5	Kitchen & Dining Hall	Acute Care	41,164	19,842
5	Kitchen & Dining Hall	Administration	0	31,614
5	Kitchen & Dining Hall	Nursing Home	10,291	0
52	Domiciliary	Administration	0	1,300
52	Domiciliary	Domiciliary	30,290	28,990
53	Oxygen Storage Building		0	220
55	Bus Shelter		0	120

CARES STAGE II FINAL REPORT – MONTROSE-CASTLE POINT

Number	Building Name	Building Group	Existing BGSF	Proposed BGSF
56	Greenhouse	Administration	0	260
56	Greenhouse	Ambulatory Services	260	0
57	Eng Tricking Filter	Logistics	0	5,026
58	Secondary Settling Tank	Logistics	0	500
59	Contact Chamber	Logistics	0	240
6	Nursing Home Care Unit		0	43,054
6	Nursing Home Care Unit	Administration	3,435	0
6	Nursing Home Care Unit	Ambulatory Services	8,011	0
6	Nursing Home Care Unit	Logistics	349	0
6	Nursing Home Care Unit	Nursing Home	31,257	0
66	Engineering Storage		0	3,360
66	Engineering Storage	Logistics	3,360	0
7	Administrative		0	21,914
7	Administrative	Acute Care	4,895	0
7	Administrative	Administration	826	0
7	Administrative	Ambulatory Services	921	0
7	Administrative	Behavioral Health	95	0
7	Administrative	Domiciliary	95	22,078
7	Administrative	Logistics	1,763	0
7	Administrative	Nursing Home	95	0
7	Administrative	Out Lease	35,300	0
8	Vacant		0	49,324
8	Vacant	Administration	512	0
8	Vacant	Ambulatory Services	512	0
8	Vacant	Out Lease	48,300	0
9	Vacant		0	47,752
9	Vacant	Out Lease	47,752	0
CC	Connecting Corridors		0	24,758
Z-10-11S	Surface Parking for Zone Logistics	Logistics	0	6,000
Z-11	Fire Station Addition	Logistics	0	4,308
Z-12	Transportation Hub Addition	Logistics	0	5,424
Z-2-11S	Surface Parking for Zone Acute Care	Acute Care	0	16,800
Z-3-11S	Surface Parking for Zone Nursing Home	Nursing Home	0	1,600
Z-4-11S	Surface Parking for Zone Domiciliary	Domiciliary	0	18,800
Z-6-11S	Surface Parking for Zone Behavioral Health	Behavioral Health	0	16,000
Z-7-11S	Surface Parking for Zone Ambulatory Services	Ambulatory Services	0	118,400
Z-8-11S	Surface Parking for Zone Research	Research	0	2,400
Z-9-11S	Surface Parking for Zone Administration	Administration	0	72,800
Z-Site Info	Site Information	Logistics	0	1,997,667

Notes:

- There is no research space provided on the campus. However, the projected area resulting from mathematical rounding of projected areas has been included in the logistics area for distribution on campus.
- If building group is blank it identifies unassigned space
- The plan recognizes that out leased space currently has existing relationships which will be considered in reuse planning

- Optimal Use of Existing Buildings:** The majority of existing buildings on the campus are not compatible with modern standards of design for clinical functions. To accommodate projected delivery of care standards, the floor plates are too small (resulting in compromised functional adjacencies); the floor to floor heights are too low (resulting in mechanical systems with insufficient air volume) and with a few exceptions, the resident rooms do not have bathrooms accessible from within the rooms. As a result, proposed renovations to address the projected workload will require additional area to achieve the same goal. Since BPO 1 seeks to optimize use of existing buildings without new construction (except for an addition to building 19 for fire fighting apparatus and a transportation hub), the area totals for this BPO are larger than those BPOs that include new construction.
- Projected Workload Volumes for 2023:** The projected areas as derived from workload volumes (See Stage II Assumptions.) indicate the desired functions can be accommodated in much less area than is currently available on the campus.

**Parking:** Portions of the existing surface parking areas will be repaved and expanded to provide parking in the most convenient locations adjacent to building entries. Where existing parking is not required, it will be removed and new landscape will be provided. Distribution of parking by departmental group is indicated in the following table. There is sufficient land available to meet the parking need. Therefore structured parking is not required for this campus.

*Table 15: Parking Distribution – BPO 1 (Baseline)*

Parking Area	Total Surface Spaces	Total Structured Spaces	Surface Area (SF)	Structured Area (SF)	Location
Acute Care	42	0	16,800	0	East of building 12
Nursing Home	4	0	1,600	0	East of building 12
Domiciliary	47	0	18,800	0	North of building 52
Rehabilitation	0	0	0	0	-
Behavioral Health	40	0	16,000	0	East of building 5
Ambulatory Services	296	0	118,400	0	East of buildings 13 & 14
Research	6	0	2,400	0	East of buildings 13 & 14
Administration	182	0	72,800	0	South of building 15
Logistics	15	0	6,000	0	West of buildings 5 & 19
Total	632	0	252,800	0	

Note: There is no nursing home or research space provided on the campus. However, the projected parking area resulting from mathematical rounding of projected areas has been included in the logistics parking area on the site plan.

- Conclusion from the Space Analysis:** The projected area need for the campus is approximately 345,000 BGSF (not including out lease space.) Because BPO 1 (Baseline) involves extensive renovation of existing space, the space required is approximately 464,000 Building Gross Square Feet (BGSF.) This projected area provides a reduction to the existing campus area of approximately 51%.

- Construction Phasing: In this BPO the extent of renovations to existing occupied space demands a complex phasing sequence to minimize disruption to patients and staff. However, due to the location of required renovations within presently occupied buildings, the time frame for construction will be extended and several interim moves are anticipated. A general overview of the phasing sequence is provided below:
  - Replace existing campus sewer system
  - Renovations to logistical & campus infrastructure (including transportation hub & fire station expansion)
  - Renovate building for swing space and relocate patients from building 28
  - Renovate domiciliary (building 28 followed by building 52) and sequentially move patients to renovated areas as construction is completed and renovate the previously occupied areas of the buildings until complete.
  - Relocate nursing home to Castle Point campus and renovate for administrative/logistical functions (buildings 5, 26 and 15)
  - Renovate to ambulatory care and behavioral health (buildings 12, 13, 14 and 3) and sequentially move patients to renovated areas as construction is completed and renovate the previously occupied areas of the buildings until complete.
- Construction Schedule: Schedules for construction activities are intended to identify relative duration of new construction or renovated work in order to calculate occupancy dates for utilization of space and escalation costs. These schedules provide a base on which the implementation plan activities will be incorporated. The Schedule indicates a brief description of the individual building construction projects and indicates the construction sequence and duration for this option. Commissioning of engineering systems should occur in the last 20% of each project's duration.
- Existing Building Maintenance Costs: Existing unaltered buildings retained on the campus for the Baseline require ongoing and periodic maintenance costs including buildings which are scheduled for demolition to the point where demolition begins.
- Capital Cost Estimate: An estimate of projected new construction and renovation costs is indicated in the BPO Capital Cost Estimate. The capital costs are based on campus-wide area projections by Departmental Group (Zone) as indicated in the Projected BPO areas by Departmental Group (Zone.)
- Construction Cost depends on Function: Construction costs are derived from projected area requirements by Building and non-Building Departmental Groups (Zones.)
- Soft Costs Standardized: Approved factors as stated in the assumptions for soft costs (such as professional fees, furnishings and equipment) are based on consultant experience and VA standards.

*Evaluation of BPO 1 (Baseline) using Capital Criteria:*

- **Consolidation of Vacated Space:** The vacant square footage area totals for BPO 1 (Baseline) indicate a 95% decrease in vacant space across the campus (see the table below). The approximately 362,000 SF includes that space in vacant buildings that will be demolished or made available for reuse.

*Table 16: Percentage of Vacant Space – BPO 1 (Baseline)*

Title	Vacant BGSF
Existing Vacant	379,313
Vacant BPO	17,094
Difference	-362,219
Percent Difference	-95%

- **Consolidation of Underutilized Space:** Underutilized space is space not used to its full potential because of physical constraints. Because there is a substantial amount of renovation required for this BPO, additional area is required to achieve a modern, safe and secure environment, resulting in an increase of underutilized space. Comparing the ideal space requirements for the workload to the square footage need for this option results in a 26% overall increase in area need (see the following table).

*Table 17: Percentage of Underutilized Space – BPO 1 (Baseline)*

Title	Total
Projected Ideal BGSF Based on In-House Workload	345,420
Proposed BPO BGSF	464,031
Underutilized Space	118,611
Variance by Percentage	26%

- **Timeliness of Completion:** This BPO requires a 13.5 year (162 months) multi-phased period of construction from initiation in January 2009 with completion to implement improvements to the physical environment starting in January 2010 and completion in July 2022 (see the following table). Key assumptions include:
  - The historic building process begins January 2007 and ends January 2011
  - Project funding is approved January 2009
  - There are 4 major construction/relocation phases targeted to implement this BPO
  - Planning and design for the first series of renovations begins January 2010 and takes 18 months
  - The first phase of the construction sequence is replacement of the existing campus sewer system. Work for this project is projected to begin January 2010 and takes 48 months for complete.
  - Planning and design for the second series of renovations begins 1/1/2012 and takes 18 months
  - Sequential renovations and relocations as described above occur thereafter.
  - Relocation of nursing home functions to the Castle Point campus and designation of remaining existing buildings as available for reuse or demolition to follow as conditions allow.



*Table 18: Total Construction Duration – BPO 1(Baseline)*

	Start Date	Completion Date	Duration
Total Construction Activity	01/01/09	07/01/22	162 Months

- **Timeliness of Urgent Seismic Corrections:** There are 31 buildings on the Montrose campus identified in the CAI with “seismic non-exempt” or higher status. The priority is for correction of these building to be accommodated as early as possible. However, the sequence of construction required to achieve proposed plan indicates vacancy of the last building with seismic corrections in January 2020. Buildings with seismic deficient status that are not projected for VA occupancy will be demolished as they become eligible for demolition based on the implementation schedule.
- **Size and Complexity of Capital Plan:** Projected areas (BGSF) based on 2023 workload volumes indicate a changes to the Montrose campus as indicated in the following table. It is significant to note that even with projected increases of area for renovations of existing buildings the overall campus area need for most departmental groups decreases. The exception is a notable increase in behavioral health and a minor increase in domiciliary.

*Table 19: Campus Area Change – BPO 1 (Baseline)*

Distributions	Acute Care	Nursing Home	Domiciliary	Rehab.	Behavioral Health	Ambulatory Services	Research	Admin.	Logistics	Out Lease
Existing Distribution	94,993	62,220	69,455	0	12,965	159,436	3,737	137,410	79,936	325,931
Proposed BPO Distribution	34,563	0	70,430	0	40,371	96,362	5,082	144,867	72,356	0
Variance By BGSF	-60,430	-62,220	975	0	27,406	-63,074	1,345	7,457	-7,580	-325,931

Note: There is no nursing home or research space provided on the campus. However, the projected area resulting from mathematical rounding of projected areas has been included in the logistics area for distribution on campus.

- **Patient Moves:** Of the existing 49 buildings on the campus (as identified in the CAI), in this BPO, all 29 buildings with clinical or clinical-related functions will be renovated or identified as available for reuse/demolition. For domiciliary services, renovations will require a portion of patients from building 28 to relocate to renovated space in building 7 on an interim basis. Sequential renovation and relocations as outlined above are then required in both building 28 and 52 to complete the projected domiciliary area requirements. In most instances for ambulatory and behavioral health services, renovations will take place in a separate building and relocation of patient care areas may be accomplished in an expedient manner. A detailed construction schedule is beyond the scope of this study. However, there are some portions of buildings 3 and 12 where renovations will be complex and that patients may be inconvenienced but care may continue in the buildings during renovations. An overview of patient moves follows.

Further detail will be provided in the implementation plan.

- Renovations to buildings 3 and 13 initiate the sequence
  - Building 3 behavioral health relocate to renovated space as construction is completed
  - Building 12 ambulatory functions relocate to building 13
  - Building 4 ambulatory functions relocate to building 14
  - Following the nursing home relocation to Castle Point, administrative functions from buildings 1 and 14 move to building 15
  - Remaining ambulatory functions relocate to building 12
- Historic Buildings Altered: There are 25 buildings identified as historic in the CAI. However, based on building age, there are 43 buildings designated as historically eligible. For this BPO, all 43 will be renovated, considered available for reuse or demolished (see the following table). The National Historic Preservation Act requires that a federal agency must assume responsibility for historic properties and Section 106 requires federal agencies to consider historic properties as it plans a project and to consult with the Advisory Council on Historic Preservation. The approval process for renovation can take more than a year and will need to be considered in the implementation planning efforts.

*Table 20: Historic Buildings Altered – BPO 1 (Baseline)*

Title	Building Count
Total Historic or Historically Eligible	43
Altered Historic Projects	43

Note: Values indicate quantity of Historically Eligible buildings as altered by this BPO

## **BPO 1 – Baseline at Castle Point**

### *BPO Description*

*Renovate existing buildings containing inpatient and outpatient services in phased renovations. Construct new space to accommodate inpatient psychiatry and nursing home services relocated from Montrose to Castle Point.*

Capital investments will be made to renovate and maintain existing buildings and infrastructure in order to meet modern, safe and secure standards.

- Retain existing support buildings, fire station, and sewage treatment plant
- Buildings 12 and 34 will be demolished

While there may be reuse potential of underutilized land and vacant buildings, reuse was not studied under this BPO.

The key constraints for modernization at Castle Point are the physical limitations of the existing buildings to accommodate state of the art healthcare delivery in addition to the disruption to patients and staff during construction. Providing a single level for nursing home residents' rooms on a sloping site also will provide building design challenges.

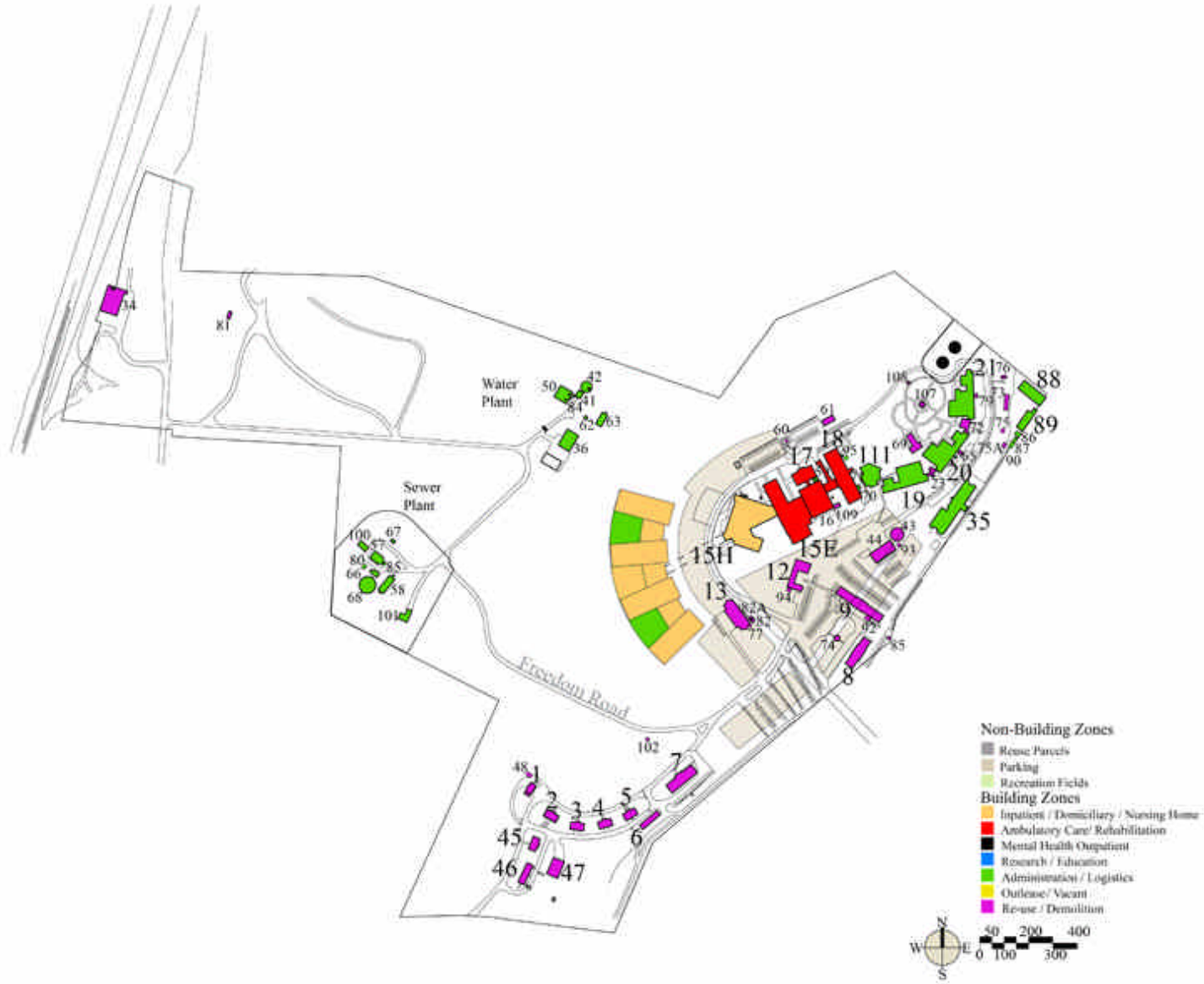
### Note:

As buildings and land become vacant over the forecast period, the contractor for the programming and design phase of the project should identify in a project schedule the reuse potential of land parcel and vacant building availability.

### *Analysis of Capital Planning Outputs*

- **Site Plan:** The Projected BPO 1 (Baseline) Site Plan (see the following figure) illustrates the proposed campus configuration and locations of buildings.
- **Building Color Code:** Similar to the Existing Current Stage Site Plan, the building color indicates the Departmental Group (Zone) of the primary occupants for each building. Matching the building color key used for the Existing Current State Site Plan, the proposed building color indicates the predominant occupancy of the building. Refer to the Legend regarding the Departmental Groups (Zone) contained therein.
- **Site Impact during Construction:** Site area calculations for cost estimating purposes are based on land area assigned to specific functions (such as for replacement piping in the utility replacement), new or replaced recreation areas (although none are identified for either of these sites), new or repaved parking areas as determined by projected need and adjacency to new or renovated buildings as defined by the BPO site plan. Where existing parking areas are not needed, the calculation provides for their demolition and replacement with turf. Restoration of existing or installation of new walkways and internal campus vehicular circulation paths are also included in the calculation. For this

Figure 8: A Diagram of the Projected BPO 1(Baseline) Site Plan



BPO the total site impact area total for cost calculations is approximately 17 acres excluding affected parking and building footprints

- Campus Area and Uses: The BPO 1 (Baseline) campus configuration as indicated on the site plan is summarized in the table below. There is no dedicated exterior recreation area defined. However, there is sufficient land available for recreational activities. The area totals for primary activities on the portions of the site to be retained exclusively for VA-related functions are indicated in the Campus Area Total below.

*Table 21: Campus Area Total Acreage - BPO 1*

Campus Area	Acres
Recreation	0
Parking	~ 10
Building & Landscape	~ 105
BPO Total (total of above)	~ 115
Existing Campus Total	~ 115

- Land Parcels Available for Re-Use: BPO 1 (Baseline) assumptions do not allow land parcels to be designated for reuse.
- Buildings Available for Re-Use: The Baseline does not identify specific buildings for reuse. Where buildings are not required to accommodate the projected area need, they are marked for reuse or demolition and may be considered for reuse prior to the designated demolition date.
- Relocation of Functions: In BPO 1 (Baseline), maintaining occupancy through renovation of existing buildings and reducing vacant space therein is achieved to the extent possible. Projected area needs will be provided through a combination of renovation to existing buildings on the main campus and new construction.

The existing campus water and sewer system and associated buildings will be replaced as the initial phase of this BPO.

A new nursing home building will be located on the hillside southwest of the existing roadway and building 15H. A sub grade service tunnel will connect the new building to the main campus at building 15H

Acute care and ambulatory services will remain in proximity to their present locations. However, multiple internal relocations will be required to accommodate renovation. Ambulatory care services will be located in buildings 16, 17, 18, 15E and a portion of 15H. Acute care functions will compose the balance of building 15H.

Administration functions will be relocated to the northeastern portion of the main campus in renovated space of buildings 20, 21, 111 and a portion of the lower level of the new nursing home building.

Administration space will also be located in building 19 with behavioral health services

Logistical functions are located in several buildings throughout the main campus but generally concentrated into a group of existing outbuildings to the northeast and the lower level of the nursing home building to the southwest. A new fire station and transportation hub will be incorporated into the new nursing home building.

Existing buildings 8, 9, 12, 13, 43, 44 and various other minor adjacent buildings will be demolished to provide sufficient parking in proximity to ambulatory care and behavioral health services entries.

The remaining existing buildings located on the campus will be vacated and designated for demolition or reuse.

The table below indicates the projected area need as assigned to each building on the campus. Departmental Group area totals are provided for each building.

*Table 22: Functional Distribution - BPO 1 (Baseline)*

Number	Building Name	Building Group Name	Existing BGSF	Proposed BGSF
1	Vacant Quarters		0	5,063
1	Vacant Quarters	Out Lease	5,062	0
2	Quarters		0	5,024
2	Quarters	Administration	5,024	0
3	Quarters		0	5,024
3	Quarters	Administration	5,024	0
4	Quarters		0	5,024
4	Quarters	Administration	5,024	0
5	Quarters		0	5,358
5	Quarters	Administration	5,358	0
6	Garage/Storage		0	1,705
6	Garage/Storage	Administration	1,705	0
7	Vacant Admin.		0	20,133
7	Vacant Admin.	Administration	1,036	0
7	Vacant Admin.	Out Lease	19,096	0
8	Research		0	12,897
8	Research	Administration	1,396	0
8	Research	Ambulatory Services	1,396	0
8	Research	Out Lease	10,103	0
9	Administration		0	27,123
9	Administration	Acute Care	9,785	0
9	Administration	Administration	1,363	0
9	Administration	Ambulatory Services	2,928	0
9	Administration	Logistics	9,523	0
9	Administration	Out Lease	3,523	0
12	Fire Station/Police Station		0	4,366
12	Fire Station/Police Station	Administration	383	0
12	Fire Station/Police Station	Ambulatory Services	1,048	0

CARES STAGE II FINAL REPORT – MONTROSE-CASTLE POINT

Number	Building Name	Building Group Name	Existing BGSF	Proposed BGSF
12	Fire Station/Police Station	Logistics	2,772	0
12	Fire Station/Police Station	Out Lease	162	0
13	Education Building		0	11,993
13	Education Building	Acute Care	53	0
13	Education Building	Administration	9,910	0
13	Education Building	Ambulatory Services	53	0
13	Education Building	Behavioral Health	53	0
13	Education Building	Domiciliary	53	0
13	Education Building	Logistics	1,709	0
13	Education Building	Nursing Home	53	0
13	Education Building	Out Lease	53	0
13	Education Building	Research	53	0
16	Patient Care	Acute Care	13,801	0
16	Patient Care	Administration	5,014	0
16	Patient Care	Ambulatory Services	14,933	39,453
16	Patient Care	Behavioral Health	1,172	0
16	Patient Care	Logistics	1,079	0
16	Patient Care	Nursing Home	3,450	0
17	Patient Care	Acute Care	295	0
17	Patient Care	Administration	2,302	0
17	Patient Care	Ambulatory Services	11,760	16,466
17	Patient Care	Behavioral Health	36	0
17	Patient Care	Domiciliary	36	0
17	Patient Care	Logistics	1,679	0
17	Patient Care	Nursing Home	295	0
17	Patient Care	Out Lease	138	0
17	Patient Care	Research	36	113
18	Patient Care	Acute Care	6,656	0
18	Patient Care	Administration	4,770	0
18	Patient Care	Ambulatory Services	24,773	51,256
18	Patient Care	Behavioral Health	1,472	0
18	Patient Care	Domiciliary	311	0
18	Patient Care	Logistics	6,781	0
18	Patient Care	Nursing Home	311	0
18	Patient Care	Out Lease	6,061	0
18	Patient Care	Research	119	0
19	NHCU	Acute Care	658	0
19	NHCU	Administration	5,905	15,001
19	NHCU	Ambulatory Services	2,954	0
19	NHCU	Behavioral Health	28	13,227
19	NHCU	Domiciliary	28	0
19	NHCU	Logistics	10,118	0
19	NHCU	Nursing Home	658	0
19	NHCU	Out Lease	7,850	0
19	NHCU	Research	28	0
20	NHCU	Administration	0	42,523

CARES STAGE II FINAL REPORT – MONTROSE-CASTLE POINT

Number	Building Name	Building Group Name	Existing BGSF	Proposed BGSF
20	NHCU	Logistics	6,222	0
20	NHCU	Nursing Home	36,301	0
21	NHCU		0	11,396
21	NHCU	Acute Care	609	0
21	NHCU	Administration	7,460	25,676
21	NHCU	Ambulatory Services	863	0
21	NHCU	Behavioral Health	13,153	0
21	NHCU	Domiciliary	719	0
21	NHCU	Logistics	2,047	0
21	NHCU	Out Lease	12,220	0
34	Storage/Old Boiler Plant		0	10,421
35	Boiler Plant/Chiller Plant	Logistics	0	14,423
44	Warehouse/Carpenter Shop		0	8,113
44	Warehouse/Carpenter Shop	Logistics	8,113	0
45	Quarters		0	5,991
45	Quarters	Administration	5,991	0
46	Child Care Center		0	7,125
46	Child Care Center	Administration	2,374	0
46	Child Care Center	Ambulatory Services	2,374	0
46	Child Care Center	Out Lease	2,374	0
48	Garage for Director's Quarters		0	288
48	Garage for Director's Quarters	Administration	288	0
57	Sewage Treatment Plant	Logistics	0	2,480
59	Generator Building	Logistics	0	250
61	Recreation		0	947
61	Recreation	Ambulatory Services	947	0
65	Storage		0	188
65	Storage	Logistics	187	0
67	storage	Logistics	265	265
69	Storage		0	1,967
69	Storage	Ambulatory Services	1,967	0
71	Storage	Logistics	179	180
73	Engineering Storage		0	1,000
73	Engineering Storage	Logistics	1,000	0
75	Sand Storage		0	1,000
80	Generator Building	Logistics	0	200
82	Generator Building		0	200
86	Engineering Storage	Logistics	300	300
87	Engineering Storage	Logistics	202	202
88	Labor Shop	Acute Care	125	0
88	Labor Shop	Administration	125	0
88	Labor Shop	Ambulatory Services	125	0
88	Labor Shop	Behavioral Health	125	0
88	Labor Shop	Domiciliary	125	0
88	Labor Shop	Logistics	4,004	5,005
88	Labor Shop	Nursing Home	125	0



CARES STAGE II FINAL REPORT – MONTROSE-CASTLE POINT

Number	Building Name	Building Group Name	Existing BGSF	Proposed BGSF
88	Labor Shop	Out Lease	125	0
88	Labor Shop	Research	125	0
89	Linen Hut	Acute Care	1,000	0
89	Linen Hut	Logistics	2,000	4,000
89	Linen Hut	Nursing Home	1,000	0
90	Engineering Storage	Logistics	252	252
91	Generator Building	Logistics	0	200
92	Generator Building		0	200
93	Generator Building		0	200
94	Generator Building		0	200
95	Generator Building	Logistics	0	200
96	Generator Building	Logistics	0	200
98	Water Treatment Plant	Logistics	0	3,136
101	Sani-Pak	Logistics	0	10,000
111	Multipurpose	Administration	0	6,284
111	Multipurpose	Ambulatory Services	6,284	0
15E	Patient Care	Acute Care	17,967	6,898
15E	Patient Care	Administration	2,903	0
15E	Patient Care	Ambulatory Services	35,151	52,082
15E	Patient Care	Behavioral Health	93	0
15E	Patient Care	Domiciliary	93	0
15E	Patient Care	Nursing Home	93	0
15E	Patient Care	Out Lease	345	0
15H	Hamilton Fish Wing	Acute Care	13	38,554
15H	Hamilton Fish Wing	Administration	4,548	0
15H	Hamilton Fish Wing	Ambulatory Services	29,510	6,124
15H	Hamilton Fish Wing	Behavioral Health	13	0
15H	Hamilton Fish Wing	Domiciliary	13	0
15H	Hamilton Fish Wing	Logistics	1,479	0
15H	Hamilton Fish Wing	Nursing Home	8,837	0
15H	Hamilton Fish Wing	Out Lease	249	0
15H	Hamilton Fish Wing	Research	13	0
59A	Generator Bldg	Logistics	0	225
Z-10	Zone Logistics	Logistics	0	7,753
Z-10-11S	Surface Parking for Zone Logistics	Logistics	0	6,000
Z-10A	Fire Station	Logistics	0	12,285
Z-10B	Transportation Hub	Logistics	0	5,424
Z-2	Zone Acute Care	Acute Care	0	38,213
Z-2-11S	Surface Parking for Zone Acute Care	Acute Care	0	58,800
Z-3	Zone Nursing Home	Nursing Home	0	124,870
Z-3-11S	Surface Parking for Zone Nursing Home	Nursing Home	0	96,400
Z-4	Zone Domiciliary	Domiciliary	0	11,042
Z-4-11S	Surface Parking for Zone Domiciliary	Domiciliary	0	8,800
Z-6-11S	Surface Parking for Zone Behavioral Health	Behavioral Health	0	8,800
Z-7-11S	Surface Parking for Zone Ambulatory Services	Ambulatory Services	0	111,200
Z-8-11S	Surface Parking for Zone Research	Research	0	400

Number	Building Name	Building Group Name	Existing BGSF	Proposed BGSF
Z-9	Zone Administration	Administration	0	29,379
Z-9-11S	Surface Parking for Zone Administration	Administration	0	80,000
Z-Site Info	Site Information	Logistics	0	721,236

Notes:

- There is no research or domiciliary space provided on the campus. However, area projections for this departmental group result from mathematical rounding. Where indicated, this area has been included as part of the overall building projected areas assigned to the largest departmental group within the building.
  - If a building group is blank, it identifies unassigned space
  - The plan recognizes that out leased space currently has existing relationships which will be considered in reuse planning.
- **Optimal Use of Existing Buildings:** The majority of existing buildings on the campus are not compatible with modern standards of design for clinical functions. To accommodate projected delivery of care standards, the floor plates are too small (resulting in compromised functional adjacencies); the floor to floor heights are too low (resulting in mechanical systems with insufficient air volume) and with a few exceptions, the resident rooms do not have bathrooms accessible from within the rooms. As a result, proposed renovations to address the projected workload will require additional area to achieve the same goal. Since BPO 1 seeks to optimize use of existing building without new construction (except for the new nursing home building), the area totals for this BPO are larger than those BPOs that include new construction.
  - **Projected Workload Volumes for 2023:** The projected areas as derived from workload volumes (See Stage II Assumptions.) indicate the desired functions require more area than is currently available on the campus.

**Parking:** Portions of the existing surface parking areas will be repaved and expanded to provide parking in the most convenient locations adjacent to building entries. Where existing parking is not required, it will be removed and new landscape will be provided. Distribution of parking by departmental group is indicated in the following table. There is sufficient land available to meet the parking need. Therefore structured parking is not required for this campus.

*Table 23: Parking Distribution – BPO 1 (Baseline)*

Parking Area	Total Surface Spaces	Total Structured Spaces	Surface Area (SF)	Structured Area (SF)	Location
Acute Care	147	0	58,800	0	Southeast of building 15H
Nursing Home	145	0	58,000	0	Northeast of new nursing home
Domiciliary	13	0	5,200	0	Southwest of building 8
Rehabilitation	0	0	0	0	-
Behavioral Health	13	0	5,200	0	Southeast of building 15H
Ambulatory Services	556	0	222,400	0	Southeast of building

					15H
Research	1	0	400	0	Northwest of building 17
Administration	160	0	64,000	0	Southeast of building 15H
Logistics	15	0	6,000	0	Northwest of building 17
Total	1,050	0	420,000	0	

Note: There is no research or domiciliary space provided on the campus. However, the projected single parking space resulting from mathematical rounding of projected areas has been included in the logistics parking area on the site plan.

- **Conclusion from the Space Analysis:** The projected area need for the campus is approximately 536,000 BGSF (not including out lease space.) Because BPO 1 (Baseline) involves extensive renovation of existing space in addition to the new nursing home construction, the space required is approximately 596,000 Building Gross Square Feet (BGSF.) This projected area provides an increase to the existing campus area of approximately 29%.
- **Construction Phasing:** In this BPO the extent of renovations to existing occupied space demands a complex phasing sequence to minimize disruption to patients and staff. However, due to the location of required renovations within presently occupied buildings, the time frame for construction will be extended and several interim moves are anticipated. A general overview of the phasing sequence is provided below:
  - Replace existing campus water and sewer system
  - Construct new nursing home building (including transportation hub & fire station expansion) and relocate patients from the Montrose campus.
  - Demolish existing logistics buildings 8, 9, 12, 44 and other minor engineering buildings.
  - Renovate buildings 16, 17, 20, 21 and 15H sequentially moving patients to renovated areas as construction is completed and renovate the previously occupied areas of the buildings until complete.
  - Renovate a series of logistical (engineering) buildings required for campus support.
  - Renovate buildings 18 and 15E, sequentially moving patients to renovated areas as construction is completed and renovate the previously occupied areas of the buildings until complete.
  - Renovate the remaining logistical (engineering) buildings required for campus support.
- **Construction Schedule:** Schedules for construction activities are intended to identify relative duration of new construction or renovated work in order to calculate occupancy date for utilization of space and escalation costs. These schedules provide a base on which the implementation plan activities will be incorporated. The Schedule indicates a brief description of the individual building construction projects and indicates the construction sequence and duration for this option. Commissioning of engineering systems should occur in the last 20% of each project's duration.

- Existing Building Maintenance Costs: Existing unaltered buildings retained on the campus for the Baseline require ongoing and periodic maintenance costs including buildings which are scheduled for demolition to the point where demolition begins.
- Capital Cost Estimate: An estimate of projected new construction and renovation costs is indicated in the BPO Capital Cost Estimate. The capital costs are based on campus-wide area projections by Departmental Group (Zone) as indicated in the Projected BPO areas by Departmental Group (Zone.)
- Construction Cost depends on Function: Construction costs are derived from projected area requirements by Building and non-Building Departmental Groups (Zones.)
- Soft Costs Standardized: Approved factors as stated in the assumptions for soft costs (such as professional fees, furnishings and equipment) are based on consultant experience and VA standards.

*Evaluation of BPO 1 (Baseline) using Capital Criteria:*

- Consolidation of Vacated Space: The vacant square footage area totals for BPO 1 (Baseline) indicate nearly an 86% decrease in vacant space across the campus (see the following table). The approximately 59,000 SF includes that space in vacant buildings that will be demolished or made available for reuse.

*Table 24: Percentage of Vacant Space – BPO 1 (Baseline)*

Title	Vacant BGSF
Existing Vacant	68,708
Vacant BPO	9,687
Difference	-59,021
Percent Difference	-85.9%

- Consolidation of Underutilized Space: Underutilized space is space not used to its full potential because of physical constraints. Because there is a substantial amount of renovation required for this BPO, additional area is required to achieve a modern, safe and secure environment, resulting in an increase of underutilized space. Comparing the ideal space requirements for the workload to the square footage need for this option results in a 64% overall increase in area need (see the table below).

*Table 25: Percentage of Underutilized Space – BPO 1 (Baseline)*

Title	Total
Projected Ideal BGSF Based on In-House Workload	535,730
Proposed BPO BGSF	595,548
Underutilized Space	59,818
Variance by Percentage	10%

- Timeliness of Completion: This BPO requires a 13.5 year (162 months) multi-phased period of construction from initiation in January 2009 with completion to implement improvements to the physical environment starting in January 2010 and completion in July 2022 (see the following table). Key assumptions include:
  - The historic building process begins January 2007 and ends January 2011
  - Project funding is approved January 2009
  - There are 4 major construction/relocation phases targeted to implement this BPO
  - Planning and design for the first series of renovations begins January 2010 and takes 18 months
  - The first phase of the construction sequence is replacement of the existing campus water and sewer system. Work for this project is projected to begin January 2010 and takes 48 months to complete.
  - Design and construction of the new nursing home building begins 1/1/2012 and takes 60 months to complete. Occupancy of the nursing home and support functions occurs thereafter. Demolition of select logistical buildings vacated from these relocations follows.
  - Design and renovations to buildings 16, 17, 20, 21 and 15H begin 7/1/2015 with multiple renovation and relocation phases with associated completion dates for each building. Simultaneously, renovations to logistical (engineering) buildings occur as coordinated to reduce disruption to clinical services.
  - Design and renovations to buildings 15E and 18 begin January 2020 with an anticipated duration of 78 months to allow for multiple renovation and relocation phases with associated completion dates for each building. Simultaneously, renovations to the remaining logistical (engineering) buildings occur as coordinated to reduce disruption to clinical services.

*Table 26: Total Construction Duration – BPO 1 (Baseline)*

	Start Date	Completion Date	Duration
Total Construction Activity	01/01/09	01/01/27	216 Months

- Timeliness of Urgent Seismic Corrections: There are 21 buildings on the Castle Point campus identified in the CAI with “seismic non-exempt” or higher status. The priority is for correction of these buildings to be accommodated as early as possible. However, the sequence of construction required to achieve proposed plan indicates vacancy of the last building with seismic corrections (building 15E) in July 2026. Buildings with seismic deficient status that are not projected for VA occupancy will be demolished as they become eligible for demolition based on the implementation schedule.
- Size and Complexity of Capital Plan: Projected areas (BGSF) based on 2023 workload volumes identifies changes to the Montrose campus as indicated in the following table. It is significant to note that for all departmental groups except behavioral health area requirements are projected to increase.

*Table 27: Campus Area Change – BPO 1 (Baseline)*

Distributions	Acute Care	Nursing Home	Domiciliary	Rehab.	Behavioral Health	Ambulatory Services	Research	Admin.	Logistics	Out Lease
Existing Distribution	50,970	51,130	1,383	0	16,150	137,072	378	77,910	59,917	67,367
Proposed BPO Distribution	83,666	124,870	11,042	0	13,227	165,384	114	118,866	78,379	0
Variance By BGSF	32,696	73,740	9,659	0	-2,923	28,312	-264	40,956	18,462	-67,367

Note: There is no research space provided on the campus. However, the area indicated resulting from mathematical rounding of projected areas has been included in the behavioral health space for distribution on the campus.

- Patient Moves:** Of the existing 51 buildings on the campus (as identified in the CAI), in this BPO, all 18 buildings with clinical or clinical-related functions will be renovated or identified as available for reuse/demolition. A detailed construction schedule is beyond the scope of this study. However, there are some portions of buildings 15H, 15E, 16, 17 and 18 where renovations and relocations will be complex and that patients may be inconvenienced but care may continue in the buildings during renovations. An overview of patient moves follows. Further detail will be provided in the implementation plan.

  - Upon completion of the new nursing home patients from the Montrose campus will be relocated. Other administration and logistical functions will relocate to the support areas of the new building from various locations on the main campus.
  - Relocation of administrative areas in building 17 initiates the sequence of internal renovations and relocations throughout the existing buildings proposed to serve clinical areas. Based on the complexity of renovations required and the duration needed to sequence the construction, it is anticipated that there will be significant inconvenience to patient care areas that will continue to operate during construction.
- Historic Buildings Altered:** There are no buildings identified as historic in the CAI. However, based on building age, there are 26 buildings designated as historically eligible. For this BPO, all 26 will be renovated, considered available for reuse or demolished (see the table below). The National Historic Preservation Act requires that a federal agency must assume responsibility for historic properties and Section 106 requires federal agencies to consider historic properties as it plans a project and to consult with the Advisory Council on Historic Preservation. The approval process for renovation can take more than a year and will need to be considered in the implementation planning efforts.

*Table 28: Historic Buildings Altered – BPO 1 (Baseline)*

Title	Building Count
Total Historic or Historically Eligible	26
Altered Historic Projects	26

Note: Values indicate quantity of Historically Eligible buildings as altered by this BPO

## **BPO 2 at Montrose**

### *BPO Description*

*Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus)*

This BPO would place Outpatient Mental Health, medical clinics, and residential treatment programs in new construction east of the fire station on the northeastern part of the campus.

Most other existing buildings and infrastructure (including the water distribution system and waste water treatment plant) would be available for reuse opportunities. Parcels 1, 2, 3, 5, 6, & 7 and portions of parcel 4 are available for reuse.

The key opportunity offered by this BPO is construction of all new facilities on the Montrose campus.

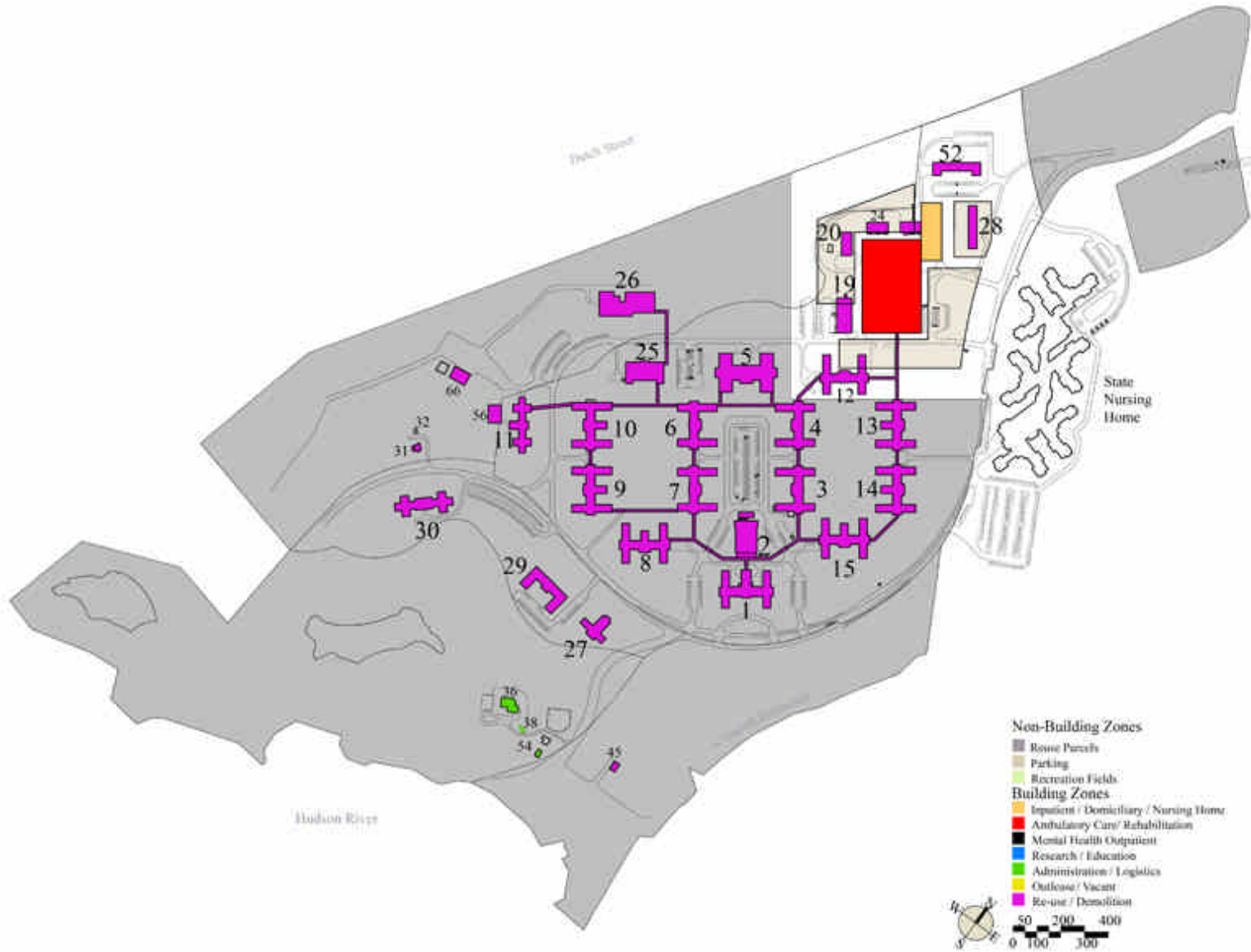
#### Note:

As buildings and land become vacant over the forecast period, the contractor for the programming and design phase of the project should identify in a project schedule the reuse potential of land parcel and vacant building availability.

### *Analysis of Capital Planning Outputs*

- Site Plan: The Projected BPO 2 Site Plan (in the figure below) illustrates the proposed campus configuration and locations of buildings.
- Building Color Code: Similar to the Existing Current Stage Site Plan, the building color indicates the Departmental Group (Zone) of the primary occupants for each building. Matching the building color key used for the Existing Current State Site Plan, the proposed building color indicates the predominant occupancy of the building. Refer to the Legend regarding the Departmental Groups (Zone) contained therein.
- Site Impact during Construction: Site area calculations for cost estimating purposes are based on land area assigned to specific functions (such as for replacement piping in the utility replacement), new or replaced recreation areas (although none are identified for either of these sites), new or repaved parking areas as determined by projected need and adjacency to new or renovated buildings as defined by the BPO site plan. Where existing parking areas are not needed, the calculation provides for their demolition and replacement with turf. Restoration of existing or installation of new walkways and internal campus vehicular circulation paths are also included in the calculation. For this BPO the total site impact area total for cost calculations is approximately 5 acres excluding affected parking and building footprints.

Figure 9: A Diagram of the Projected BPO 2 Site Plan





- **Campus Area and Uses:** The BPO 2 campus configuration as indicated on the site plan is summarized in the following table. There is no dedicated exterior recreation area defined. However, there is sufficient land available for recreational activities. The area totals for primary activities on the portions of the site to be retained exclusively for VA-related functions are indicated in the Campus Area Total below.

*Table 26: Campus Area Total Acreage - BPO 2*

Campus Area	Acres
Recreation	0
Parking	~ 6
Building & Landscape	~ 19
BPO Total (total of above)	~ 25
Existing Campus Total	~ 189

- **Land Parcels Available for Re-Use:** BPO 2 designates approximately 25 acres (or 13% of the present site) in the northwestern portion of the campus as required for projected VA functions and approximately 136 acres (or 87% of the site) as available for reuse. Buildings and structures associated with replacement of the campus sewer system are included as part of the area available for reuse.
- **Buildings Available for Re-Use:** This BPO identifies buildings 12, 16, 19, 20, 24, 17, 18, 28 and 52 as demolished to allow for new construction on the campus. All other existing buildings are designated as available for reuse or demolition.
- **Relocation of Functions:** In BPO 2 all projected area requirements will be accommodated in new 3 to 4 story buildings primarily serving ambulatory care and domiciliary. Buildings will be connected at each level to provide for ease of access from one departmental group to another.

The existing campus sewer system and associated buildings will be replaced as the initial phase of this BPO.

The clinical and administrative building will be located on the present site of building 16 in the northeastern portion of the campus. Parking will surround the building with multiple designated entries assigned to specific functions. The transportation hub and fire station will be incorporated into the new construction with vehicular access adjacent to the shipping/receiving dock on the northwestern face of the building.

The domiciliary will be due north of the ambulatory and administrative building and connected at each level. Food service areas are anticipated to be located on the entry level of the ambulatory and administrative building to provide adjacency to the shipping/receiving dock.

The table below indicates the projected area need as assigned to each building on the campus. Departmental Group area totals are provided for each building.

*Table 29: Functional Distribution - BPO 2*

Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
1	Administration		0	57,445
1	Administration	Acute Care	9,419	0
1	Administration	Administration	20,506	0
1	Administration	Ambulatory Services	13,453	0
1	Administration	Behavioral Health	226	0
1	Administration	Domiciliary	226	0
1	Administration	Logistics	9,632	0
1	Administration	Nursing Home	1,640	0
1	Administration	Out Lease	2,344	0
10	Vacant		0	47,511
10	Vacant	Out Lease	47,510	0
11	Vacant		0	34,540
11	Vacant	Out Lease	34,540	0
12	Administration Offices		0	46,572
12	Administration Offices	Acute Care	94	0
12	Administration Offices	Administration	6,027	0
12	Administration Offices	Ambulatory Services	3,106	0
12	Administration Offices	Behavioral Health	7,248	0
12	Administration Offices	Domiciliary	94	0
12	Administration Offices	Logistics	5,227	0
12	Administration Offices	Nursing Home	94	0
12	Administration Offices	Out Lease	24,274	0
12	Administration Offices	Research	408	0
13	Residential treatment		0	48,084
13	Residential treatment	Acute Care	119	0
13	Residential treatment	Administration	841	0
13	Residential treatment	Ambulatory Services	3,418	0
13	Residential treatment	Behavioral Health	119	0
13	Residential treatment	Domiciliary	18,165	0
13	Residential treatment	Logistics	2,207	0
13	Residential treatment	Nursing Home	119	0
13	Residential treatment	Out Lease	23,097	0
14	Psychiatry		0	49,312
14	Psychiatry	Acute Care	34,184	0
14	Psychiatry	Administration	2,092	0
14	Psychiatry	Ambulatory Services	4,713	0
14	Psychiatry	Behavioral Health	88	0
14	Psychiatry	Domiciliary	88	0
14	Psychiatry	Logistics	1,470	0
14	Psychiatry	Nursing Home	137	0
14	Psychiatry	Out Lease	3,420	0
14	Psychiatry	Research	3,120	0
15	NHCU		0	47,241
15	NHCU	Acute Care	33	0
15	NHCU	Administration	9,680	0

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Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
15	NHCU	Ambulatory Services	2,308	0
15	NHCU	Behavioral Health	33	0
15	NHCU	Domiciliary	33	0
15	NHCU	Logistics	1,053	0
15	NHCU	Nursing Home	17,034	0
15	NHCU	Out Lease	17,034	0
15	NHCU	Research	33	0
16	Engineering/Rehab		0	32,221
16	Engineering/Rehab	Ambulatory Services	18,211	0
16	Engineering/Rehab	Logistics	11,000	0
16	Engineering/Rehab	Out Lease	3,010	0
17	Warehouse		0	21,489
17	Warehouse	Acute Care	593	0
17	Warehouse	Logistics	20,303	0
17	Warehouse	Nursing Home	593	0
19	Fire House / Grounds & Transp't'n		0	9,065
19	Fire House / Grounds & Transp't'n	Logistics	9,065	0
2	Theater		0	22,160
2	Theater	Administration	275	0
2	Theater	Ambulatory Services	16,011	0
2	Theater	Logistics	1,100	0
2	Theater	Out Lease	4,774	0
20	Boiler Plant		0	7,133
21	Storage		0	1,156
21	Storage	Acute Care	29	0
21	Storage	Administration	29	0
21	Storage	Ambulatory Services	29	0
21	Storage	Behavioral Health	29	0
21	Storage	Domiciliary	29	0
21	Storage	Logistics	925	0
21	Storage	Nursing Home	29	0
21	Storage	Out Lease	29	0
21	Storage	Research	29	0
23	Storage		0	1,200
23	Storage	Logistics	1,200	0
24	Paint Shop		0	3,780
24	Paint Shop	Acute Care	94	0
24	Paint Shop	Administration	94	0
24	Paint Shop	Ambulatory Services	94	0
24	Paint Shop	Behavioral Health	94	0
24	Paint Shop	Domiciliary	94	0
24	Paint Shop	Logistics	3,024	0
24	Paint Shop	Nursing Home	94	0
24	Paint Shop	Out Lease	94	0
24	Paint Shop	Research	94	0
25	Recreation & Canteen		0	36,640

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Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
25	Recreation & Canteen	Acute Care	56	0
25	Recreation & Canteen	Administration	2,009	0
25	Recreation & Canteen	Ambulatory Services	34,407	0
25	Recreation & Canteen	Behavioral Health	56	0
25	Recreation & Canteen	Domiciliary	56	0
25	Recreation & Canteen	Nursing Home	56	0
26	Pool/Gym		0	23,842
26	Pool/Gym	Acute Care	86	0
26	Pool/Gym	Ambulatory Services	23,498	0
26	Pool/Gym	Behavioral Health	86	0
26	Pool/Gym	Domiciliary	86	0
26	Pool/Gym	Nursing Home	86	0
27	Chapel		0	10,758
27	Chapel	Administration	10,758	0
28	Residential Treatment		0	19,360
28	Residential Treatment	Domiciliary	19,360	0
29	Child Care & Non-housekeeping Qtrs		0	33,194
29	Child Care & Non-housekeeping Qtrs	Administration	29,190	0
29	Child Care & Non-housekeeping Qtrs	Ambulatory Services	2,002	0
29	Child Care & Non-housekeeping Qtrs	Out Lease	2,002	0
3	Outpatient Building		0	43,569
3	Outpatient Building	Acute Care	945	0
3	Outpatient Building	Administration	9,609	0
3	Outpatient Building	Ambulatory Services	20,123	0
3	Outpatient Building	Behavioral Health	4,780	0
3	Outpatient Building	Domiciliary	39	0
3	Outpatient Building	Logistics	5,288	0
3	Outpatient Building	Nursing Home	39	0
30	Quarters		0	34,645
30	Quarters	Administration	33,957	0
30	Quarters	Domiciliary	688	0
31	Housekeeping Qtrs		0	3,664
31	Housekeeping Qtrs	Administration	3,664	0
31A	Director's Garage		0	845
31A	Director's Garage	Administration	846	0
33	Paint Storage		0	739
33	Paint Storage	Acute Care	18	0
33	Paint Storage	Administration	18	0
33	Paint Storage	Ambulatory Services	18	0
33	Paint Storage	Behavioral Health	18	0
33	Paint Storage	Domiciliary	18	0
33	Paint Storage	Logistics	591	0
33	Paint Storage	Nursing Home	18	0
33	Paint Storage	Out Lease	18	0
33	Paint Storage	Research	18	0
36	Wastewater Treatment	Acute Care	1	0

CARES STAGE II FINAL REPORT – MONTROSE-CASTLE POINT

Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
36	Wastewater Treatment	Ambulatory Services	1	0
36	Wastewater Treatment	Behavioral Health	1	0
36	Wastewater Treatment	Domiciliary	1	0
36	Wastewater Treatment	Logistics	1	2,867
36	Wastewater Treatment	Nursing Home	1	0
37	Greenhouse		0	1,750
37	Greenhouse	Ambulatory Services	1,750	0
38	Chlorination Chamber	Logistics	0	207
39	Greenhouse		0	1,248
39	Greenhouse	Ambulatory Services	1,248	0
4	Acute Building		0	42,950
4	Acute Building	Acute Care	3,223	0
4	Acute Building	Administration	3,001	0
4	Acute Building	Ambulatory Services	2,591	0
4	Acute Building	Behavioral Health	53	0
4	Acute Building	Domiciliary	53	0
4	Acute Building	Logistics	1,032	0
4	Acute Building	Nursing Home	598	0
4	Acute Building	Out Lease	32,395	0
44	Engineering		0	285
44	Engineering	Logistics	285	0
45	Concession & Shelter House		0	1,563
46	Boat House (Bath House)		0	2,709
46	Boat House (Bath House)	Ambulatory Services	2,709	0
48	Women's Rest Room		0	177
49	Garage & Storage		0	1,320
49	Garage & Storage	Acute Care	33	0
49	Garage & Storage	Administration	33	0
49	Garage & Storage	Ambulatory Services	33	0
49	Garage & Storage	Behavioral Health	33	0
49	Garage & Storage	Domiciliary	33	0
49	Garage & Storage	Logistics	1,056	0
49	Garage & Storage	Nursing Home	33	0
49	Garage & Storage	Out Lease	33	0
49	Garage & Storage	Research	33	0
5	Kitchen & Dining Hall		0	51,455
5	Kitchen & Dining Hall	Acute Care	41,164	0
5	Kitchen & Dining Hall	Nursing Home	10,291	0
52	Domiciliary		0	30,290
52	Domiciliary	Domiciliary	30,290	0
53	Oxygen Storage Building		0	220
55	Bus Shelter		0	120
56	Greenhouse		0	260
56	Greenhouse	Ambulatory Services	260	0
57	Eng Trickling Filter	Logistics	0	5,026
58	Secondary Settling Tank	Logistics	0	500

CARES STAGE II FINAL REPORT – MONTROSE-CASTLE POINT

Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
59	Contact Chamber	Logistics	0	240
6	Nursing Home Care Unit		0	43,054
6	Nursing Home Care Unit	Administration	3,435	0
6	Nursing Home Care Unit	Ambulatory Services	8,011	0
6	Nursing Home Care Unit	Logistics	349	0
6	Nursing Home Care Unit	Nursing Home	31,257	0
66	Engineering Storage		0	3,360
66	Engineering Storage	Logistics	3,360	0
7	Administrative		0	43,992
7	Administrative	Acute Care	4,895	0
7	Administrative	Administration	826	0
7	Administrative	Ambulatory Services	921	0
7	Administrative	Behavioral Health	95	0
7	Administrative	Domiciliary	95	0
7	Administrative	Logistics	1,763	0
7	Administrative	Nursing Home	95	0
7	Administrative	Out Lease	35,300	0
8	Vacant		0	49,324
8	Vacant	Administration	512	0
8	Vacant	Ambulatory Services	512	0
8	Vacant	Out Lease	48,300	0
9	Vacant		0	47,752
9	Vacant	Out Lease	47,752	0
CC	Connecting Corridors		0	24,758
Z-10	Zone Logistics	Logistics	0	19,529
Z-10-11S	Surface Parking for Zone Logistics	Logistics	0	6,000
Z-10A	Fire Station	Logistics	0	12,285
Z-10B	Transportation Hub	Logistics	0	5,424
Z-2	Zone Acute Care	Acute Care	0	21,397
Z-2-11S	Surface Parking for Zone Acute Care	Acute Care	0	16,800
Z-3	Zone Nursing Home	Nursing Home	0	3,420
Z-3-11S	Surface Parking for Zone Nursing Home	Nursing Home	0	1,600
Z-4	Zone Domiciliary	Domiciliary	0	40,131
Z-4-11S	Surface Parking for Zone Domiciliary	Domiciliary	0	18,800
Z-6	Zone Behavioral Health	Behavioral Health	0	33,924
Z-6-11S	Surface Parking for Zone Behavioral Health	Behavioral Health	0	16,000
Z-7	Zone Ambulatory Services	Ambulatory Services	0	76,715
Z-7-11S	Surface Parking for Zone Ambulatory Services	Ambulatory Services	0	118,400
Z-8	Zone Research	Research	0	4,472
Z-8-11S	Surface Parking for Zone Research	Research	0	2,400
Z-9	Zone Administration	Administration	0	118,025
Z-9-11S	Surface Parking for Zone Administration	Administration	0	72,800
Z-SiteInfo	Site Information	Logistics	0	244,572

Notes:

- There is no nursing home or research space provided on the campus. However, the projected area resulting from mathematical rounding of projected areas has been included in the logistics area for distribution on campus.

- If building group is blank it identifies unassigned space
  - The plan recognizes that out leased space currently has existing relationships which will be considered in reuse planning
- **Optimal Use of Existing Buildings** In this BPO, all existing buildings on the campus (except those associated with the sewer plant replacement) will be vacated and designated for reuse or demolition.
  - **Projected Workload Volumes for 2023:** The projected areas as derived from workload volumes (See Stage II Assumptions.) indicate the desired functions can be accommodated in much less area than is currently available on the campus.
  - **Parking:** Portions of the existing surface parking areas will be repaved and expanded to provide parking in the most convenient locations adjacent to building entries. Where existing parking is not required, it will be removed and new landscape will be provided. Distribution of parking by departmental group is indicated in the following table. There is sufficient land available to meet the parking need. Therefore structured parking is not required for this campus.

*Table 30: Parking Distribution – BPO 2*

Parking Area	Total Surface Spaces	Total Structured Spaces	Surface Area (SF)	Structured Area (SF)	Location
Acute Care	42	0	16,800	0	Northwest of new ambulatory building
Nursing Home	4	0	1,600	0	Northwest of new ambulatory building
Domiciliary	47	0	18,800	0	North of new domiciliary
Rehabilitation	0	0	0	0	-
Behavioral Health	40	0	16,000	0	East and northeast of new ambulatory building
Ambulatory Services	296	0	118,400	0	East and northeast of new ambulatory building
Research	6	0	2,400	0	West of new ambulatory building
Administration	182	0	72,800	0	West of new ambulatory building
Logistics	15	0	6,000	0	Northwest of new ambulatory building
<b>Total</b>	<b>632</b>	<b>0</b>	<b>252,800</b>	<b>0</b>	

Note: There is no nursing home or research space provided on the campus. However, the projected parking area resulting from mathematical rounding of projected areas has been included in the logistics parking area on the site plan.

- **Conclusion from the Space Analysis:** The projected area need for the campus is approximately 345,000 BGSF (not including out lease space.) Because this BPO does not include significant renovations of existing space (except for logistical areas

associated with the sewer plant replacement), the space required approximately matches the projected Building Gross Square Feet yielding a reduction to the campus area of approximately 64%.

- Construction Phasing: A general overview of the phasing sequence for this BPO is provided below:
  - Replace campus sewer system.
  - Vacate and demolish buildings 16, 17 and 18.
  - Construct new buildings on campus and transfer primary campus utility feeds to designated location in new building.
  - Relocate all proposed functions to the new buildings and demolish remaining existing buildings in the designated VA parcel.
  - Identify the remaining existing buildings on campus as available for reuse or demolition.
- Construction Schedule: Schedules for construction activities are intended to identify relative duration of new construction or renovated work in order to calculate occupancy date for utilization of space and escalation costs. These schedules provide a base on which the implementation plan activities will be incorporated. The Schedule indicates a brief description of the individual building construction projects and indicates the construction sequence and duration for this option. Commissioning of engineering systems should occur in the last 20% of each project's duration.
- Existing Building Maintenance Costs: Existing unaltered buildings retained on the campus for this BPO require ongoing and periodic maintenance costs including buildings which are scheduled for demolition to the point where demolition begins or agreements for reuse are accepted.
- Capital Cost Estimate: An estimate of projected new construction and renovation costs is indicated in the BPO Capital Cost Estimate. The capital costs are based on campus-wide area projections by Departmental Group (Zone) as indicated in the Projected BPO areas by Departmental Group (Zone.)
- Construction Cost depends on Function: Construction costs are derived from projected area requirements by Building and non-Building Departmental Groups (Zones.)
- Soft Costs Standardized: Approved factors as stated in the assumptions for soft costs (such as professional fees, furnishings and equipment) are based on consultant experience and VA standards.

*Evaluation of BPO 2 using Capital Criteria:*

- Consolidation of Vacated Space: The vacant square footage area totals for BPO 2 indicates there will be no vacant space across the campus (see the following table). Existing buildings with vacant space will be demolished or made available for reuse.



*Table 31: Percentage of Vacant Space – BPO 2*

Title	Vacant BGSF
Existing Vacant	379,313
Vacant BPO	0
Difference	-379,313
Percent Difference	-100%

- **Consolidation of Underutilized Space:** Underutilized space is space not used to its full potential because of physical constraints. Because there is a minimal amount of renovation required for this BPO, there is no attributable underutilization of space projected for the campus (see the following table).

*Table 32: Percentage of Underutilized Space – BPO 2*

Title	Total
Projected Ideal BGSF Based on In-House Workload	345,420
Proposed BPO BGSF	344,162
Underutilized Space	-1,258
Variance by Percentage	0%

- **Timeliness of Completion:** This BPO requires a 7 year (84 months) phased period of construction from initiation in January 2009 with completion to implement improvements to the physical environment starting in January 2010 and completion in January 2016 (see the table below). Key assumptions include:
  - The historic building process begins January 2007 and ends January 2011
  - Project funding is approved January 2009
  - There are 4 major construction/relocation phases targeted to implement this BPO
  - Planning and design for the first series of renovations begins January 2010 and takes 18 months
  - The first phase of the construction sequence is replacement of the existing campus sewer system. Work for this project is projected to begin January 2010 and takes 48 months for complete.
  - Vacation and Demolition of existing buildings in the northwestern portion of the site
  - Construction of new facilities occurs immediately thereafter with occupancy scheduled for July 2015
  - Relocation of nursing home functions to the Castle Point campus and designation of remaining existing buildings as available for reuse or demolition to follow as conditions allow.

*Table 33: Total Construction Duration – BPO 2*

	Start Date	Completion Date	Duration
Total Construction Activity	01/01/09	01/01/16	84 Months

- **Timeliness of Urgent Seismic Corrections:** There are 31 buildings on the Montrose campus identified in the CAI with “seismic non-exempt” or higher status. The priority is for correction of these building to be accommodated as early as possible. However, the sequence of construction required to achieve proposed plan indicates vacancy of the last

building with seismic corrections at completion of the new construction. Buildings with seismic deficient status that are not projected for VA occupancy will be demolished as they become eligible for demolition based on the implementation schedule.

- **Size and Complexity of Capital Plan:** Projected areas (BGSF) based on 2023 workload volumes indicate a changes to the Montrose campus as indicated in the following table. It is significant to note that all departmental groups require less projected area than existing due to the anticipated improvements based on new construction that will meet state of the art design. The exception is the Behavioral health group which required a significant increase in projected area.

*Table 34: Campus Area Change – BPO 2*

Distributions	Acute Care	Nursing Home	Domiciliary	Rehab.	Behavioral Health	Ambulatory Services	Research	Admin.	Logistics	Out Lease
Existing Distribution	94,993	62,220	69,455	0	12,965	159,436	3,737	137,410	79,936	325,931
Proposed BPO Distribution	21,397	3,420	40,131	0	33,924	76,715	4,472	118,025	46,078	0
Variance By BGSF	-73,596	-58,800	-29,324	0	20,959	-82,721	735	-19,385	-33,858	-325,931

Note: There is no nursing home or research space provided on the campus. However, the projected area resulting from mathematical rounding of projected areas has been included in the logistics area for distribution on campus.

- **Patient Moves:** Of the existing 49 buildings on the campus (as identified in the CAI), in this BPO, all 29 buildings with clinical or clinical-related functions will be renovated or identified as available for reuse/demolition. With all new facilities provided in this option, impact to clinical functions and patient inconvenience is minimized. Furthermore, relocations activities may be accommodated in a simple manner without disruption to care delivery. An overview of patient moves follows. Further detail will be provided in the implementation plan.
  - Upon construction completion of the new nursing home facilities at the Castle Point campus, nursing home functions vacate their present locations.
  - Upon construction completion of the new ambulatory and domiciliary facilities, all remaining clinical and support functions relocate to the new buildings
- **Historic Buildings Altered:** There are 25 buildings identified as historic in the CAI. However, based on building age, there are 43 buildings designated as historically eligible. For this BPO, all 43 will be renovated, considered available for reuse or demolished (see the table below). The National Historic Preservation Act requires that a federal agency must assume responsibility for historic properties and Section 106 requires federal agencies to consider historic properties as it plans a project and to consult with the Advisory Council on Historic Preservation. The approval process for renovation can take more than a year and will need to be considered in the implementation planning efforts.

*Table 35: Historic Buildings Altered – BPO 2*

Title	Building Count
Total Historic or Historically Eligible	43
Altered Historic Projects	43

Note: Values indicate quantity of Historically Eligible buildings as altered by this BPO

## **BPO 4 at Montrose**

### *BPO Description*

*Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station (Site of Buildings 13 and 14)*

Place Outpatient Mental Health, medical clinics, and residential treatment programs in new construction south of the fire station on the site of Buildings 13 and 14. Buildings 12, 13, 14 and 15 will be demolished to provide the necessary space for the new facilities.

All other existing buildings and infrastructure (including the water distribution system and waste water treatment plant) would be available for reuse opportunities. Parcels 1, 2, 4, 5, 6, & 7 and portions of parcel 3 are available for reuse.

The key opportunity offered by this BPO is construction of all new facilities on the Montrose campus.

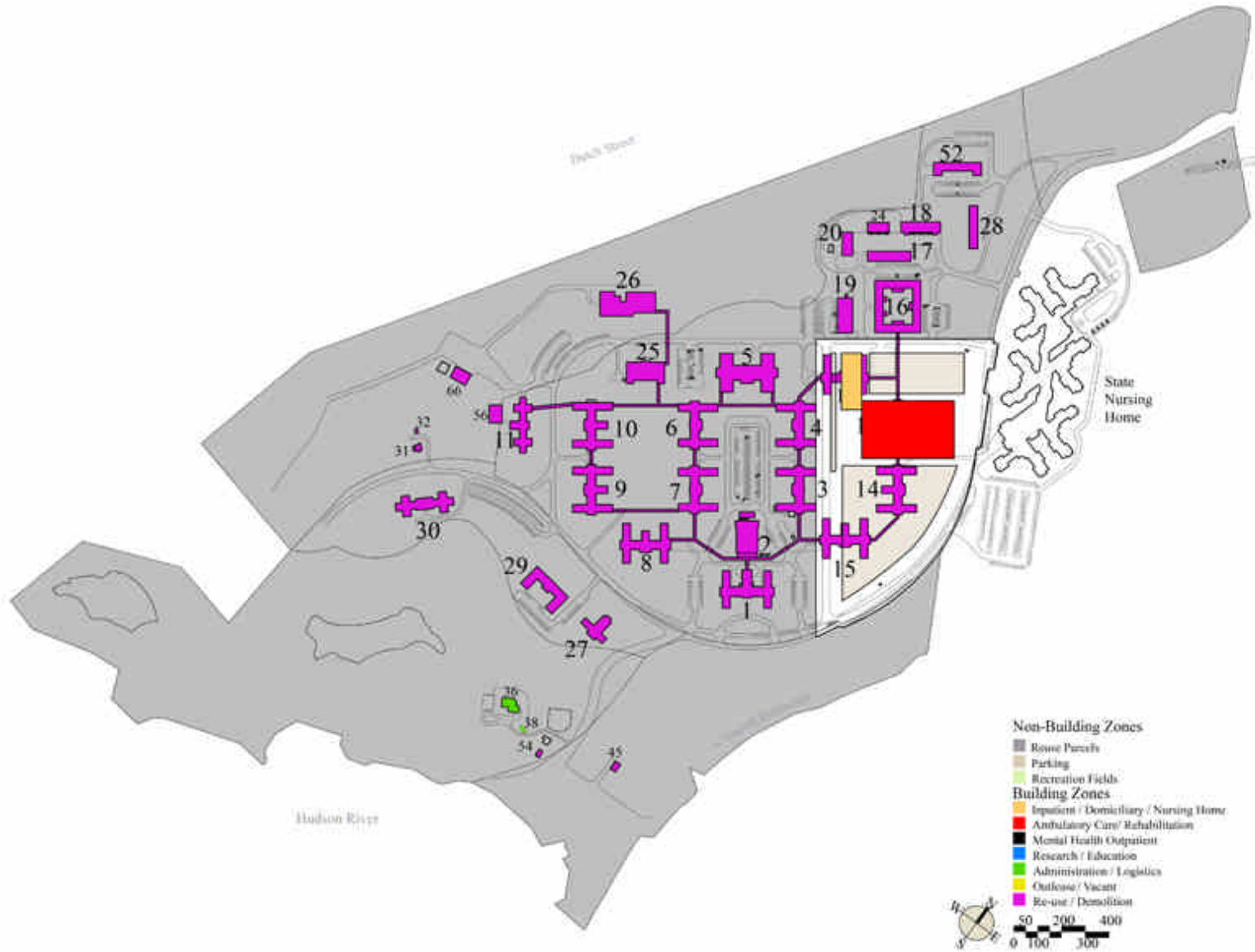
Note:

As buildings and land become vacant over the forecast period, the contractor for the programming and design phase of the project should identify in a project schedule the reuse potential of land parcel and vacant building availability.

### *Analysis of Capital Planning Outputs*

- Site Plan: The Projected BPO 4 Site Plan (in the following figure) illustrates the proposed campus configuration and locations of buildings.
- Building Color Code: Similar to the Existing Current Stage Site Plan, the building color indicates the Departmental Group (Zone) of the primary occupants for each building. Matching the building color key used for the Existing Current State Site Plan, the proposed building color indicates the predominant occupancy of the building. Refer to the Legend regarding the Departmental Groups (Zone) contained therein.
- Site Impact during Construction: Site area calculations for cost estimating purposes are based on land area assigned to specific functions (such as for replacement piping in the utility replacement), new or replaced recreation areas (although none are identified for either of these sites), new or repaved parking areas as determined by projected need and adjacency to new or renovated buildings as defined by the BPO site plan. Where existing parking areas are not needed, the calculation provides for their demolition and replacement with turf. Restoration of existing or installation of new walkways and internal campus vehicular circulation paths are also included in the calculation. For this BPO the total site impact area total for cost calculations is approximately 7 acres excluding affected parking and building footprints.

Figure 10: A Diagram of the Projected BPO 4 Site Plan



- **Campus Area and Uses:** The BPO 4 campus configuration as indicated on the site plan is summarized in the below table. There is no dedicated exterior recreation area defined. However, there is sufficient land available for recreational activities. The area totals for primary activities on the portions of the site to be retained exclusively for VA-related functions are indicated in the Campus Area Total below.

*Table 36: Campus Area Total Acreage - BPO 4*

Campus Area	Acres
Recreation	0
Parking	~ 6
Building & Landscape	~ 11
BPO Total (total of above)	~ 17
Existing Campus Total	~ 189

- **Land Parcels Available for Re-Use** BPO 4 designates approximately 17 acres (or 9% of the present site) in the northwestern portion of the campus as required for projected VA functions and approximately 172 acres (or 91% of the site) as available for reuse. Buildings and structures associated with replacement of the campus sewer system are included as part of the area available for reuse.
- **Buildings Available for Re-Use:** This BPO identifies buildings 12, 13, 14 and 15 as demolished to allow for new construction on the campus. All other existing buildings are designated as available for reuse or demolition.
- **Relocation of Functions:** In BPO 4 all projected area requirements will be accommodated in new 3 to 4 story buildings primarily serving ambulatory care and domiciliary. Buildings will be connected at each level to provide for ease of access from one departmental group to another.

The existing campus sewer system and associated buildings will be replaced as the initial phase of this BPO.

The clinical and administrative building will be located on the present site of building 13 in the eastern portion of the campus. Parking will be provided due north and south of the building with multiple designated entries assigned to specific functions. The transportation hub and fire station will be incorporated into the new construction with vehicular access and service parking adjacent to the shipping/receiving dock on the southwestern face of the building.

The domiciliary will be due west of the ambulatory and administrative building and connected at each level. Food service areas are anticipated to be located on the entry level of the ambulatory and administrative building to provide adjacency to the shipping/receiving dock.

The below table indicates the projected area need as assigned to each building on the campus. Departmental Group area totals are provided for each building.

*Table 37: Functional Distribution - BPO 4*

Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
1	Administration		0	57,445
1	Administration	Acute Care	9,419	0
1	Administration	Administration	20,506	0
1	Administration	Ambulatory Services	13,453	0
1	Administration	Behavioral Health	226	0
1	Administration	Domiciliary	226	0
1	Administration	Logistics	9,632	0
1	Administration	Nursing Home	1,640	0
1	Administration	Out Lease	2,344	0
10	Vacant		0	47,511
10	Vacant	Out Lease	47,510	0
11	Vacant		0	34,540
11	Vacant	Out Lease	34,540	0
12	Administration Offices		0	46,572
12	Administration Offices	Acute Care	94	0
12	Administration Offices	Administration	6,027	0
12	Administration Offices	Ambulatory Services	3,106	0
12	Administration Offices	Behavioral Health	7,248	0
12	Administration Offices	Domiciliary	94	0
12	Administration Offices	Logistics	5,227	0
12	Administration Offices	Nursing Home	94	0
12	Administration Offices	Out Lease	24,274	0
12	Administration Offices	Research	408	0
13	Residential treatment		0	48,084
13	Residential treatment	Acute Care	119	0
13	Residential treatment	Administration	841	0
13	Residential treatment	Ambulatory Services	3,418	0
13	Residential treatment	Behavioral Health	119	0
13	Residential treatment	Domiciliary	18,165	0
13	Residential treatment	Logistics	2,207	0
13	Residential treatment	Nursing Home	119	0
13	Residential treatment	Out Lease	23,097	0
14	Psychiatry		0	49,312
14	Psychiatry	Acute Care	34,184	0
14	Psychiatry	Administration	2,092	0
14	Psychiatry	Ambulatory Services	4,713	0
14	Psychiatry	Behavioral Health	88	0
14	Psychiatry	Domiciliary	88	0
14	Psychiatry	Logistics	1,470	0
14	Psychiatry	Nursing Home	137	0
14	Psychiatry	Out Lease	3,420	0
14	Psychiatry	Research	3,120	0
15	NHCU		0	47,241
15	NHCU	Acute Care	33	0

CARES STAGE II FINAL REPORT – MONTROSE-CASTLE POINT

Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
15	NHCU	Administration	9,680	0
15	NHCU	Ambulatory Services	2,308	0
15	NHCU	Behavioral Health	33	0
15	NHCU	Domiciliary	33	0
15	NHCU	Logistics	1,053	0
15	NHCU	Nursing Home	17,034	0
15	NHCU	Out Lease	17,034	0
15	NHCU	Research	33	0
16	Engineering/Rehab		0	32,221
16	Engineering/Rehab	Ambulatory Services	18,211	0
16	Engineering/Rehab	Logistics	11,000	0
16	Engineering/Rehab	Out Lease	3,010	0
17	Warehouse		0	21,489
17	Warehouse	Acute Care	593	0
17	Warehouse	Logistics	20,303	0
17	Warehouse	Nursing Home	593	0
19	Fire House / Grounds & Transprt'n		0	9,065
19	Fire House / Grounds & Transprt'n	Logistics	9,065	0
2	Theater		0	22,160
2	Theater	Administration	275	0
2	Theater	Ambulatory Services	16,011	0
2	Theater	Logistics	1,100	0
2	Theater	Out Lease	4,774	0
20	Boiler Plant		0	7,133
21	Storage		0	1,156
21	Storage	Acute Care	29	0
21	Storage	Administration	29	0
21	Storage	Ambulatory Services	29	0
21	Storage	Behavioral Health	29	0
21	Storage	Domiciliary	29	0
21	Storage	Logistics	925	0
21	Storage	Nursing Home	29	0
21	Storage	Out Lease	29	0
21	Storage	Research	29	0
23	Storage		0	1,200
23	Storage	Logistics	1,200	0
24	Paint Shop		0	3,780
24	Paint Shop	Acute Care	94	0
24	Paint Shop	Administration	94	0
24	Paint Shop	Ambulatory Services	94	0
24	Paint Shop	Behavioral Health	94	0
24	Paint Shop	Domiciliary	94	0
24	Paint Shop	Logistics	3,024	0
24	Paint Shop	Nursing Home	94	0
24	Paint Shop	Out Lease	94	0
24	Paint Shop	Research	94	0

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Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
25	Recreation & Canteen		0	36,640
25	Recreation & Canteen	Acute Care	56	0
25	Recreation & Canteen	Administration	2,009	0
25	Recreation & Canteen	Ambulatory Services	34,407	0
25	Recreation & Canteen	Behavioral Health	56	0
25	Recreation & Canteen	Domiciliary	56	0
25	Recreation & Canteen	Nursing Home	56	0
26	Pool/Gym		0	23,842
26	Pool/Gym	Acute Care	86	0
26	Pool/Gym	Ambulatory Services	23,498	0
26	Pool/Gym	Behavioral Health	86	0
26	Pool/Gym	Domiciliary	86	0
26	Pool/Gym	Nursing Home	86	0
27	Chapel		0	10,758
27	Chapel	Administration	10,758	0
28	Residential Treatment		0	19,360
28	Residential Treatment	Domiciliary	19,360	0
29	Child Care & Non-housekeeping Qtrs		0	33,194
29	Child Care & Non-housekeeping Qtrs	Administration	29,190	0
29	Child Care & Non-housekeeping Qtrs	Ambulatory Services	2,002	0
29	Child Care & Non-housekeeping Qtrs	Out Lease	2,002	0
3	Outpatient Building		0	43,569
3	Outpatient Building	Acute Care	945	0
3	Outpatient Building	Administration	9,609	0
3	Outpatient Building	Ambulatory Services	20,123	0
3	Outpatient Building	Behavioral Health	4,780	0
3	Outpatient Building	Domiciliary	39	0
3	Outpatient Building	Logistics	5,288	0
3	Outpatient Building	Nursing Home	39	0
30	Quarters		0	34,645
30	Quarters	Administration	33,957	0
30	Quarters	Domiciliary	688	0
31	Housekeeping Qtrs		0	3,664
31	Housekeeping Qtrs	Administration	3,664	0
31A	Director's Garage		0	845
31A	Director's Garage	Administration	846	0
33	Paint Storage		0	739
33	Paint Storage	Acute Care	18	0
33	Paint Storage	Administration	18	0
33	Paint Storage	Ambulatory Services	18	0
33	Paint Storage	Behavioral Health	18	0
33	Paint Storage	Domiciliary	18	0
33	Paint Storage	Logistics	591	0
33	Paint Storage	Nursing Home	18	0
33	Paint Storage	Out Lease	18	0
33	Paint Storage	Research	18	0



CARES STAGE II FINAL REPORT – MONTROSE-CASTLE POINT

Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
36	Wastewater Treatment	Acute Care	1	0
36	Wastewater Treatment	Ambulatory Services	1	0
36	Wastewater Treatment	Behavioral Health	1	0
36	Wastewater Treatment	Domiciliary	1	0
36	Wastewater Treatment	Logistics	1	2,867
36	Wastewater Treatment	Nursing Home	1	0
37	Greenhouse		0	1,750
37	Greenhouse	Ambulatory Services	1,750	0
38	Chlorination Chamber	Logistics	0	207
39	Greenhouse		0	1,248
39	Greenhouse	Ambulatory Services	1,248	0
4	Acute Building		0	42,950
4	Acute Building	Acute Care	3,223	0
4	Acute Building	Administration	3,001	0
4	Acute Building	Ambulatory Services	2,591	0
4	Acute Building	Behavioral Health	53	0
4	Acute Building	Domiciliary	53	0
4	Acute Building	Logistics	1,032	0
4	Acute Building	Nursing Home	598	0
4	Acute Building	Out Lease	32,395	0
44	Engineering		0	285
44	Engineering	Logistics	285	0
45	Concession & Shelter House		0	1,563
46	Boat House (Bath House)		0	2,709
46	Boat House (Bath House)	Ambulatory Services	2,709	0
48	Women's Rest Room		0	177
49	Garage & Storage		0	1,320
49	Garage & Storage	Acute Care	33	0
49	Garage & Storage	Administration	33	0
49	Garage & Storage	Ambulatory Services	33	0
49	Garage & Storage	Behavioral Health	33	0
49	Garage & Storage	Domiciliary	33	0
49	Garage & Storage	Logistics	1,056	0
49	Garage & Storage	Nursing Home	33	0
49	Garage & Storage	Out Lease	33	0
49	Garage & Storage	Research	33	0
5	Kitchen & Dining Hall		0	51,455
5	Kitchen & Dining Hall	Acute Care	41,164	0
5	Kitchen & Dining Hall	Nursing Home	10,291	0
52	Domiciliary		0	30,290
52	Domiciliary	Domiciliary	30,290	0
53	Oxygen Storage Building		0	220
55	Bus Shelter		0	120
56	Greenhouse		0	260
56	Greenhouse	Ambulatory Services	260	0
57	Eng Trickling Filter	Logistics	0	5,026

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Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
58	Secondary Settling Tank	Logistics	0	500
59	Contact Chamber	Logistics	0	240
6	Nursing Home Care Unit		0	43,054
6	Nursing Home Care Unit	Administration	3,435	0
6	Nursing Home Care Unit	Ambulatory Services	8,011	0
6	Nursing Home Care Unit	Logistics	349	0
6	Nursing Home Care Unit	Nursing Home	31,257	0
66	Engineering Storage		0	3,360
66	Engineering Storage	Logistics	3,360	0
7	Administrative		0	43,992
7	Administrative	Acute Care	4,895	0
7	Administrative	Administration	826	0
7	Administrative	Ambulatory Services	921	0
7	Administrative	Behavioral Health	95	0
7	Administrative	Domiciliary	95	0
7	Administrative	Logistics	1,763	0
7	Administrative	Nursing Home	95	0
7	Administrative	Out Lease	35,300	0
8	Vacant		0	49,324
8	Vacant	Administration	512	0
8	Vacant	Ambulatory Services	512	0
8	Vacant	Out Lease	48,300	0
9	Vacant		0	47,752
9	Vacant	Out Lease	47,752	0
CC	Connecting Corridors		0	24,758
Z-10	Zone Logistics	Logistics	0	19,529
Z-10-11S	Surface Parking for Zone Logistics	Logistics	0	6,000
Z-10A	Fire Station	Logistics	0	12,285
Z-10B	Transportation Hub	Logistics	0	5,424
Z-2	Zone Acute Care	Acute Care	0	21,397
Z-2-11S	Surface Parking for Zone Acute Care	Acute Care	0	16,800
Z-3	Zone Nursing Home	Nursing Home	0	3,420
Z-3-11S	Surface Parking for Zone Nursing Home	Nursing Home	0	1,600
Z-4	Zone Domiciliary	Domiciliary	0	40,131
Z-4-11S	Surface Parking for Zone Domiciliary	Domiciliary	0	18,800
Z-6	Zone Behavioral Health	Behavioral Health	0	33,924
Z-6-11S	Surface Parking for Zone Behavioral Health	Behavioral Health	0	16,000
Z-7	Zone Ambulatory Services	Ambulatory Services	0	76,715
Z-7-11S	Surface Parking for Zone Ambulatory Services	Ambulatory Services	0	118,400
Z-8	Zone Research	Research	0	4,472
Z-8-11S	Surface Parking for Zone Research	Research	0	2,400
Z-9	Zone Administration	Administration	0	118,025
Z-9-11S	Surface Parking for Zone Administration	Administration	0	72,800
Z-SiteInfo	Site Information	Logistics	0	295,977

Notes:

- There is no nursing home or research space provided on the campus. However, the projected area resulting from mathematical rounding of projected areas has been included in the logistics area for distribution on campus.
  - If building group is blank it identifies unassigned space
  - The plan recognizes that out leased space currently has existing relationships which will be considered in reuse planning
- **Optimal Use of Existing Buildings** In this BPO, all existing buildings on the campus (except those associated with the sewer plant replacement) will be vacated and designated for reuse or demolition.
  - **Projected Workload Volumes for 2023:** The projected areas as derived from workload volumes (See Stage II Assumptions.) indicate the desired functions can be accommodated in much less area than is currently available on the campus.
  - **Parking:** Portions of the existing surface parking areas will be repaved and expanded to provide parking in the most convenient locations adjacent to building entries. Where existing parking is not required, it will be removed and new landscape will be provided. Distribution of parking by departmental group is indicated in the table below. There is sufficient land available to meet the parking need. Therefore structured parking is not required for this campus.

*Table 38: Parking Distribution – BPO 4*

Parking Area	Total Surface Spaces	Total Structured Spaces	Surface Area (SF)	Structured Area (SF)	Location
Acute Care	42	0	16,800	0	Northwest of new ambulatory building
Nursing Home	4	0	1,600	0	Northwest of new ambulatory building
Domiciliary	47	0	18,800	0	Northwest of new domiciliary building
Rehabilitation	0	0	0	0	-
Behavioral Health	40	0	16,000	0	Northwest of new ambulatory building
Ambulatory Services	296	0	118,400	0	Southeast of new ambulatory building
Research	6	0	2,400	0	Southwest of new ambulatory building
Administration	182	0	72,800	0	Southeast of new ambulatory building
Logistics	15	0	6,000	0	Southwest of new domiciliary building
<b>Total</b>	<b>632</b>	<b>0</b>	<b>252,800</b>	<b>0</b>	

Note: There is no nursing home or research space provided on the campus. However, the projected parking area resulting from mathematical rounding of projected areas has been included in the logistics parking area on the site plan.

- Conclusion from the Space Analysis: The projected area need for the campus is approximately 345,000 BGSF (not including out lease space.) Because this BPO does not include significant renovations of existing space (except for logistical areas associated with the sewer plant replacement), the space required approximately matches the projected Building Gross Square Feet yielding a reduction to the campus area of approximately 64%.
- Construction Phasing: A general overview of the phasing sequence for this BPO is provided below:
  - Replace campus sewer system.
  - Vacate and demolish buildings 13.
  - Construct new ambulatory and support building on campus.
  - Relocate all proposed functions except domiciliary to the new building.
  - Vacate and demolish buildings 12, 14 and 15.
  - Construct new domiciliary building and occupy upon completion.
  - Identify the remaining existing buildings on campus as available for reuse or demolition.
- Construction Schedule: Schedules for construction activities are intended to identify relative duration of new construction or renovated work in order to calculate occupancy date for utilization of space and escalation costs. These schedules provide a base on which the implementation plan activities will be incorporated. The Schedule indicates a brief description of the individual building construction projects and indicates the construction sequence and duration for this option. Commissioning of engineering systems should occur in the last 20% of each project's duration.
- Existing Building Maintenance Costs: Existing unaltered buildings retained on the campus for the Baseline require ongoing and periodic maintenance costs including buildings which are scheduled for demolition to the point where demolition begins or agreements for reuse are accepted.
- Capital Cost Estimate: An estimate of projected new construction and renovation costs is indicated in the BPO Capital Cost Estimate. The capital costs are based on campus-wide area projections by Departmental Group (Zone) as indicated in the Projected BPO areas by Departmental Group (Zone.)
- Construction Cost depends on Function: Construction costs are derived from projected area requirements by Building and non-Building Departmental Groups (Zones.)
- Soft Costs Standardized: Approved factors as stated in the assumptions for soft costs (such as professional fees, furnishings and equipment) are based on consultant experience and VA standards.

*Evaluation of BPO 4 Baseline using Capital Criteria:*

- **Consolidation of Vacated Space:** The vacant square footage area totals for BPO 2 indicates there will be no vacant space across the campus (see the following table). Existing buildings with vacant space will be demolished or made available for reuse.

*Table 39: Percentage of Vacant Space – BPO 4*

Title	Vacant BGSF
Existing Vacant	379,313
Vacant BPO	0
Difference	-379,313
Percent Difference	-100%

- **Consolidation of Underutilized Space:** Underutilized space is space not used to its full potential because of physical constraints. Because there is a minimal amount of renovation required for this BPO, there is no attributable underutilization of space projected for the campus (see the table below).

*Table 40: Percentage of Underutilized Space – BPO 4*

Title	Total
Projected Ideal BGSF Based on In-House Workload	345,420
Proposed BPO BGSF	344,162
Underutilized Space	-1,258
Variance by Percentage	0%

- **Timeliness of Completion:** This BPO requires a 7 year (84 months) phased period of construction from initiation in January 2009 with completion to implement improvements to the physical environment starting in January 2010 and completion in January 2016 (see the following table). Key assumptions include:
  - The historic building process begins January 2007 and ends January 2011
  - Project funding is approved January 2009
  - There are 5 major construction/relocation phases targeted to implement this BPO
  - Planning and design for the first series of renovations begins January 2010 and takes 18 months
  - The first phase of the construction sequence is replacement of the existing campus sewer system. Work for this project is projected to begin January 2010 and takes 48 months for complete.
  - Vacation and demolition of existing building 13 in the northeast portion of the site
  - Construction of new ambulatory building occurs immediately thereafter with occupancy scheduled for July 2014.
  - Vacation and demolition of existing buildings 12, 14 and 15
  - Construction of new domiciliary building occurs immediately thereafter with occupancy scheduled for July 2015
  - Relocation of nursing home functions to the Castle Point campus and designation of remaining existing buildings as available for reuse or demolition to follow as conditions allow.

*Table 41: Total Construction Duration – BPO 4*

	Start Date	Completion Date	Duration
Total Construction Activity	01/01/09	01/01/16	84 Months

- **Timeliness of Urgent Seismic Corrections:** There are 31 buildings on the Montrose campus identified in the CAI with “seismic non-exempt” or higher status. The priority is for correction of these building to be accommodated as early as possible. However, the sequence of construction required to achieve proposed plan indicates vacancy of the last building with seismic corrections at completion of the new construction. Buildings with seismic deficient status that are not projected for VA occupancy will be demolished as they become eligible for demolition based on the implementation schedule.
- **Size and Complexity of Capital Plan:** Projected areas (BGSF) based on 2023 workload volumes indicate changes to the Montrose campus as indicated in the table below. It is significant to note that all departmental groups require less projected area than existing due to the anticipated improvements based on new construction that will meet state of the art design. The exception is the Behavioral health group which required a significant increase in projected area.

*Table 42: Campus Area Change – BPO 4*

Distributions	Acute Care	Nursing Home	Domiciliary	Rehab.	Behavioral Health	Ambulatory Services	Research	Admin.	Logistics	Out Lease
Existing Distribution	94,993	62,220	69,455	0	12,965	159,436	3,737	137,410	79,936	325,931
Proposed BPO Distribution	21,397	3,420	40,131	0	33,924	76,715	4,472	118,025	46,078	0
Variance By BGSF	-73,596	-58,800	-29,324	0	20,959	-82,721	735	-19,385	-33,858	-325,931

Note: There is no nursing home or research space provided on the campus. However, the projected area resulting from mathematical rounding of projected areas has been included in the logistics area for distribution on campus.

- **Patient Moves:** Of the existing 49 buildings on the campus (as identified in the CAI), in this BPO, all 29 buildings with clinical or clinical-related functions will be renovated or identified as available for reuse/demolition. With all new facilities provided in this option, impact to clinical functions and patient inconvenience is minimized. Furthermore, relocations activities may be accommodated in a simple manner without disruption to care delivery. An overview of patient moves follows. Further detail will be provided in the implementation plan.
  - Upon construction completion of the new nursing home facilities at the Castle Point campus, nursing home functions vacate their present locations.
  - Upon construction completion of the new ambulatory and domiciliary facilities, all remaining clinical, administrative and support functions relocate to the new buildings
  - Existing on-grade connecting corridors serving building 13 from buildings 12 and 14 will be demolished with building 13 to prepare the site for construction of the new ambulatory building. Pedestrian access to these buildings may be accomplished through alternative routes.

- Historic Buildings Altered:** There are 25 buildings identified as historic in the CAI. However, based on building age, there are 43 buildings designated as historically eligible. For this BPO, all 43 will be renovated, considered available for reuse or demolished (see the table below). The National Historic Preservation Act requires that a federal agency must assume responsibility for historic properties and Section 106 requires federal agencies to consider historic properties as it plans a project and to consult with the Advisory Council on Historic Preservation. The approval process for renovation can take more than a year and will need to be considered in the implementation planning efforts.

*Table 43: Historic Buildings Altered – BPO 4*

Title	Building Count
Total Historic or Historically Eligible	43
Altered Historic Projects	43

Note: Values indicate quantity of Historically Eligible buildings as altered by this BPO

## **BPO 7 at Castle Point**

### *BPO Description*

#### *Construct Replacement Facility West of Existing Buildings*

Construct a replacement facility on vacant land west of the existing buildings. Accommodate all inpatient, ambulatory care, and nursing home services including services relocated from Montrose (inpatient psychiatry and nursing home.)

Inpatient Spinal Cord Injury services are relocated to Bronx VAMC and outpatient Spinal Cord Injury services remain on campus.

Expand and improve parking. Maintain water and sewage treatment capacity, and fire station capability. All other buildings on the campus will be vacated.

Reuse was not studied in Stage I. Reuse opportunities for available land and buildings are being studied in Stage II.

The key opportunity offered by this BPO is construction of all new facilities on the Castle Point campus.

#### Note:

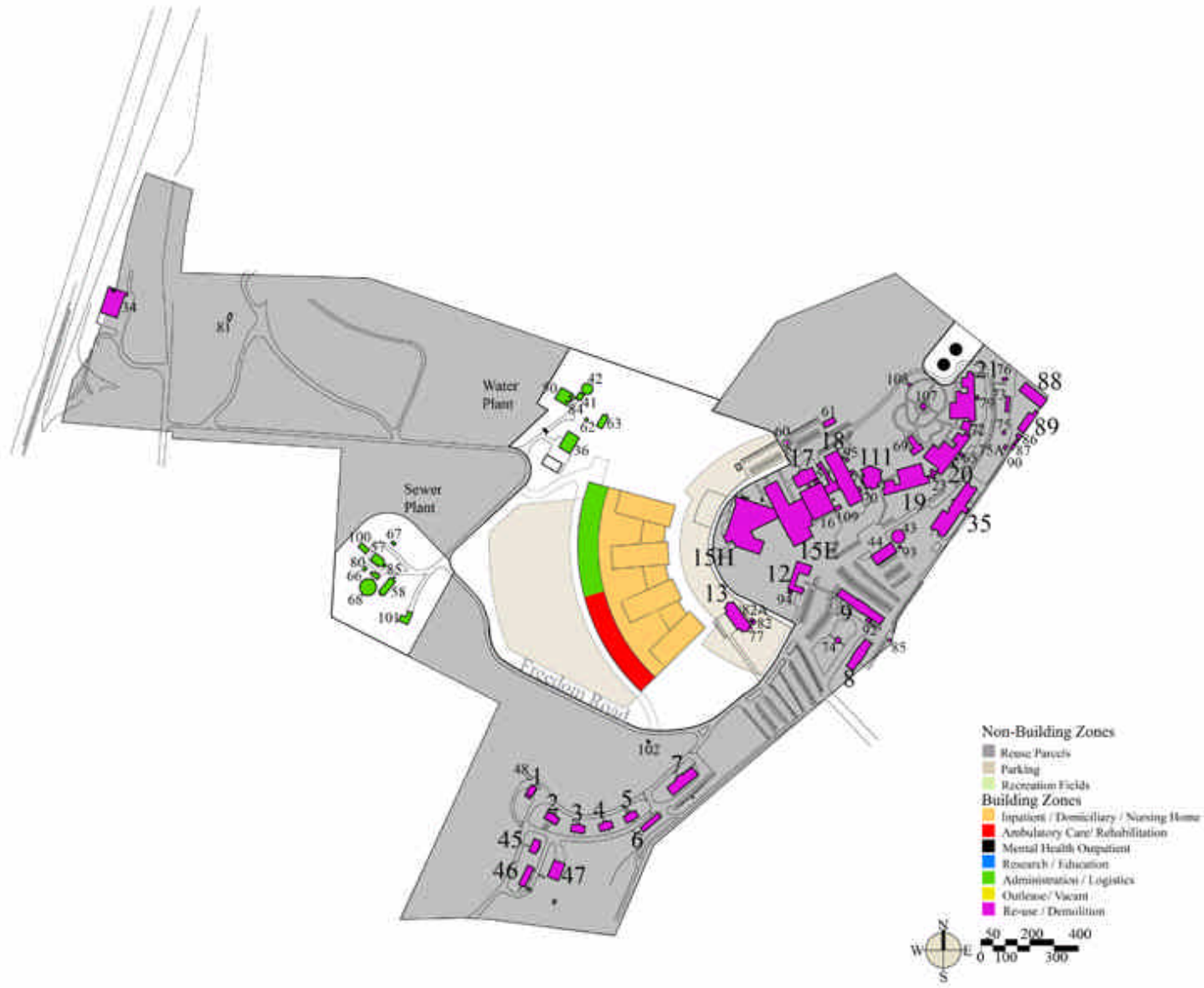
As buildings and land become vacant over the forecast period, the contractor for the programming and design phase of the project should identify in a project schedule the reuse potential of land parcel and vacant building availability.

### *Analysis of Capital Planning Outputs*

- **Site Plan:** The Projected BPO 7 Site Plan (in the following figure) illustrates the proposed campus configuration and locations of buildings.
- **Building Color Code:** Similar to the Existing Current Stage Site Plan, the building color indicates the Departmental Group (Zone) of the primary occupants for each building. Matching the building color key used for the Existing Current State Site Plan, the proposed building color indicates the predominant occupancy of the building. Refer to the Legend regarding the Departmental Groups (Zone) contained therein.



Figure 11: A Diagram of the Projected BPO 7 Site Plan



- **Site Impact during Construction:** Site area calculations for cost estimating purposes are based on land area assigned to specific functions (such as for replacement piping in the utility replacement), new or replaced recreation areas (although none are identified for either of these sites), new or repaved parking areas as determined by projected need and adjacency to new or renovated buildings as defined by the BPO site plan. Where existing parking areas are not needed, the calculation provides for their demolition and replacement with turf. Restoration of existing or installation of new walkways and internal campus vehicular circulation paths are also included in the calculation. For this BPO the total site impact area total for cost calculations is approximately 5 acres excluding affected parking and building footprints.
- **Campus Area and Uses:** The BPO 7 campus configuration as indicated on the site plan is summarized in the table below. There is no dedicated exterior recreation area defined. However, there is sufficient land available for recreational activities. The area totals for primary activities on the portions of the site to be retained exclusively for VA-related functions are indicated in the Campus Area Total below.

*Table 44: Campus Area Total Acreage - BPO 7*

Campus Area	Acres
Recreation	0
Parking	~ 10
Building & Landscape	~ 24
BPO Total (total of above)	~ 34
Existing Campus Total	~ 115

- **Land Parcels Available for Re-Use:** BPO 7 designates approximately 34 acres (or 29% of the present site) on the slope in the central portion of the campus as required for projected VA functions and approximately 81 acres (or 71% of the site) as available for reuse. Buildings and structures associated with replacement of the campus water and sewer system are included as part of the area available for reuse.
- **Buildings Available for Re-Use:** This BPO designates the entire main campus as well as a cluster of buildings in the southwestern portion of the campus (buildings 1, 2, 3, 4, 5, 6, 7, 45, 46, 47 and 48) as available for reuse or demolition.
- **Relocation of Functions:** In BPO 7, all projected area requirements will be accommodated in a new replacement campus composed of a series of 4 story buildings primarily on the southwestern slope at the central portion of the campus. Buildings will be connected at each level to provide for ease of access from one departmental group to another.

The existing campus water and sewer systems and associated buildings will be replaced and an additional water tower will be constructed adjacent to the present water tower. These site utility projects will be the initial phase of this BPO.

Parking will be grouped into two large parking areas adjacent to the building. Parking for nursing home and administration will be located at the upper elevation of the hill. Parking to serve ambulatory care and other clinical function will be located at the lower elevation of the hill. The transportation hub and fire station will be incorporated into the new construction with vehicular access adjacent to the shipping/receiving dock on the northwestern face of the building. Food service areas are anticipated to be located on the entry level of the ambulatory and administrative building to provide adjacency to the shipping/receiving dock.

The table below indicates the projected area need as assigned to each building on the campus. Departmental Group area totals are provided for each building.

*Table 45: Functional Distribution - BPO 7*

Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
1	Vacant Quarters		0	5,063
1	Vacant Quarters	Out Lease	5,062	0
2	Quarters		0	5,024
2	Quarters	Administration	5,024	0
3	Quarters		0	5,024
3	Quarters	Administration	5,024	0
4	Quarters		0	5,024
4	Quarters	Administration	5,024	0
5	Quarters		0	5,358
5	Quarters	Administration	5,358	0
6	Garage/Storage		0	1,705
6	Garage/Storage	Administration	1,705	0
7	Vacant Admin.		0	20,133
7	Vacant Admin.	Administration	1,036	0
7	Vacant Admin.	Out Lease	19,096	0
8	Research		0	12,897
8	Research	Administration	1,396	0
8	Research	Ambulatory Services	1,396	0
8	Research	Out Lease	10,103	0
9	Administration		0	27,123
9	Administration	Acute Care	9,785	0
9	Administration	Administration	1,363	0
9	Administration	Ambulatory Services	2,928	0
9	Administration	Logistics	9,523	0
9	Administration	Out Lease	3,523	0
12	Fire Station/Police Station		0	4,366
12	Fire Station/Police Station	Administration	383	0
12	Fire Station/Police Station	Ambulatory Services	1,048	0
12	Fire Station/Police Station	Logistics	2,772	0
12	Fire Station/Police Station	Out Lease	162	0
13	Education Building		0	11,993
13	Education Building	Acute Care	53	0
13	Education Building	Administration	9,910	0

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Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
13	Education Building	Ambulatory Services	53	0
13	Education Building	Behavioral Health	53	0
13	Education Building	Domiciliary	53	0
13	Education Building	Logistics	1,709	0
13	Education Building	Nursing Home	53	0
13	Education Building	Out Lease	53	0
13	Education Building	Research	53	0
16	Patient Care		0	39,453
16	Patient Care	Acute Care	13,801	0
16	Patient Care	Administration	5,014	0
16	Patient Care	Ambulatory Services	14,933	0
16	Patient Care	Behavioral Health	1,172	0
16	Patient Care	Logistics	1,079	0
16	Patient Care	Nursing Home	3,450	0
17	Patient Care		0	16,580
17	Patient Care	Acute Care	295	0
17	Patient Care	Administration	2,302	0
17	Patient Care	Ambulatory Services	11,760	0
17	Patient Care	Behavioral Health	36	0
17	Patient Care	Domiciliary	36	0
17	Patient Care	Logistics	1,679	0
17	Patient Care	Nursing Home	295	0
17	Patient Care	Out Lease	138	0
17	Patient Care	Research	36	0
18	Patient Care		0	51,256
18	Patient Care	Acute Care	6,656	0
18	Patient Care	Administration	4,770	0
18	Patient Care	Ambulatory Services	24,773	0
18	Patient Care	Behavioral Health	1,472	0
18	Patient Care	Domiciliary	311	0
18	Patient Care	Logistics	6,781	0
18	Patient Care	Nursing Home	311	0
18	Patient Care	Out Lease	6,061	0
18	Patient Care	Research	119	0
19	NHCU		0	28,228
19	NHCU	Acute Care	658	0
19	NHCU	Administration	5,905	0
19	NHCU	Ambulatory Services	2,954	0
19	NHCU	Behavioral Health	28	0
19	NHCU	Domiciliary	28	0
19	NHCU	Logistics	10,118	0
19	NHCU	Nursing Home	658	0
19	NHCU	Out Lease	7,850	0
19	NHCU	Research	28	0
20	NHCU		0	42,523
20	NHCU	Logistics	6,222	0

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Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
20	NHCU	Nursing Home	36,301	0
21	NHCU		0	37,073
21	NHCU	Acute Care	609	0
21	NHCU	Administration	7,460	0
21	NHCU	Ambulatory Services	863	0
21	NHCU	Behavioral Health	13,153	0
21	NHCU	Domiciliary	719	0
21	NHCU	Logistics	2,047	0
21	NHCU	Out Lease	12,220	0
34	Storage/Old Boiler Plant		0	10,421
35	Boiler Plant/Chiller Plant		0	14,423
44	Warehouse/Carpenter Shop		0	8,113
44	Warehouse/Carpenter Shop	Logistics	8,113	0
45	Quarters		0	5,991
45	Quarters	Administration	5,991	0
46	Child Care Center		0	7,125
46	Child Care Center	Administration	2,374	0
46	Child Care Center	Ambulatory Services	2,374	0
46	Child Care Center	Out Lease	2,374	0
48	Garage for Director's Quarters		0	288
48	Garage for Director's Quarters	Administration	288	0
57	Sewage Treatment Plant	Logistics	0	2,480
59	Generator Building		0	250
61	Recreation		0	947
61	Recreation	Ambulatory Services	947	0
65	Storage		0	188
65	Storage	Logistics	187	0
67	Storage	Logistics	265	265
69	Storage		0	1,967
69	Storage	Ambulatory Services	1,967	0
71	Storage		0	180
71	Storage	Logistics	179	0
73	Engineering Storage		0	1,000
73	Engineering Storage	Logistics	1,000	0
75	Sand Storage		0	1,000
80	Generator Building	Logistics	0	200
82	Generator Building		0	200
86	Engineering Storage		0	300
86	Engineering Storage	Logistics	300	0
87	Engineering Storage		0	202
87	Engineering Storage	Logistics	202	0
88	Labor Shop		0	5,005
88	Labor Shop	Acute Care	125	0
88	Labor Shop	Administration	125	0
88	Labor Shop	Ambulatory Services	125	0
88	Labor Shop	Behavioral Health	125	0

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Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
88	Labor Shop	Domiciliary	125	0
88	Labor Shop	Logistics	4,004	0
88	Labor Shop	Nursing Home	125	0
88	Labor Shop	Out Lease	125	0
88	Labor Shop	Research	125	0
89	Linen Hut		0	4,000
89	Linen Hut	Acute Care	1,000	0
89	Linen Hut	Logistics	2,000	0
89	Linen Hut	Nursing Home	1,000	0
90	Engineering Storage		0	252
90	Engineering Storage	Logistics	252	0
91	Generator Building		0	200
92	Generator Building		0	200
93	Generator Building		0	200
94	Generator Building		0	200
95	Generator Building		0	200
96	Generator Building		0	200
98	Water Treatment Plant	Logistics	0	3,136
101	Sani-Pak	Logistics	0	10,000
111	Multipurpose		0	6,284
111	Multipurpose	Ambulatory Services	6,284	0
15E	Patient Care		0	58,980
15E	Patient Care	Acute Care	17,967	0
15E	Patient Care	Administration	2,903	0
15E	Patient Care	Ambulatory Services	35,151	0
15E	Patient Care	Behavioral Health	93	0
15E	Patient Care	Domiciliary	93	0
15E	Patient Care	Nursing Home	93	0
15E	Patient Care	Out Lease	345	0
15H	Hamilton Fish Wing		0	44,678
15H	Hamilton Fish Wing	Acute Care	13	0
15H	Hamilton Fish Wing	Administration	4,548	0
15H	Hamilton Fish Wing	Ambulatory Services	29,510	0
15H	Hamilton Fish Wing	Behavioral Health	13	0
15H	Hamilton Fish Wing	Domiciliary	13	0
15H	Hamilton Fish Wing	Logistics	1,479	0
15H	Hamilton Fish Wing	Nursing Home	8,837	0
15H	Hamilton Fish Wing	Out Lease	249	0
15H	Hamilton Fish Wing	Research	13	0
59A	Generator Bldg		0	225
Z-10	Zone Logistics	Logistics	0	31,997
Z-10-11S	Surface Parking for Zone Logistics	Logistics	0	6,000
Z-10A	Fire Station	Logistics	0	12,285
Z-10B	Transportation Hub	Logistics	0	5,424
Z-2	Zone Acute Care	Acute Care	0	76,283
Z-2-11S	Surface Parking for Zone Acute Care	Acute Care	0	58,800

Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
Z-3	Zone Nursing Home	Nursing Home	0	124,870
Z-3-11S	Surface Parking for Zone Nursing Home	Nursing Home	0	96,400
Z-4	Zone Domiciliary	Domiciliary	0	11,042
Z-4-11S	Surface Parking for Zone Domiciliary	Domiciliary	0	8,800
Z-6	Zone Behavioral Health	Behavioral Health	0	10,978
Z-6-11S	Surface Parking for Zone Behavioral Health	Behavioral Health	0	8,800
Z-7	Zone Ambulatory Services	Ambulatory Services	0	144,369
Z-7-11S	Surface Parking for Zone Ambulatory Services	Ambulatory Services	0	111,200
Z-8	Zone Research	Research	0	101
Z-8-11S	Surface Parking for Zone Research	Research	0	400
Z-9	Zone Administration	Administration	0	103,532
Z-9-11S	Surface Parking for Zone Administration	Administration	0	80,000
Z-Site Info	Site Information	Logistics	0	221,419

Notes:

- There is no research or domiciliary space provided on the campus. However, area projections for this departmental group result from mathematical rounding. Where indicated, this area has been included as part of the overall building projected areas assigned to the largest departmental group within the building.
  - If building group is blank it identifies unassigned space
  - The plan recognizes that out leased space currently has existing relationships which will be considered in reuse planning.
- **Conceptual Building Section** To optimize views and relationship to the existing topography the nursing home elements are located at the upper elevation of the existing slope. Support and behavioral health services are located on the next level below. Level 2 provides a combination of ambulatory care and administration with the balance of ambulatory care services at the lowest level of the slope to accommodate at-grade entries from a new surface parking area which rests at an elevation slightly above the existing roadway (see the following figure).

Figure 12: A diagram of the Conceptual Section for BPO 7



- **Optimal Use of Existing Buildings:** In this BPO, all existing buildings on the campus (except those associated with the sewer and water plant replacement) will be vacated and designated for reuse or demolition.
- **Projected Workload Volumes for 2023:** The projected areas as derived from workload volumes (See Stage II Assumptions) indicate the desired functions require more area than is currently available on the campus.

Parking: Portions of the existing surface parking areas will be repaved and expanded to provide parking in the most convenient locations adjacent to building entries. Where existing parking is not required, it will be removed and new landscape will be provided. Distribution of parking by departmental group is indicated in the table below. There is sufficient land available to meet the parking need. Therefore structured parking is not required for this campus.

*Table 46: Parking Distribution – BPO 7*

Parking Area	Total Surface Spaces	Total Structured Spaces	Surface Area (SF)	Structured Area (SF)	Location
Acute Care	147	0	58,800	0	Southwest of new building
Nursing Home	145	0	58,000	0	Northeast of new building
Domiciliary	13	0	5,200	0	Northeast of new building
Rehabilitation	0	0	0	0	-
Behavioral Health	13	0	5,200	0	Southwest of new building
Ambulatory Services	556	0	222,400	0	Southwest of new building
Research	1	0	400	0	East of new building
Administration	160	0	64,000	0	East of new building
Logistics	15	0	6,000	0	Southwest of new building
Total	1,050	0	420,000	0	

Note: There is no research space provided on the campus. However, the projected single parking space resulting from mathematical rounding of projected areas has been included in the logistics parking area on the site plan.

- Conclusion from the Space Analysis: The projected area need for the campus is approximately 536,000 BGSF (not including out lease space.) Because this BPO does not include significant renovations of existing space (except for logistical areas associated with the sewer plant replacement), the space required approximately matches the projected Building Gross Square Feet yielding a reduction to the campus area of approximately 16%.
- Construction Phasing: A general overview of the phasing sequence for this BPO is provided below:
  - Replace campus water and sewer system.
  - Construct new buildings on campus.
  - Relocate all proposed functions to the new buildings.
  - Identify the remaining existing buildings on campus as available for reuse or demolition.
- Construction Schedule: Schedules for construction activities are intended to identify relative duration of new construction or renovated work in order to calculate occupancy date for utilization of space and escalation costs. These schedules provide a base on



which the implementation plan activities will be incorporated. The Schedule indicates a brief description of the individual building construction projects and indicates the construction sequence and duration for this option. Commissioning of engineering systems should occur in the last 20% of each project's duration.

- Existing Building Maintenance Costs: Existing unaltered buildings retained on the campus for the Baseline require ongoing and periodic maintenance costs including buildings which are scheduled for demolition to the point where demolition begins or agreements for reuse are accepted.
- Capital Cost Estimate: An estimate of projected new construction and renovation costs is indicated in the BPO Capital Cost Estimate. The capital costs are based on campus-wide area projections by Departmental Group (Zone) as indicated in the Projected BPO areas by Departmental Group (Zone.)
- Construction Cost depends on Function: Construction costs are derived from projected area requirements by Building and non-Building Departmental Groups (Zones.)
- Soft Costs Standardized: Approved factors as stated in the assumptions for soft costs (such as professional fees, furnishings and equipment) are based on consultant experience and VA standards.

*Evaluation of BPO 7 using Capital Criteria:*

- Consolidation of Vacated Space: The vacant square footage area totals indicate a 100% decrease in vacant space across the campus (see the table below). The approximately 69,000 SF includes that space in vacant buildings that will be demolished or made available for reuse.

*Table 47: Percentage of Vacant Space – BPO 7*

Title	Vacant BGSF
Existing Vacant	68,708
Vacant BPO	0
Difference	-68,708
Percent Difference	-100%

- Consolidation of Underutilized Space: Underutilized space is space not used to its full potential because of physical constraints. Because there is a minimal amount of renovation required for this BPO, there is no attributable underutilization of space projected for the campus (see the following table).

*Table 48: Percentage of Underutilized Space – BPO 7*

Title	Total
Projected Ideal BGSF Based on In-House Workload	535,730
Proposed BPO BGSF	536,962
Underutilized Space	1,232
Variance by Percentage	0%

- **Timeliness of Completion:** This BPO requires a 7.5 year (90 months) multi-phased period of construction from initiation in January 2009 with completion to implement improvements to the physical environment starting in January 2010 and completion in July 2016 (see the following table). Key assumptions include:
  - The historic building process begins January 2007 and ends January 2011.
  - Project funding is approved January 2009.
  - There are 2 major construction/relocation phases targeted to implement this BPO.
  - The first phase of the construction sequence is replacement of the existing campus water and sewer system. Work for this project is projected to begin January 2010 and takes 48 months to complete.
  - Design and construction for all new buildings composing the replacement campus building begins January 2010 and takes 66 months to complete. Occupancy of the new buildings and relocation of nursing home patients from the Montrose campus occurs thereafter.

*Table 49: Total Construction Duration – BPO 7*

	Start Date	Completion Date	Duration
Total Construction Activity	01/01/09	07/01/16	90 Months

- **Timeliness of Urgent Seismic Corrections:** There are 21 buildings on the Castle Point campus identified in the CAI with “seismic non-exempt” or higher status. The priority is for correction of these buildings to be accommodated as early as possible. However, the sequence of construction required to achieve proposed plan indicates vacancy of the last building with seismic corrections at completion of the new construction. Buildings with seismic deficient status that are not projected for VA occupancy will be demolished as they become eligible for demolition based on the implementation schedule.
- **Size and Complexity of Capital Plan:** Projected areas (BGSF) based on 2023 workload volumes indicate changes to the Castle Point campus as indicated in the below table. It is significant to note that for all departmental groups except behavioral health area requirements are projected to increase.

*Table 50: Campus Area Change – BPO 7*

Distributions	Acute Care	Nursing Home	Domiciliary	Rehab.	Behavioral Health	Ambulatory Services	Research	Admin.	Logistics	Out Lease
Existing Distribution	50,970	51,130	1,383	0	16,150	137072	378	77,910	59,917	67,367
Proposed BPO Distribution	76,283	124,870	11,042	0	10,978	144369	101	103,532	65,787	0
Variance By BGSF	25,313	73,740	9,659	0	-5,172	7297	-277	25,622	5,870	-67,367

Note: There is no research or domiciliary space provided on the campus. However, the area indicated resulting from mathematical rounding of projected areas has been included in the behavioral health space for distribution on the campus.

- **Patient Moves:** Of the existing 51 buildings on the campus (as identified in the CAI), in this BPO, all 18 buildings with clinical or clinical-related functions will be identified as available for reuse/demolition. With all new facilities provided in this option, impact to clinical functions and patient inconvenience is minimized. Furthermore, relocations activities may be accommodated in a simple manner without disruption to care delivery. An overview of patient moves follows. Further detail will be provided in the implementation plan.
  - Upon construction completion of the new replacement facilities at the Castle Point campus, nursing home functions will relocate from the Montrose campus and all other clinical, administrative and support functions relocate from the main campus to the new buildings
  
- **Historic Buildings Altered:** There are no buildings identified as historic in the CAI. However, based on building age, there are 26 buildings designated as historically eligible. For this BPO, all 26 will be renovated, considered available for reuse or demolished (see the following table). The National Historic Preservation Act requires that a federal agency must assume responsibility for historic properties and Section 106 requires federal agencies to consider historic properties as it plans a project and to consult with the Advisory Council on Historic Preservation. The approval process for renovation can take more than a year and will need to be considered in the implementation planning efforts.

*Table 51: Historic Buildings Altered – BPO 7*

Title	Building Count
Total Historic or Historically Eligible	26
Altered Historic Projects	26

Note: Values indicate quantity of Historically Eligible buildings as altered by this BPO

## **BPO 10 at Castle Point**

### *BPO Description*

#### *Build New Nursing Home and Renovate Existing Facility*

All current services at Castle Point will remain on campus with the exception of Inpatient Spinal Cord Injury services (which are relocated to Bronx VAMC.) Outpatient Spinal Cord Injury services remain on campus.

Build replacement nursing home to accommodate existing Castle Point services and those nursing home beds relocated from Montrose.

Renovate buildings to accommodate existing Castle Point inpatient and ambulatory care services and inpatient psychiatry transferred from Montrose. Expand and improve parking.

Reuse was not studied in Stage I. Reuse opportunities for available land and buildings are being studied in Stage II.

The key constraints for modernization at Castle Point are the physical limitations of the existing buildings to accommodate state of the art healthcare delivery in addition to the disruption to patients and staff during construction. Providing a single level for nursing home residents' rooms on a sloping, wooded site also will provide building design challenges.

#### Note:

As buildings and land become vacant over the forecast period, the contractor for the programming and design phase of the project should identify in a project schedule the reuse potential of land parcel and vacant building availability.

### *Analysis of Capital Planning Outputs*

- **Site Plan:** The Projected *BPO 10* Site Plan (in the figure below) illustrates the proposed campus configuration and locations of buildings.
- **Building Color Code:** Similar to the Existing Current Stage Site Plan, the building color indicates the Departmental Group (Zone) of the primary occupants for each building. Matching the building color key used for the Existing Current State Site Plan, the proposed building color indicates the predominant occupancy of the building. Refer to the Legend regarding the Departmental Groups (Zone) contained therein.
- **Site Impact during Construction:** Site area calculations for cost estimating purposes are based on land area assigned to specific functions (such as for replacement piping in the utility replacement), new or replaced recreation areas (although none are identified for

Figure 13: A Diagram of the Projected BPO 10 Site Plan



either of these sites), new or repaved parking areas as determined by projected need and adjacency to new or renovated buildings as defined by the BPO site plan. Where existing parking areas are not needed, the calculation provides for their demolition and replacement with turf. Restoration of existing or installation of new walkways and internal campus vehicular circulation paths are also included in the calculation. For this BPO the total site impact area total for cost calculations is approximately 13 acres excluding affected parking and building footprints.

- Campus Area and Uses: The *BPO 10* campus configuration as indicated on the site plan is summarized in the following table. There is no dedicated exterior recreation area defined. However, there is sufficient land available for recreational activities. The area totals for primary activities on the portions of the site to be retained exclusively for VA-related functions are indicated in the Campus Area Total below.

*Table 52: Campus Area Total Acreage - BPO 10*

Campus Area	Acres
Recreation	0
Parking	~ 10
Building & Landscape	~ 45
BPO Total (total of above)	~ 55
Existing Campus Total	~ 115

- Land Parcels Available for Re-Use: BPO 10 designates approximately 55 acres (or 47% of the present site) in the northeastern portion of the campus as required for projected VA functions and approximately 60 acres (or 53% of the site) as available for reuse. Buildings and structures associated with replacement of the campus water and sewer system are included as part of the area available for reuse.
- Buildings Available for Re-Use: This BPO designates a cluster of buildings in the southwestern portion of the campus (buildings 1, 2, 3, 4, 5, 6, 7, 45, 46, 47 and 48) as available for reuse or demolition.
- Relocation of Functions: In BPO 10, maintaining occupancy through renovation of existing buildings and reducing vacant space therein is achieved to the extent possible. Projected area needs will be provided through a combination of renovation to existing buildings on the main campus and new construction.

The existing campus water sewer system and associated buildings will be replaced as the initial phase of this BPO.

A new nursing home building will be located on the hillside northwest of the building 18 and southwest of the new and existing water towers. This location requires a multi-phased construction sequence with occupancy to portions of the buildings prior to completion of the later phases.

Existing clinical and administrative building 19, 20 and 21 will be demolished to provide for the new nursing home building and parking.

A new domiciliary building will be constructed on the hillside southwest of the existing roadway and building 15H. A sub grade service tunnel will connect the new building to the main campus at building 15H.

Acute care and ambulatory services will remain in proximity to their present locations. However, multiple internal relocations will be required to accommodate renovation. Ambulatory care and behavioral health services will be located in buildings 16, 15E and new construction southeast of building 15H. Acute care functions will compose the balance of building 15H and a portion of the new construction.

Administration functions will be relocated in the central portion of the main campus in renovated space of buildings 17, 18, 111 and a portion of the lower level of the new nursing home building.

Logistical functions are located in several buildings throughout the main campus but generally concentrated into a group of existing outbuildings to the northeast and the lower level of the nursing home building to the southwest. A new fire station and transportation hub will be incorporated into the new nursing home building.

Existing logistics building 8, 9, 12, 13, 35, 43, 44, 88, 89 and various other minor adjacent buildings will be demolished to provide sufficient parking in proximity to ambulatory care and behavioral health services entries.

The remaining existing buildings located on the campus will be vacated and designated for demolition or reuse.

The table below indicates the projected area need as assigned to each building on the campus. Departmental Group area totals are provided for each building.

*Table 53: Functional Distribution - BPO 10*

Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
1	Vacant Quarters		0	5,063
1	Vacant Quarters	Out Lease	5,062	0
2	Quarters		0	5,024
2	Quarters	Administration	5,024	0
3	Quarters		0	5,024
3	Quarters	Administration	5,024	0
4	Quarters		0	5,024
4	Quarters	Administration	5,024	0
5	Quarters		0	5,358
5	Quarters	Administration	5,358	0
6	Garage/Storage		0	1,705
6	Garage/Storage	Administration	1,705	0

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Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
7	Vacant Admin.		0	20,133
7	Vacant Admin.	Administration	1,036	0
7	Vacant Admin.	Out Lease	19,096	0
8	Research		0	12,897
8	Research	Administration	1,396	0
8	Research	Ambulatory Services	1,396	0
8	Research	Out Lease	10,103	0
9	Administration		0	27,123
9	Administration	Acute Care	9,785	0
9	Administration	Administration	1,363	0
9	Administration	Ambulatory Services	2,928	0
9	Administration	Logistics	9,523	0
9	Administration	Out Lease	3,523	0
12	Fire Station/Police Station		0	4,366
12	Fire Station/Police Station	Administration	383	0
12	Fire Station/Police Station	Ambulatory Services	1,048	0
12	Fire Station/Police Station	Logistics	2,772	0
12	Fire Station/Police Station	Out Lease	162	0
13	Education Building		0	11,993
13	Education Building	Acute Care	53	0
13	Education Building	Administration	9,910	0
13	Education Building	Ambulatory Services	53	0
13	Education Building	Behavioral Health	53	0
13	Education Building	Domiciliary	53	0
13	Education Building	Logistics	1,709	0
13	Education Building	Nursing Home	53	0
13	Education Building	Out Lease	53	0
13	Education Building	Research	53	0
16	Patient Care	Acute Care	13,801	0
16	Patient Care	Administration	5,014	0
16	Patient Care	Ambulatory Services	14,933	39,453
16	Patient Care	Behavioral Health	1,172	0
16	Patient Care	Logistics	1,079	0
16	Patient Care	Nursing Home	3,450	0
17	Patient Care	Acute Care	295	0
17	Patient Care	Administration	2,302	16,466
17	Patient Care	Ambulatory Services	11,760	0
17	Patient Care	Behavioral Health	36	0
17	Patient Care	Domiciliary	36	0
17	Patient Care	Logistics	1,679	0
17	Patient Care	Nursing Home	295	0
17	Patient Care	Out Lease	138	0
17	Patient Care	Research	36	113
18	Patient Care	Acute Care	6,656	0
18	Patient Care	Administration	4,770	51,256
18	Patient Care	Ambulatory Services	24,773	0



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Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
18	Patient Care	Behavioral Health	1,472	0
18	Patient Care	Domiciliary	311	0
18	Patient Care	Logistics	6,781	0
18	Patient Care	Nursing Home	311	0
18	Patient Care	Out Lease	6,061	0
18	Patient Care	Research	119	0
19	NHCU		0	28,228
19	NHCU	Acute Care	658	0
19	NHCU	Administration	5,905	0
19	NHCU	Ambulatory Services	2,954	0
19	NHCU	Behavioral Health	28	0
19	NHCU	Domiciliary	28	0
19	NHCU	Logistics	10,118	0
19	NHCU	Nursing Home	658	0
19	NHCU	Out Lease	7,850	0
19	NHCU	Research	28	0
20	NHCU		0	42,523
20	NHCU	Logistics	6,222	0
20	NHCU	Nursing Home	36,301	0
21	NHCU		0	37,073
21	NHCU	Acute Care	609	0
21	NHCU	Administration	7,460	0
21	NHCU	Ambulatory Services	863	0
21	NHCU	Behavioral Health	13,153	0
21	NHCU	Domiciliary	719	0
21	NHCU	Logistics	2,047	0
21	NHCU	Out Lease	12,220	0
34	Storage/Old Boiler Plant		0	10,421
35	Boiler Plant/Chiller Plant		0	14,423
44	Warehouse/Carpenter Shop		0	8,113
44	Warehouse/Carpenter Shop	Logistics	8,113	0
45	Quarters		0	5,991
45	Quarters	Administration	5,991	0
46	Child Care Center		0	7,125
46	Child Care Center	Administration	2,374	0
46	Child Care Center	Ambulatory Services	2,374	0
46	Child Care Center	Out Lease	2,374	0
48	Garage for Director's Quarters		0	288
48	Garage for Director's Quarters	Administration	288	0
57	Sewage Treatment Plant	Logistics	0	2,480
59	Generator Building		0	250
61	Recreation		0	947
61	Recreation	Ambulatory Services	947	0
65	Storage		0	188
65	Storage	Logistics	187	0
67	Storage	Logistics	265	265

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Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
69	Storage		0	1,967
69	Storage	Ambulatory Services	1,967	0
71	Storage	Logistics	179	180
73	Engineering Storage		0	1,000
73	Engineering Storage	Logistics	1,000	0
75	Sand Storage		0	1,000
80	Generator Building	Logistics	0	200
82	Generator Building		0	200
86	Engineering Storage		0	300
86	Engineering Storage	Logistics	300	0
87	Engineering Storage		0	202
87	Engineering Storage	Logistics	202	0
88	Labor Shop		0	5,005
88	Labor Shop	Acute Care	125	0
88	Labor Shop	Administration	125	0
88	Labor Shop	Ambulatory Services	125	0
88	Labor Shop	Behavioral Health	125	0
88	Labor Shop	Domiciliary	125	0
88	Labor Shop	Logistics	4,004	0
88	Labor Shop	Nursing Home	125	0
88	Labor Shop	Out Lease	125	0
88	Labor Shop	Research	125	0
89	Linen Hut		0	4,000
89	Linen Hut	Acute Care	1,000	0
89	Linen Hut	Logistics	2,000	0
89	Linen Hut	Nursing Home	1,000	0
90	Engineering Storage		0	252
90	Engineering Storage	Logistics	252	0
91	Generator Building	Logistics	0	200
92	Generator Building		0	200
93	Generator Building		0	200
94	Generator Building		0	200
95	Generator Building	Logistics	0	200
96	Generator Building	Logistics	0	200
98	Water Treatment Plant	Logistics	0	3,136
101	Sani-Pak	Logistics	0	10,000
111	Multipurpose	Administration	0	6,284
111	Multipurpose	Ambulatory Services	6,284	0
15E	Patient Care	Acute Care	17,967	6,898
15E	Patient Care	Administration	2,903	0
15E	Patient Care	Ambulatory Services	35,151	52,082
15E	Patient Care	Behavioral Health	93	0
15E	Patient Care	Domiciliary	93	0
15E	Patient Care	Nursing Home	93	0
15E	Patient Care	Out Lease	345	0
15H	Hamilton Fish Wing	Acute Care	13	31,452

Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
15H	Hamilton Fish Wing	Administration	4,548	0
15H	Hamilton Fish Wing	Ambulatory Services	29,510	0
15H	Hamilton Fish Wing	Behavioral Health	13	13,227
15H	Hamilton Fish Wing	Domiciliary	13	0
15H	Hamilton Fish Wing	Logistics	1,479	0
15H	Hamilton Fish Wing	Nursing Home	8,837	0
15H	Hamilton Fish Wing	Out Lease	249	0
15H	Hamilton Fish Wing	Research	13	0
59A	Generator Bldg		0	225
Z-10	Zone Logistics	Logistics	0	31,239
Z-10-11S	Surface Parking for Zone Logistics	Logistics	0	6,000
Z-10A	Fire Station	Logistics	0	12,285
Z-10B	Transportation Hub	Logistics	0	5,424
Z-2	Zone Acute Care	Acute Care	0	44,108
Z-2-11S	Surface Parking for Zone Acute Care	Acute Care	0	58,800
Z-3-11S	Surface Parking for Zone Nursing Home	Nursing Home	0	96,400
Z-3A	Nursing Home (phase 2)	Nursing Home	0	70,870
Z-3B	Nursing Home (phase 4)	Nursing Home	0	54,000
Z-4	Zone Domiciliary	Domiciliary	0	11,042
Z-4-11S	Surface Parking for Zone Domiciliary	Domiciliary	0	8,800
Z-6-11S	Surface Parking for Zone Behavioral Health	Behavioral Health	0	8,800
Z-7	Zone Ambulatory Services	Ambulatory Services	0	98,537
Z-7-11S	Surface Parking for Zone Ambulatory Services	Ambulatory Services	0	111,200
Z-8-11S	Surface Parking for Zone Research	Research	0	400
Z-9	Zone Administration	Administration	0	4,548
Z-9-11S	Surface Parking for Zone Administration	Administration	0	80,000
Z-Site Info	Site Information	Logistics	0	555,012

Notes:

- There is no research or domiciliary space provided on the campus. However, area projections for this departmental group result from mathematical rounding. Where indicated, this area has been included as part of the overall building projected areas assigned to the largest departmental group within the building.
- If a building group is blank, it identifies unassigned space
- The plan recognizes that out leased space currently has existing relationships which will be considered in reuse planning.
- **Conceptual Building Section** To optimize views and relationship to the existing topography the nursing home elements are located at the upper elevation of the existing slope. Support services are located on the next level below. A service drive passes through the building generally following the path of the existing drive but at a lower elevation to provide access for shipping/receiving dock functions, fire station access and transportation hub parking. Additional logistical functions are located on the western portion of the new construction at the third level below to optimize integration with the existing slope (see the following figure).

Security controls and clear vistas for approach and exit of the lower level roadway are critical to the design of this option. Primary security checkpoints to limit vehicular

Figure 14: A diagram of the Conceptual Section for BPO 10



access to approved traffic beyond the nursing home parking area are recommended as part of this option. While an architectural design for this option is beyond the scope of this study, an alternate to a vehicular circulation loop passing through the lower level would allow for the roadway to terminate at the north and south face of the new construction. A shipping/receiving dock may be located at the north face and the fire station/transportation hub access may be located at the south face.

- **Optimal Use of Existing Buildings:** The majority of existing buildings on the campus are not compatible with modern standards of design for clinical functions. To accommodate projected delivery of care standards, the floor plates are too small (resulting in compromised functional adjacencies); the floor to floor heights are too low (resulting in mechanical systems with insufficient air volume) and with a few exceptions, the resident rooms do not have bathrooms accessible from within the rooms. As a result, proposed renovations to address the projected workload will require additional area to achieve the same goal.
- **Projected Workload Volumes for 2023:** The projected areas as derived from workload volumes (See Stage II Assumptions.) indicate the desired functions require more area than is currently available on the campus.

**Parking:** Portions of the existing surface parking areas will be repaved and expanded to provide parking in the most convenient locations adjacent to building entries. Where existing parking is not required, it will be removed and new landscape will be provided. Distribution of parking by departmental group is indicated in the table below. There is sufficient land available to meet the parking need. Therefore structured parking is not required for this campus.

Table 54: Parking Distribution – BPO 10

Parking Area	Total Surface Spaces	Total Structured Spaces	Surface Area (SF)	Structured Area (SF)	Location
Acute Care	147	0	58,800	0	Southeast of building 15H
Nursing Home	145	0	58,000	0	Northeast of new nursing home
Domiciliary	13	0	5,200	0	Southwest of building 8

Rehabilitation	0	0	0	0	-
Behavioral Health	13	0	5,200	0	Southeast of building 15H
Ambulatory Services	556	0	222,400	0	Southeast of building 15H
Research	1	0	400	0	Northwest of building 17
Administration	160	0	64,000	0	Southeast of building 15H
Logistics	15	0	6,000	0	Northwest of building 17
Total	1,050	0	420,000	0	

Note: There is no research or domiciliary space provided on the campus. However, the projected single parking space resulting from mathematical rounding of projected areas has been included in the logistics parking area on the site plan.

- **Conclusion from the Space Analysis:** The projected area need for the campus is approximately 536,000 BGSF (not including out lease space.) Because BPO 10 involves extensive renovation of existing space in addition to the new nursing home construction, the space required is approximately 566,000 Building Gross Square Feet (BGSF.) This projected area provides an increase to the existing campus area of approximately 22%.
- **Construction Phasing:** In this BPO the extent of renovations to existing occupied space demands a complex phasing sequence to minimize disruption to patients and staff. However, due to the location of required renovations within presently occupied buildings, the time frame for construction will be extended and several interim moves are anticipated. A general overview of the phasing sequence is provided below:
  - Replace existing campus water and sewer system.
  - Construct the northern portion of the new nursing home building (including transportation hub & fire station expansion) and relocate a portion of the patients from the Montrose campus.
  - Construct new ambulatory and acute care addition southeast of building 15H.
  - Demolish existing logistics building 8, 9, 12, 13, 35, 43, 44, 88, 89 and various other minor adjacent buildings.
  - Renovate buildings 16, 17, 111, 15E and 15H sequentially moving patients to renovated areas as construction is completed and renovate the previously occupied areas of the buildings until complete.
  - Demolish building 19 and construct the southern portion of the new nursing home building and relocate the remaining portion of the patients from the Montrose campus.
  - Renovate the remaining logistical (engineering) buildings required for campus support.
- **Construction Schedule:** Schedules for construction activities are intended to identify relative duration of new construction or renovated work in order to calculate occupancy date for utilization of space and escalation costs. These schedules provide a base on which the implementation plan activities will be incorporated. The Schedule indicates a brief description of the individual building construction projects and indicates the

construction sequence and duration for this option. Commissioning of engineering systems should occur in the last 20% of each project's duration.

- **Existing Building Maintenance Costs:** Existing unaltered buildings retained on the campus for the Baseline require ongoing and periodic maintenance costs including buildings which are scheduled for demolition to the point where demolition begins or agreements for reuse are accepted.
- **Capital Cost Estimate:** An estimate of projected new construction and renovation costs is indicated in the BPO Capital Cost Estimate. The capital costs are based on campus-wide area projections by Departmental Group (Zone) as indicated in the Projected BPO areas by Departmental Group (Zone.)
- **Construction Cost depends on Function:** Construction costs are derived from projected area requirements by Building and non-Building Departmental Groups (Zones.)
- **Soft Costs Standardized:** Approved factors as stated in the assumptions for soft costs (such as professional fees, furnishings and equipment) are based on consultant experience and VA standards.

*Evaluation of BPO 10 using Capital Criteria:*

- **Consolidation of Vacated Space:** The vacant square footage area totals for BPO 10 indicate a 100% decrease in vacant space across the campus (see the following table). The approximately 69,000 SF includes that space in vacant buildings that will be demolished or made available for reuse

*Table 55: Percentage of Vacant Space – BPO 10*

Title	Vacant BGSF
Existing Vacant	68,708
Vacant BPO	0
Difference	-68,708
Percent Difference	-100%

- **Consolidation of Underutilized Space:** Underutilized space is space not used to its full potential because of physical constraints. Because there is a substantial amount of renovation required for this BPO, additional area is required to achieve a modern, safe and secure environment, resulting in an increase of underutilized space. Comparing the ideal space requirements for the workload to the square footage need for this option results in a 63% overall increase in area need (see the table below).

*Table 56: Percentage of Underutilized Space – BPO 10*

Title	Total
Projected Ideal BGSF Based on In-House Workload	535,730
Proposed BPO BGSF	566,149
Underutilized Space	30,419
Variance by Percentage	5%

- **Timeliness of Completion:** The proposed BPO 10 requires a 14.5 year (174 months) multi-phased period of construction from initiation in January 2009 with completion to implement improvements to the physical environment starting in January 2010 and completion in July 2023 (see the table below). Key assumptions include:
  - The historic building process begins January 2007 and ends January 2011.
  - Project funding is approved January 2009.
  - There are 4 major construction/relocation phases targeted to implement this BPO.
  - Planning and design for the first series of renovations begins January 2010 and takes 18 months.
  - The first phase of the construction sequence is replacement of the existing campus water and sewer system. Work for this project is projected to begin January 2010 and takes 48 months to complete.
  - Design and construction for the northern portion of the new nursing home and ambulatory addition begins January 2012 and lasts 72 months. Demolition of select logistical buildings vacated from these relocations follows.
  - Design and renovations to buildings 16, 17 and 15H begin July 2015 with multiple renovation and relocation phases with associated completion dates for each building. Simultaneously, renovations to logistical (engineering) buildings occur as coordinated to reduce disruption to clinical services.
  - Design and construction for the southern portion of the new nursing home addition begins January 2017 and lasts 60 months. Demolition of select logistical buildings vacated from these relocations follows.
  - Demolition of vacated building 19 begins January 2018 with construction of the southern portion of the nursing home to begin thereafter.
  - Design and renovations to buildings 15E and 18 begin January 2020 with an anticipated duration of 78 months to allow for multiple renovation and relocation phases with associated completion dates for each building. Simultaneously, renovations to the remaining logistical (engineering) buildings occur as coordinated to reduce disruption to clinical services.

*Table 57: Total Construction Duration – BPO 10*

	Start Date	Completion Date	Duration
Total Construction Activity	01/01/09	07/01/23	174 Months

- **Timeliness of Urgent Seismic Corrections:** There are 21 buildings on the Castle Point campus identified in the CAI with “seismic non-exempt” or higher status. The priority is for correction of these buildings to be accommodated as early as possible. However, the sequence of construction required to achieve the proposed plan indicates final occupancy of the last few with seismic corrections (buildings 16, 17, 15E and 15H) in 2023.

Buildings with seismic deficient status that are not projected for VA occupancy will be demolished as they become eligible for demolition based on the implementation schedule.

- **Size and Complexity of Capital Plan:** Projected areas (BGSF) based on 2023 workload volumes indicate a changes to the Castle Point campus as indicated in the table below. It is significant to note that for all departmental groups except behavioral health area requirements are projected to increase.

*Table 58: Campus Area Change – BPO 10*

Distributions	Acute Care	Nursing Home	Domiciliary	Rehab.	Behavioral Health	Ambulatory Services	Research	Admin.	Logistics	Out Lease
Existing Distribution	50,970	51,130	1,383	0	16,150	137,072	378	77,910	59,917	67,367
Proposed BPO Distribution	82,458	124,870	11,042	0	13,227	190,073	114	78,556	65,809	0
Variance By BGSF	31,488	73,740	9,659	0	-2,923	53,001	-264	646	5,892	-67,367

Note: There is no research or domiciliary space provided on the campus. However, the area indicated resulting from mathematical rounding of projected areas has been included in the behavioral health space for distribution on the campus.

- **Patient Moves:** Of the existing 51 buildings on the campus (as identified in the CAI), in this BPO, all 18 buildings with clinical or clinical-related functions will be renovated or identified as available for reuse/demolition. A detailed construction schedule is beyond the scope of this study. However, there are some portions of buildings 15H, 15E, 16, 17 and 18 where renovations and relocations will be complex and patients may be inconvenienced but care may continue in the buildings during renovations. An overview of patient moves follows. Further detail will be provided in the implementation plan.
  - Upon completion of each portion of the new nursing home, patients from the Montrose campus will be relocated. Similarly, other administration and logistical functions will relocate to the support areas of the new building from various locations on the main campus.
  - Relocation of administrative areas in building 17 initiates the sequence of internal renovations and relocations throughout the existing buildings proposed to serve clinical areas. Based on the complexity of renovations required and the duration needed to sequence the construction, it is anticipated that there will be significant inconvenience to patient care areas that will continue to operate during construction.
- **Historic Buildings Altered:** There are no buildings identified as historic in the CAI. However, based on building age, there are 26 buildings designated as historically eligible. For this BPO, all 26 will be renovated, considered available for reuse or demolished (see the table below). The National Historic Preservation Act requires that a federal agency must assume responsibility for historic properties and Section 106 requires federal agencies to consider historic properties as it plans a project and to consult with the Advisory Council on Historic Preservation. The approval process for renovation can take more than a year and will need to be considered in the implementation planning efforts.



*Table 59: Historic Buildings Altered – BPO 10*

Title	Building Count
Total Historic or Historically Eligible	26
Altered Historic Projects	26

Note: Values indicate quantity of Historically Eligible buildings as altered by this BPO.

## **BPO 11A & 11B at Montrose**

### *BPO Description*

*Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location*

At Montrose, construct a new building for ambulatory care services east of former fire station. All other services (inpatient psychiatry, nursing home and residential treatment programs) are relocated to Castle Point. Expand and improve parking.

The analysis and proposed capital plan for BPO 11A & 11B at Montrose are identical.

The key opportunity offered by this BPO is construction of all new facilities on the Montrose campus.

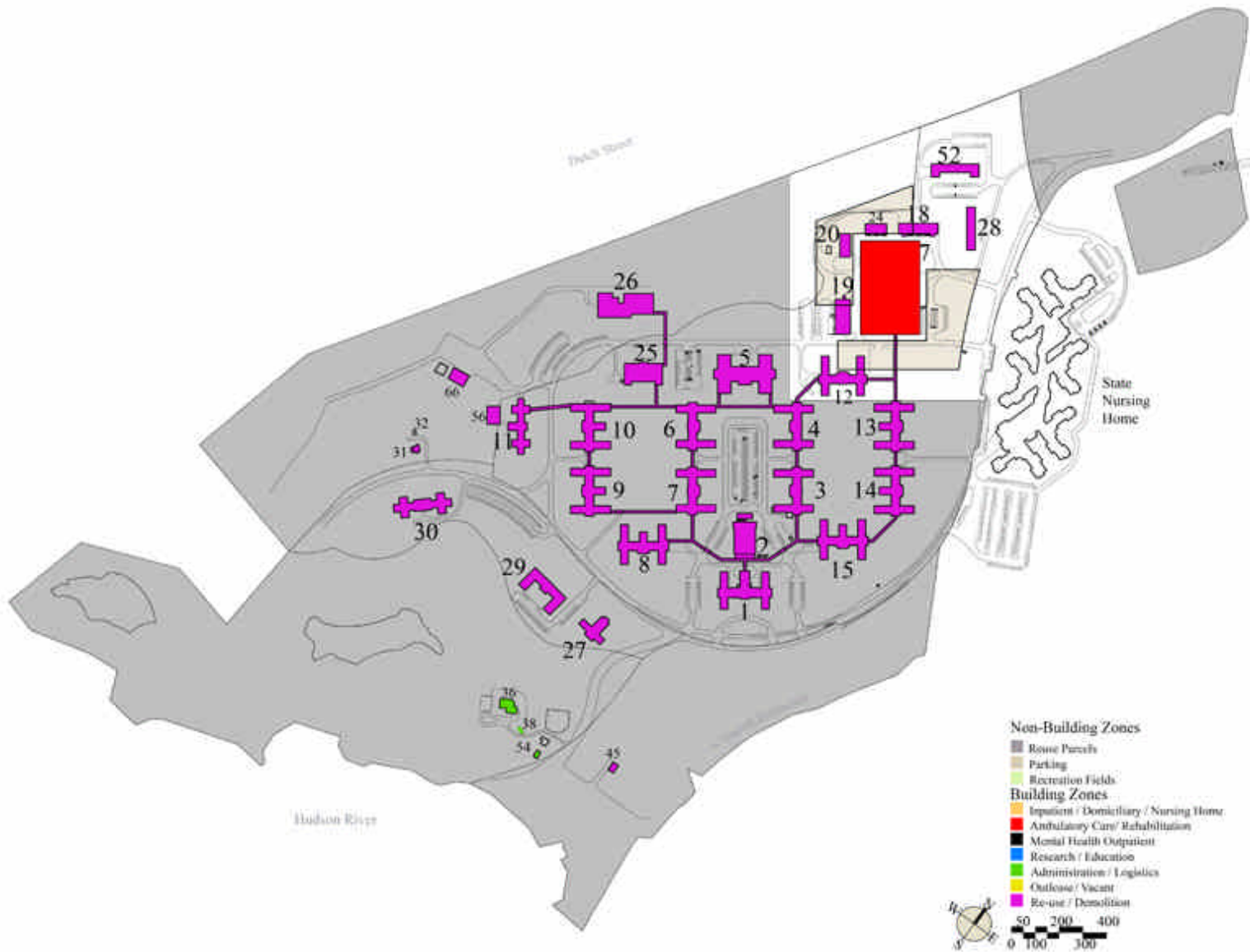
#### Note:

As buildings and land become vacant over the forecast period, the contractor for the programming and design phase of the project should identify in a project schedule the reuse potential of land parcel and vacant building availability.

### *Analysis of Capital Planning Outputs*

- **Site Plan:** The Projected BPO 11A & 11B Site Plan (see the figure below) illustrates the proposed campus configuration and locations of buildings.
- **Building Color Code:** Similar to the Existing Current Stage Site Plan, the building color indicates the Departmental Group (Zone) of the primary occupants for each building. Matching the building color key used for the Existing Current State Site Plan, the proposed building color indicates the predominant occupancy of the building. Refer to the Legend regarding the Departmental Groups (Zone) contained therein.
- **Site Impact during Construction:** Site area calculations for cost estimating purposes are based on land area assigned to specific functions (such as for replacement piping in the utility replacement), new or replaced recreation areas (although none are identified for either of these sites), new or repaved parking areas as determined by projected need and adjacency to new or renovated buildings as defined by the BPO site plan. Where existing parking areas are not needed, the calculation provides for their demolition and replacement with turf. Restoration of existing or installation of new walkways and internal campus vehicular circulation paths are also included in the calculation. For this BPO the total site impact area total for cost calculations is approximately 7 acres excluding affected parking and building footprints.

Figure 15: A Diagram of the Projected BPO 11A & 11B Site Plan



- **Campus Area and Uses:** The BPO 11A & 11B campus configuration as indicated on the site plan is summarized in the following table. There is no dedicated exterior recreation area defined. However, there is sufficient land available for recreational activities. The area totals for primary activities on the portions of the site to be retained exclusively for VA-related functions are indicated in the Campus Area Total below.

*Table 60: Campus Area Total Acreage - BPO 11A & 11B*

Campus Area	Acres
Recreation	0
Parking	~ 5
Building & Landscape	~ 20
BPO Total (total of above)	~ 25
Existing Campus Total	~ 189

- **Land Parcels Available for Re-Use:** BPO 11A & 11B designate approximately 25 acres (or 13% of the present site) in the northwestern portion of the campus as required for projected VA functions and approximately 136 acres (or 87% of the site) as available for reuse. Buildings and structures associated with replacement of the campus sewer system are included as part of the area available for reuse.
- **Buildings Available for Re-Use:** This BPO identifies buildings 12, 16, 19, 20, 24, 17, 18, 28 and 52 as demolished to allow for new construction on the campus. All other existing buildings are designated as available for reuse or demolition.
- **Relocation of Functions:** In BPO 11A & 11B, all projected area requirements will be accommodated in new 3 to 4 story buildings primarily serving ambulatory care and support function.

The existing campus sewer system and associated buildings will be replaced as the initial phase of this BPO.

The clinical and administrative building will be located on the present site of building 16 in the northeastern portion of the campus. Parking will surround the building with multiple designated entries assigned to specific functions. The transportation hub and fire station will be incorporated into the new construction with vehicular access adjacent to the shipping/receiving dock on the northwestern face of the building.

The table below indicates the projected area need as assigned to each building on the campus. Departmental Group area totals are provided for each building.

*Table 61: Functional Distribution - BPO 11A & 11B*

Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
1	Administration		0	57,445
1	Administration	Acute Care	9,419	0
1	Administration	Administration	20,506	0
1	Administration	Ambulatory Services	13,453	0

CARES STAGE II FINAL REPORT – MONTROSE-CASTLE POINT

Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
1	Administration	Behavioral Health	226	0
1	Administration	Domiciliary	226	0
1	Administration	Logistics	9,632	0
1	Administration	Nursing Home	1,640	0
1	Administration	Out Lease	2,344	0
10	Vacant		0	47,511
10	Vacant	Out Lease	47,510	0
11	Vacant		0	34,540
11	Vacant	Out Lease	34,540	0
12	Administration Offices		0	46,572
12	Administration Offices	Acute Care	94	0
12	Administration Offices	Administration	6,027	0
12	Administration Offices	Ambulatory Services	3,106	0
12	Administration Offices	Behavioral Health	7,248	0
12	Administration Offices	Domiciliary	94	0
12	Administration Offices	Logistics	5,227	0
12	Administration Offices	Nursing Home	94	0
12	Administration Offices	Out Lease	24,274	0
12	Administration Offices	Research	408	0
13	Residential treatment		0	48,084
13	Residential treatment	Acute Care	119	0
13	Residential treatment	Administration	841	0
13	Residential treatment	Ambulatory Services	3,418	0
13	Residential treatment	Behavioral Health	119	0
13	Residential treatment	Domiciliary	18,165	0
13	Residential treatment	Logistics	2,207	0
13	Residential treatment	Nursing Home	119	0
13	Residential treatment	Out Lease	23,097	0
14	Psychiatry		0	49,312
14	Psychiatry	Acute Care	34,184	0
14	Psychiatry	Administration	2,092	0
14	Psychiatry	Ambulatory Services	4,713	0
14	Psychiatry	Behavioral Health	88	0
14	Psychiatry	Domiciliary	88	0
14	Psychiatry	Logistics	1,470	0
14	Psychiatry	Nursing Home	137	0
14	Psychiatry	Out Lease	3,420	0
14	Psychiatry	Research	3,120	0
15	NHCU		0	47,241
15	NHCU	Acute Care	33	0
15	NHCU	Administration	9,680	0
15	NHCU	Ambulatory Services	2,308	0
15	NHCU	Behavioral Health	33	0
15	NHCU	Domiciliary	33	0
15	NHCU	Logistics	1,053	0
15	NHCU	Nursing Home	17,034	0

CARES STAGE II FINAL REPORT – MONTROSE-CASTLE POINT

Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
15	NHCU	Out Lease	17,034	0
15	NHCU	Research	33	0
16	Engineering/Rehab		0	32,221
16	Engineering/Rehab	Ambulatory Services	18,211	0
16	Engineering/Rehab	Logistics	11,000	0
16	Engineering/Rehab	Out Lease	3,010	0
17	Warehouse		0	21,489
17	Warehouse	Acute Care	593	0
17	Warehouse	Logistics	20,303	0
17	Warehouse	Nursing Home	593	0
19	Fire House / Grounds & Transp'rt'n		0	9,065
19	Fire House / Grounds & Transp'rt'n	Logistics	9,065	0
2	Theater		0	22,160
2	Theater	Administration	275	0
2	Theater	Ambulatory Services	16,011	0
2	Theater	Logistics	1,100	0
2	Theater	Out Lease	4,774	0
20	Boiler Plant		0	7,133
21	Storage		0	1,156
21	Storage	Acute Care	29	0
21	Storage	Administration	29	0
21	Storage	Ambulatory Services	29	0
21	Storage	Behavioral Health	29	0
21	Storage	Domiciliary	29	0
21	Storage	Logistics	925	0
21	Storage	Nursing Home	29	0
21	Storage	Out Lease	29	0
21	Storage	Research	29	0
23	Storage		0	1,200
23	Storage	Logistics	1,200	0
24	Paint Shop		0	3,780
24	Paint Shop	Acute Care	94	0
24	Paint Shop	Administration	94	0
24	Paint Shop	Ambulatory Services	94	0
24	Paint Shop	Behavioral Health	94	0
24	Paint Shop	Domiciliary	94	0
24	Paint Shop	Logistics	3,024	0
24	Paint Shop	Nursing Home	94	0
24	Paint Shop	Out Lease	94	0
24	Paint Shop	Research	94	0
25	Recreation & Canteen		0	36,640
25	Recreation & Canteen	Acute Care	56	0
25	Recreation & Canteen	Administration	2,009	0
25	Recreation & Canteen	Ambulatory Services	34,407	0
25	Recreation & Canteen	Behavioral Health	56	0
25	Recreation & Canteen	Domiciliary	56	0

CARES STAGE II FINAL REPORT – MONTROSE-CASTLE POINT

Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
25	Recreation & Canteen	Nursing Home	56	0
26	Pool/Gym		0	23,842
26	Pool/Gym	Acute Care	86	0
26	Pool/Gym	Ambulatory Services	23,498	0
26	Pool/Gym	Behavioral Health	86	0
26	Pool/Gym	Domiciliary	86	0
26	Pool/Gym	Nursing Home	86	0
27	Chapel		0	10,758
27	Chapel	Administration	10,758	0
28	Residential Treatment		0	19,360
28	Residential Treatment	Domiciliary	19,360	0
29	Child Care & Non-housekeeping Qtrs		0	33,194
29	Child Care & Non-housekeeping Qtrs	Administration	29,190	0
29	Child Care & Non-housekeeping Qtrs	Ambulatory Services	2,002	0
29	Child Care & Non-housekeeping Qtrs	Out Lease	2,002	0
3	Outpatient Building		0	43,569
3	Outpatient Building	Acute Care	945	0
3	Outpatient Building	Administration	9,609	0
3	Outpatient Building	Ambulatory Services	20,123	0
3	Outpatient Building	Behavioral Health	4,780	0
3	Outpatient Building	Domiciliary	39	0
3	Outpatient Building	Logistics	5,288	0
3	Outpatient Building	Nursing Home	39	0
30	Quarters		0	34,645
30	Quarters	Administration	33,957	0
30	Quarters	Domiciliary	688	0
31	Housekeeping Qtrs		0	3,664
31	Housekeeping Qtrs	Administration	3,664	0
31A	Director's Garage		0	845
31A	Director's Garage	Administration	846	0
33	Paint Storage		0	739
33	Paint Storage	Acute Care	18	0
33	Paint Storage	Administration	18	0
33	Paint Storage	Ambulatory Services	18	0
33	Paint Storage	Behavioral Health	18	0
33	Paint Storage	Domiciliary	18	0
33	Paint Storage	Logistics	591	0
33	Paint Storage	Nursing Home	18	0
33	Paint Storage	Out Lease	18	0
33	Paint Storage	Research	18	0
36	Wastewater Treatment	Acute Care	1	0
36	Wastewater Treatment	Ambulatory Services	1	0
36	Wastewater Treatment	Behavioral Health	1	0
36	Wastewater Treatment	Domiciliary	1	0
36	Wastewater Treatment	Logistics	1	2,867
36	Wastewater Treatment	Nursing Home	1	0

CARES STAGE II FINAL REPORT – MONTROSE-CASTLE POINT

Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
37	Greenhouse		0	1,750
37	Greenhouse	Ambulatory Services	1,750	0
38	Chlorination Chamber	Logistics	0	207
39	Greenhouse		0	1,248
39	Greenhouse	Ambulatory Services	1,248	0
4	Acute Building		0	42,950
4	Acute Building	Acute Care	3,223	0
4	Acute Building	Administration	3,001	0
4	Acute Building	Ambulatory Services	2,591	0
4	Acute Building	Behavioral Health	53	0
4	Acute Building	Domiciliary	53	0
4	Acute Building	Logistics	1,032	0
4	Acute Building	Nursing Home	598	0
4	Acute Building	Out Lease	32,395	0
44	Engineering		0	285
44	Engineering	Logistics	285	0
45	Concession & Shelter House		0	1,563
46	Boat House (Bath House)		0	2,709
46	Boat House (Bath House)	Ambulatory Services	2,709	0
48	Women's Rest Room		0	177
49	Garage & Storage		0	1,320
49	Garage & Storage	Acute Care	33	0
49	Garage & Storage	Administration	33	0
49	Garage & Storage	Ambulatory Services	33	0
49	Garage & Storage	Behavioral Health	33	0
49	Garage & Storage	Domiciliary	33	0
49	Garage & Storage	Logistics	1,056	0
49	Garage & Storage	Nursing Home	33	0
49	Garage & Storage	Out Lease	33	0
49	Garage & Storage	Research	33	0
5	Kitchen & Dining Hall		0	51,455
5	Kitchen & Dining Hall	Acute Care	41,164	0
5	Kitchen & Dining Hall	Nursing Home	10,291	0
52	Domiciliary		0	30,290
52	Domiciliary	Domiciliary	30,290	0
53	Oxygen Storage Building		0	220
55	Bus Shelter		0	120
56	Greenhouse		0	260
56	Greenhouse	Ambulatory Services	260	0
57	Eng Trickling Filter	Logistics	0	5,026
58	Secondary Settling Tank	Logistics	0	500
59	Contact Chamber	Logistics	0	240
6	Nursing Home Care Unit		0	43,054
6	Nursing Home Care Unit	Administration	3,435	0
6	Nursing Home Care Unit	Ambulatory Services	8,011	0
6	Nursing Home Care Unit	Logistics	349	0



CARES STAGE II FINAL REPORT – MONTROSE-CASTLE POINT

Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
6	Nursing Home Care Unit	Nursing Home	31,257	0
66	Engineering Storage		0	3,360
66	Engineering Storage	Logistics	3,360	0
7	Administrative		0	43,992
7	Administrative	Acute Care	4,895	0
7	Administrative	Administration	826	0
7	Administrative	Ambulatory Services	921	0
7	Administrative	Behavioral Health	95	0
7	Administrative	Domiciliary	95	0
7	Administrative	Logistics	1,763	0
7	Administrative	Nursing Home	95	0
7	Administrative	Out Lease	35,300	0
8	Vacant		0	49,324
8	Vacant	Administration	512	0
8	Vacant	Ambulatory Services	512	0
8	Vacant	Out Lease	48,300	0
9	Vacant		0	47,752
9	Vacant	Out Lease	47,752	0
CC	Connecting Corridors		0	24,758
Z-10	Zone Logistics	Logistics	0	15,961
Z-10-11S	Surface Parking for Zone Logistics	Logistics	0	6,000
Z-10A	Fire Station	Logistics	0	12,285
Z-10B	Transportation Hub	Logistics	0	5,424
Z-2	Zone Acute Care	Acute Care	0	5,562
Z-2-11S	Surface Parking for Zone Acute Care	Acute Care	0	4,400
Z-3	Zone Nursing Home	Nursing Home	0	1,104
Z-3-11S	Surface Parking for Zone Nursing Home	Nursing Home	0	1,200
Z-4	Zone Domiciliary	Domiciliary	0	715
Z-4-11S	Surface Parking for Zone Domiciliary	Domiciliary	0	800
Z-6	Zone Behavioral Health	Behavioral Health	0	33,508
Z-6-11S	Surface Parking for Zone Behavioral Health	Behavioral Health	0	26,000
Z-7	Zone Ambulatory Services	Ambulatory Services	0	73,518
Z-7-11S	Surface Parking for Zone Ambulatory Services	Ambulatory Services	0	56,800
Z-8	Zone Research	Research	0	4,464
Z-8-11S	Surface Parking for Zone Research	Research	0	3,600
Z-9	Zone Administration	Administration	0	118,019
Z-9-11S	Surface Parking for Zone Administration	Administration	0	90,800
Z-Site Info	Site Information	Logistics	0	300,682

Notes:

- There is no nursing home, domiciliary or research space provided on the campus. However, the projected area resulting from mathematical rounding of projected areas has been included in the logistics area for distribution on campus.
- If building group is blank it identifies unassigned space.
- The plan recognizes that out leased space currently has existing relationships which will be considered in reuse planning

- **Optimal Use of Existing Buildings:** In this BPO, all existing buildings on the campus (except those associated with the sewer plant replacement) will be vacated and designated for reuse or demolition.
- **Projected Workload Volumes for 2023:** The projected areas as derived from workload volumes (See Stage II Assumptions.) indicate the desired functions can be accommodated in much less area than is currently available on the campus. However, projected area for domiciliary functions was subtracted from the total to accommodate relocation of this service to the Castle Point campus. Where areas for domiciliary functions occur in tables, these values are the result of mathematical rounding of area projection calculations.
- **Parking:** Portions of the existing surface parking areas will be repaved and expanded to provide parking in the most convenient locations adjacent to building entries. Where existing parking is not required, it will be removed and new landscape will be provided. Distribution of parking by departmental group is indicated in the following table. There is sufficient land available to meet the parking need. Therefore structured parking is not required for this campus.

*Table 62: Parking Distribution – BPO 11A & 11B*

Parking Area	Total Surface Spaces	Total Structured Spaces	Surface Area (SF)	Structured Area (SF)	Location
Acute Care	11	0	4,400	0	Northwest of new ambulatory building
Nursing Home	2	0	800	0	Northwest of new ambulatory building
Domiciliary	1	0	400	0	East and northeast of new ambulatory building
Rehabilitation	0	0	0	0	-
Behavioral Health	39	0	15,600	0	East and northeast of new ambulatory building
Ambulatory Services	283	0	113,200	0	East and northeast of new ambulatory building
Research	6	0	2,400	0	West of new ambulatory building
Administration	182	0	72,800	0	West of new ambulatory building
Logistics	15	0	6,000	0	Northwest of new ambulatory building
<b>Total</b>	<b>539</b>	<b>0</b>	<b>215,600</b>	<b>0</b>	

Note: There is no nursing home, domiciliary or research space provided on the campus. However, the projected parking area resulting from mathematical rounding of projected areas has been included in the logistics parking area on the site plan.

- Conclusion from the Space Analysis: The projected area need for the campus is approximately 284,000 BGSF (not including out lease space.) Because this BPO does not include significant renovations of existing space (except for logistical areas associated with the sewer plant replacement), the space required approximately matches the projected Building Gross Square Feet yielding a reduction to the campus area of approximately 70%.
- Construction Phasing: A general overview of the phasing sequence for this BPO is provided below:
  - Replace campus sewer system.
  - Vacate and demolish buildings 16, 17 and 18.
  - Construct new buildings on campus and transfer primary campus utility feeds to designated location in new building.
  - Relocate all proposed functions to the new buildings and demolish remaining existing buildings in the designated VA parcel.
  - Identify the remaining existing buildings on campus as available for reuse or demolition.
- Construction Schedule: Schedules for construction activities are intended to identify relative duration of new construction or renovated work in order to calculate occupancy date for utilization of space and escalation costs. These schedules provide a base on which the implementation plan activities will be incorporated. The Schedule indicates a brief description of the individual building construction projects and indicates the construction sequence and duration for this option. Commissioning of engineering systems should occur in the last 20% of each project's duration.
- Existing Building Maintenance Costs: Existing unaltered buildings retained on the campus for the Baseline require ongoing and periodic maintenance costs including buildings which are scheduled for demolition to the point where demolition begins or agreements for reuse are accepted.
- Capital Cost Estimate: An estimate of projected new construction and renovation costs is indicated in the BPO Capital Cost Estimate. The capital costs are based on campus-wide area projections by Departmental Group (Zone) as indicated in the Projected BPO areas by Departmental Group (Zone.)
- Construction Cost depends on Function: Construction costs are derived from projected area requirements by Building and non-Building Departmental Groups (Zones.)
- Soft Costs Standardized: Approved factors as stated in the assumptions for soft costs (such as professional fees, furnishings and equipment) are based on consultant experience and VA standards.

*Evaluation of BPO 11A & 11B using Capital Criteria:*

- **Consolidation of Vacated Space:** The vacant square footage area totals for BPO 2 indicates there will be no vacant space across the campus (see the following table). Existing buildings with vacant space will be demolished or made available for reuse.

*Table 63: Percentage of Vacant Space – BPO 11A & 11B*

Title	Vacant BGSF
Existing Vacant	379,313
Vacant BPO	0
Difference	-379,313
Percent Difference	-100%

- **Consolidation of Underutilized Space:** Underutilized space is space not used to its full potential because of physical constraints. Because there is a minimal amount of renovation required for this BPO, there is no attributable underutilization of space projected for the campus (see the table below).

*Table 64: Percentage of Underutilized Space – BPO 11A & 11B*

Title	Total
Projected Ideal BGSF Based on In-House Workload	283,979
Proposed BPO BGSF	279,400
Underutilized Space	-4,579
Variance by Percentage	-2%

Note: Negative percentage of underutilized space indicates the area reduction values for BGSF of domiciliary services transferred to Castle Point in this BPO.

- **Timeliness of Completion:** This BPO requires a 7 year (84 months) phased period of construction from initiation in January 2009 with completion to implement improvements to the physical environment starting in January 2010 and completion in January 2016 (see the table below). Key assumptions include:
  - The historic building process begins January 2007 and ends January 2011.
  - Project funding is approved January 2009.
  - There are 4 major construction/relocation phases targeted to implement this BPO.
  - Planning and design for the first series of renovations begins January 2010 and takes 18 months.
  - The first phase of the construction sequence is replacement of the existing campus sewer system. Work for this project is projected to begin January 2010 and takes 48 months for complete.
  - Vacation and Demolition of existing buildings in the northwestern portion of the site
  - Construction of new facilities occurs immediately thereafter with occupancy scheduled for July 2015.
  - Relocation of nursing home and domiciliary functions to the Castle Point campus and designation of remaining existing buildings as available for reuse or demolition to follow as conditions allow.

*Table 65: Total Construction Duration – BPO 11A & 11B*

	Start Date	Completion Date	Duration
Total Construction Activity	01/01/09	01/01/16	84 Months

- **Timeliness of Urgent Seismic Corrections:** There are 31 buildings on the Montrose campus identified in the CAI with “seismic non-exempt” or higher status. The priority is for correction of these building to be accommodated as early as possible. However, the sequence of construction required to achieve proposed plan indicates vacancy of the last building with seismic corrections at completion of the new construction. Buildings with seismic deficient status that are not projected for VA occupancy will be demolished as they become eligible for demolition based on the implementation schedule.
- **Size and Complexity of Capital Plan:** Projected areas (BGSF) based on 2023 workload volumes indicate changes to the Montrose campus as indicated in the following table. It is significant to note that all departmental groups require less projected area than existing due to the anticipated improvements based on new construction that will meet state of the art design. The exception is the Behavioral health group which required a significant increase in projected area

*Table 66: Campus Area Change – BPO 11A & 11B*

Distributions	Acute Care	Nursing Home	Domiciliary	Rehab.	Behavioral Health	Ambulatory Services	Research	Admin.	Logistics	Out Lease
Existing Distribution	94,993	62,220	69,455	0	12,965	159,436	3,737	137,410	79,936	325,931
Proposed BPO Distribution	5,562	1,104	715	0	33,508	73,518	4,464	118,019	42,510	0
Variance By BGSF	-89,431	-61,116	-68,740	0	20,543	-85,918	727	-19,391	-37,426	-325,931

Note: There is no nursing home, domiciliary or research space provided on the campus. However, the projected area resulting from mathematical rounding of projected areas has been included in the logistics area for distribution on campus.

- **Patient Moves:** Of the existing 49 buildings on the campus (as identified in the CAI), in this BPO, all 29 buildings with clinical or clinical-related functions will be renovated or identified as available for reuse/demolition. With all new facilities provided in this option, impact to clinical functions and patient inconvenience is minimized. Furthermore, relocations activities may be accommodated in a simple manner without disruption to care delivery. An overview of patient moves follows. Further detail will be provided in the implementation plan.
  - Upon construction completion of the new nursing home and domiciliary facilities at the Castle Point campus, nursing home and domiciliary functions vacate their present locations.
  - Upon construction completion of the new ambulatory facilities, all remaining clinical, administrative and support functions relocate to the new building.
- **Historic Buildings Altered:** There are 25 buildings identified as historic in the CAI. However, based on building age, there are 43 buildings designated as historically eligible. For this BPO, all 43 will be renovated, considered available for reuse or demolished (see the table below). The National Historic Preservation Act requires that a federal agency

must assume responsibility for historic properties and Section 106 requires federal agencies to consider historic properties as it plans a project and to consult with the Advisory Council on Historic Preservation. The approval process for renovation can take more than a year and will need to be considered in the implementation planning efforts.

*Table 67: Historic Buildings Altered – BPO 11A & 11B*

Title	Building Count
Total Historic or Historically Eligible	43
Altered Historic Projects	43

Note: Values indicate quantity of Historically Eligible buildings as altered by this BPO

## **BPO 11A at Castle Point**

### *BPO Description*

#### *Construct Replacement Facility (Similar to BPO 7)*

At Castle Point (similar to BPO 7), construct a replacement facility on vacant land west of the existing buildings. Accommodate all inpatient, ambulatory care, and nursing home services including services relocated from Montrose (inpatient psychiatry, nursing home and residential treatment programs.) Inpatient Spinal Cord Injury services are relocated to Bronx VAMC and Outpatient Spinal Cord Injury services remain on campus.

Reuse was not studied in Stage I at Castle Point. Reuse opportunities for available land and buildings at both campuses are being studied in Stage II.

The key constraints for execution of this option are the same as for BPO 10 with the additional parameter of constructing a new domiciliary facility on the slope northwest of the existing main campus and connecting to the other new facilities through a new multi-level pedestrian connector.

#### Note:

As buildings and land become vacant over the forecast period, the contractor for the programming and design phase of the project should identify in a project schedule the reuse potential of land parcel and vacant building availability.

### *Analysis of Capital Planning Outputs*

- **Site Plan:** The Projected BPO 11A Site Plan (as depicted in the following figure) illustrates the proposed campus configuration and locations of buildings.
- **Building Color Code:** Similar to the Existing Current Stage Site Plan, the building color indicates the Departmental Group (Zone) of the primary occupants for each building. Matching the building color key used for the Existing Current State Site Plan, the proposed building color indicates the predominant occupancy of the building. Refer to the Legend regarding the Departmental Groups (Zone) contained therein.
- **Site Impact during Construction:** Site area calculations for cost estimating purposes are based on land area assigned to specific functions (such as for replacement piping in the utility replacement), new or replaced recreation areas (although none are identified for either of these sites), new or repaved parking areas as determined by projected need and adjacency to new or renovated buildings as defined by the BPO site plan. Where existing parking areas are not needed, the calculation provides for their demolition and replacement with turf. Restoration of existing or installation of new walkways and internal campus vehicular circulation paths are also included in the calculation. For this BPO the total site impact area total for cost calculations is approximately 6 acres excluding affected parking and building footprints.

Figure 16: A Diagram of the Projected BPO 11A Site Plan





- **Campus Area and Uses:** The BPO 11A campus configuration as indicated on the site plan is summarized in the following table. There is no dedicated exterior recreation area defined. However, there is sufficient land available for recreational activities. The area totals for primary activities on the portions of the site to be retained exclusively for VA-related functions are indicated in the Campus Area Total below.

*Table 68: Campus Area Total Acreage - BPO 11A*

Campus Area	Acres
Recreation	0
Parking	~ 10
Building & Landscape	~ 24
BPO Total (total of above)	~ 34
Existing Campus Total	~ 115

- **Land Parcels Available for Re-Use:** BPO 11A designates approximately 34 acres (or 29% of the present site) on the slope in the central portion of the campus as required for projected VA functions and approximately 81 acres (or 71% of the site) as available for reuse. Buildings and structures associated with replacement of the campus water and sewer system are included as part of the area available for reuse.
- **Buildings Available for Re-Use:** This BPO designates the entire main campus as well as a cluster of buildings in the southwestern portion of the campus (buildings 1, 2, 3, 4, 5, 6, 7, 45, 46, 47 and 48) as available for reuse or demolition.
- **Relocation of Functions:** In BPO 11A, projected area requirements will be accommodated in a new replacement campus composed of a series of 4 story buildings primarily on the southwestern slope at the central portion of the campus. Buildings will be connected at each level to provide for ease of access from one departmental group to another.

The existing campus water and sewer systems and associated buildings will be replaced and an additional water tower will be constructed adjacent to the present water tower. These site utility projects will be the initial phase of this BPO.

Parking will be grouped into two large parking areas adjacent to the building. Parking for domiciliary, nursing home and administration will be located at the upper elevation of the hill. Parking to serve ambulatory care and other clinical function will be located at the lower elevation of the hill. The transportation hub and fire station will be incorporated into the new construction with vehicular access adjacent to the shipping/receiving dock on the northwestern face of the building. Food service areas are anticipated to be located on the entry level of the ambulatory and administrative building to provide adjacency to the shipping/receiving dock.

The domiciliary will be north of the new replacement campus building and connected at each level.

The table below indicates the projected area need as assigned to each building on the campus. Departmental Group area totals are provided for each building.

*Table 69: Functional Distribution - BPO 11A*

Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
1	Vacant Quarters		0	5,063
1	Vacant Quarters	Out Lease	5,062	0
2	Quarters		0	5,024
2	Quarters	Administration	5,024	0
3	Quarters		0	5,024
3	Quarters	Administration	5,024	0
4	Quarters		0	5,024
4	Quarters	Administration	5,024	0
5	Quarters		0	5,358
5	Quarters	Administration	5,358	0
6	Garage/Storage		0	1,705
6	Garage/Storage	Administration	1,705	0
7	Vacant Admin.		0	20,133
7	Vacant Admin.	Administration	1,036	0
7	Vacant Admin.	Out Lease	19,096	0
8	Research		0	12,897
8	Research	Administration	1,396	0
8	Research	Ambulatory Services	1,396	0
8	Research	Out Lease	10,103	0
9	Administration		0	27,123
9	Administration	Acute Care	9,785	0
9	Administration	Administration	1,363	0
9	Administration	Ambulatory Services	2,928	0
9	Administration	Logistics	9,523	0
9	Administration	Out Lease	3,523	0
12	Fire Station/Police Station		0	4,366
12	Fire Station/Police Station	Administration	383	0
12	Fire Station/Police Station	Ambulatory Services	1,048	0
12	Fire Station/Police Station	Logistics	2,772	0
12	Fire Station/Police Station	Out Lease	162	0
13	Education Building		0	11,993
13	Education Building	Acute Care	53	0
13	Education Building	Administration	9,910	0
13	Education Building	Ambulatory Services	53	0
13	Education Building	Behavioral Health	53	0
13	Education Building	Domiciliary	53	0
13	Education Building	Logistics	1,709	0
13	Education Building	Nursing Home	53	0
13	Education Building	Out Lease	53	0
13	Education Building	Research	53	0
16	Patient Care		0	39,453
16	Patient Care	Acute Care	13,801	0

CARES STAGE II FINAL REPORT – MONTROSE-CASTLE POINT

Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
16	Patient Care	Administration	5,014	0
16	Patient Care	Ambulatory Services	14,933	0
16	Patient Care	Behavioral Health	1,172	0
16	Patient Care	Logistics	1,079	0
16	Patient Care	Nursing Home	3,450	0
17	Patient Care		0	16,580
17	Patient Care	Acute Care	295	0
17	Patient Care	Administration	2,302	0
17	Patient Care	Ambulatory Services	11,760	0
17	Patient Care	Behavioral Health	36	0
17	Patient Care	Domiciliary	36	0
17	Patient Care	Logistics	1,679	0
17	Patient Care	Nursing Home	295	0
17	Patient Care	Out Lease	138	0
17	Patient Care	Research	36	0
18	Patient Care		0	51,256
18	Patient Care	Acute Care	6,656	0
18	Patient Care	Administration	4,770	0
18	Patient Care	Ambulatory Services	24,773	0
18	Patient Care	Behavioral Health	1,472	0
18	Patient Care	Domiciliary	311	0
18	Patient Care	Logistics	6,781	0
18	Patient Care	Nursing Home	311	0
18	Patient Care	Out Lease	6,061	0
18	Patient Care	Research	119	0
19	NHCU		0	28,228
19	NHCU	Acute Care	658	0
19	NHCU	Administration	5,905	0
19	NHCU	Ambulatory Services	2,954	0
19	NHCU	Behavioral Health	28	0
19	NHCU	Domiciliary	28	0
19	NHCU	Logistics	10,118	0
19	NHCU	Nursing Home	658	0
19	NHCU	Out Lease	7,850	0
19	NHCU	Research	28	0
20	NHCU		0	42,523
20	NHCU	Logistics	6,222	0
20	NHCU	Nursing Home	36,301	0
21	NHCU		0	37,073
21	NHCU	Acute Care	609	0
21	NHCU	Administration	7,460	0
21	NHCU	Ambulatory Services	863	0
21	NHCU	Behavioral Health	13,153	0
21	NHCU	Domiciliary	719	0
21	NHCU	Logistics	2,047	0
21	NHCU	Out Lease	12,220	0

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Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
34	Storage/Old Boiler Plant		0	10,421
35	Boiler Plant/Chiller Plant		0	14,423
44	Warehouse/Carpenter Shop		0	8,113
44	Warehouse/Carpenter Shop	Logistics	8,113	0
45	Quarters		0	5,991
45	Quarters	Administration	5,991	0
46	Child Care Center		0	7,125
46	Child Care Center	Administration	2,374	0
46	Child Care Center	Ambulatory Services	2,374	0
46	Child Care Center	Out Lease	2,374	0
48	Garage for Director's Quarters		0	288
48	Garage for Director's Quarters	Administration	288	0
57	Sewage Treatment Plant	Logistics	0	2,480
59	Generator Building		0	250
61	Recreation		0	947
61	Recreation	Ambulatory Services	947	0
65	Storage		0	188
65	Storage	Logistics	187	0
67	storage	Logistics	265	265
69	Storage		0	1,967
69	Storage	Ambulatory Services	1,967	0
71	Storage		0	180
71	Storage	Logistics	179	0
73	Engineering Storage		0	1,000
73	Engineering Storage	Logistics	1,000	0
75	Sand Storage		0	1,000
80	Generator Building	Logistics	0	200
82	Generator Building		0	200
86	Engineering Storage		0	300
86	Engineering Storage	Logistics	300	0
87	Engineering Storage		0	202
87	Engineering Storage	Logistics	202	0
88	Labor Shop		0	5,005
88	Labor Shop	Acute Care	125	0
88	Labor Shop	Administration	125	0
88	Labor Shop	Ambulatory Services	125	0
88	Labor Shop	Behavioral Health	125	0
88	Labor Shop	Domiciliary	125	0
88	Labor Shop	Logistics	4,004	0
88	Labor Shop	Nursing Home	125	0
88	Labor Shop	Out Lease	125	0
88	Labor Shop	Research	125	0
89	Linen Hut		0	4,000
89	Linen Hut	Acute Care	1,000	0
89	Linen Hut	Logistics	2,000	0
89	Linen Hut	Nursing Home	1,000	0

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Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
90	Engineering Storage		0	252
90	Engineering Storage	Logistics	252	0
91	Generator Building		0	200
92	Generator Building		0	200
93	Generator Building		0	200
94	Generator Building		0	200
95	Generator Building		0	200
96	Generator Building		0	200
98	Water Treatment Plant	Logistics	0	3,136
101	Sani-Pak	Logistics	0	10,000
111	Multipurpose		0	6,284
111	Multipurpose	Ambulatory Services	6,284	0
15E	Patient Care		0	58,980
15E	Patient Care	Acute Care	17,967	0
15E	Patient Care	Administration	2,903	0
15E	Patient Care	Ambulatory Services	35,151	0
15E	Patient Care	Behavioral Health	93	0
15E	Patient Care	Domiciliary	93	0
15E	Patient Care	Nursing Home	93	0
15E	Patient Care	Out Lease	345	0
15H	Hamilton Fish Wing		0	44,678
15H	Hamilton Fish Wing	Acute Care	13	0
15H	Hamilton Fish Wing	Administration	4,548	0
15H	Hamilton Fish Wing	Ambulatory Services	29,510	0
15H	Hamilton Fish Wing	Behavioral Health	13	0
15H	Hamilton Fish Wing	Domiciliary	13	0
15H	Hamilton Fish Wing	Logistics	1,479	0
15H	Hamilton Fish Wing	Nursing Home	8,837	0
15H	Hamilton Fish Wing	Out Lease	249	0
15H	Hamilton Fish Wing	Research	13	0
59A	Generator Bldg		0	225
Z-10	Zone Logistics	Logistics	0	32,017
Z-10-11S	Surface Parking for Zone Logistics	Logistics	0	6,000
Z-10A	Fire Station	Logistics	0	12,285
Z-10B	Transportation Hub	Logistics	0	5,424
Z-2	Zone Acute Care	Acute Care	0	98,318
Z-2-11S	Surface Parking for Zone Acute Care	Acute Care	0	76,000
Z-3	Zone Nursing Home	Nursing Home	0	124,882
Z-3-11S	Surface Parking for Zone Nursing Home	Nursing Home	0	96,400
Z-4	Zone Domiciliary	Domiciliary	0	51,394
Z-4-11S	Surface Parking for Zone Domiciliary	Domiciliary	0	39,600
Z-6	Zone Behavioral Health	Behavioral Health	0	10,988
Z-6-11S	Surface Parking for Zone Behavioral Health	Behavioral Health	0	8,800
Z-7	Zone Ambulatory Services	Ambulatory Services	0	142,931
Z-7-11S	Surface Parking for Zone Ambulatory Services	Ambulatory Services	0	110,000
Z-8	Zone Research	Research	0	101

Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
Z-8-11S	Surface Parking for Zone Research	Research	0	400
Z-9	Zone Administration	Administration	0	103,535
Z-9-11S	Surface Parking for Zone Administration	Administration	0	80,000
Z-Site Info	Site Information	Logistics	0	275,099

Notes:

- There is no research space provided on the campus. However, area projections for this departmental group result from mathematical rounding. Where indicated, this area has been included as part of the overall building projected areas assigned to the largest departmental group within the building.
  - If a building group is blank, it identifies unassigned space.
  - The plan recognizes that out leased space currently has existing relationships which will be considered in reuse planning.
- **Optimal Use of Existing Buildings:** In this BPO, all existing buildings on the campus (except those associated with the sewer and water plant replacement) will be vacated and designated for reuse or demolition.
  - **Projected Workload Volumes for 2023:** The projected areas as derived from workload volumes (See Stage II Assumptions.) indicate the desired functions require more area than is currently available on the campus.

**Parking:** Portions of the existing surface parking areas will be repaved and expanded to provide parking in the most convenient locations adjacent to building entries. Where existing parking is not required, it will be removed and new landscape will be provided. Distribution of parking by departmental group is indicated in the following table. There is sufficient land available to meet the parking need. Therefore structured parking is not required for this campus.

*Table 70: Parking Distribution – BPO 11A*

Parking Area	Total Surface Spaces	Total Structured Spaces	Surface Area (SF)	Structured Area (SF)	Location
Acute Care	190	0	76,000	0	Southwest of new building
Nursing Home	145	0	58,000	0	Northeast of new building
Domiciliary	60	0	24,000	0	East of new building
Rehabilitation	0	0	0	0	-
Behavioral Health	13	0	5,200	0	Southwest of new building
Ambulatory Services	550	0	220,000	0	Southwest of new building
Research	1	0	400	0	East of new building
Administration	160	0	64,000	0	East of new building
Logistics	15	0	6,000	0	Southwest of new building
Total	1,134	0	453,600	0	

Note: There is no research space provided on the campus. However, the projected single parking space resulting from mathematical rounding of projected areas has been included in the logistics parking area on the site plan.

- Conclusion from the Space Analysis: The projected area need for the campus is approximately 597,000 BGSF (not including out lease space.) Because this BPO does not include significant renovations of existing space (except for logistical areas associated with the sewer plant replacement), the space required approximately matches the projected Building Gross Square Feet yielding a reduction to the campus area of approximately 29%.
- Construction Phasing: A general overview of the phasing sequence for this BPO is provided below:
  - Replace campus water and sewer system.
  - Construct new buildings (including domiciliary) on campus.
  - Relocate all proposed functions to the new buildings.
  - Identify the remaining existing buildings on campus as available for reuse or demolition.
- Construction Schedule: Schedules for construction activities are intended to identify relative duration of new construction or renovated work in order to calculate occupancy date for utilization of space and escalation costs. These schedules provide a base on which the implementation plan activities will be incorporated. The Schedule indicates a brief description of the individual building construction projects and indicates the construction sequence and duration for this option. Commissioning of engineering systems should occur in the last 20% of each project's duration.
- Existing Building Maintenance Costs: Existing unaltered buildings retained on the campus for the Baseline require ongoing and periodic maintenance costs including buildings which are scheduled for demolition to the point where demolition begins or agreements for reuse are accepted.
- Capital Cost Estimate: An estimate of projected new construction and renovation costs is indicated in the BPO Capital Cost Estimate. The capital costs are based on campus-wide area projections by Departmental Group (Zone) as indicated in the Projected BPO areas by Departmental Group (Zone.)
- Construction Cost depends on Function: Construction costs are derived from projected area requirements by Building and non-Building Departmental Groups (Zones.)
- Soft Costs Standardized: Approved factors as stated in the assumptions for soft costs (such as professional fees, furnishings and equipment) are based on consultant experience and VA standards.

*Evaluation of BPO 11A using Capital Criteria:*

- Consolidation of Vacated Space: The vacant square footage area totals for BPO 11A indicate a 100% decrease in vacant space across the campus (see the table below). The

approximately 69,000 SF includes that space in vacant buildings that will be demolished or made available for reuse.

*Table 71: Percentage of Vacant Space – BPO 11A*

Title	Vacant BGSF
Existing Vacant	68,708
Vacant BPO	0
Difference	-68,708
Percent Difference	-100%

- **Consolidation of Underutilized Space:** Underutilized space is space not used to its full potential because of physical constraints. Because there is a minimal amount of renovation required for this BPO, there is no attributable underutilization of space projected for the campus (see the following table).

*Table 72: Percentage of Underutilized Space – BPO 11A*

Title	Total
Projected Ideal BGSF Based on In-House Workload	596,724
Proposed BPO BGSF	597,956
Underutilized Space	1,232
Variance by Percentage	0%

- **Timeliness of Completion:** This BPO requires a 7.5 year (90 months) multi-phased period of construction from initiation in January 2009 with completion to implement improvements to the physical environment starting in January 2010 and completion in July 2016 (see the following table). Key assumptions include:
  - The historic building process begins January 2007 and ends January 2011.
  - Project funding is approved January 2009.
  - There are 2 major construction/relocation phases targeted to implement this BPO.
  - The first phase of the construction sequence is replacement of the existing campus water and sewer system. Work for this project is projected to begin January 2010 and takes 48 months to complete.
  - Design and construction for all new buildings composing the replacement campus building begins January 2010 and takes 66 months to complete. Occupancy of the new buildings and relocation of nursing home patients from the Montrose campus occurs thereafter.

*Table 73: Total Construction Duration – BPO 11A*

	Start Date	Completion Date	Duration
Total Construction Activity	01/01/09	07/01/16	90 Months

- **Timeliness of Urgent Seismic Corrections:** There are 21 buildings on the Castle Point campus identified in the CAI with “seismic non-exempt” or higher status. The priority is for correction of these building to be accommodated as early as possible. However, the sequence of construction required to achieve proposed plan indicates vacancy of the last building with seismic corrections at completion of the new construction. Buildings with



seismic deficient status that are not projected for VA occupancy will be demolished as they become eligible for demolition based on the implementation schedule.

- **Size and Complexity of Capital Plan:** Projected areas (BGSF) based on 2023 workload volumes indicate a changes to the Castle Point campus as indicated in the table below. It is significant to note that for all departmental groups except behavioral health area requirements are projected to increase.

*Table 74: Campus Area Change – BPO 11A*

Distributions	Acute Care	Nursing Home	Domiciliary	Rehab.	Behavioral Health	Ambulatory Services	Research	Admin.	Logistics	Out Lease
Existing Distribution	50,970	51,130	1,383	0	16,150	137,072	378	77,910	59,917	67,367
Proposed BPO Distribution	98,318	124,882	51,394	0	10,988	142,931	101	103,535	65,807	0
Variance By BGSF	47,348	73,752	50,011	0	-5,162	5,859	-277	25,625	5,890	-67,367

Note: There is no research space provided on the campus. However, the area indicated resulting from mathematical rounding of projected areas has been included in the behavioral health space for distribution on the campus.

- **Patient Moves:** Of the existing 51 buildings on the campus (as identified in the CAI), in this BPO, all 18 buildings with clinical or clinical-related functions will be identified as available for reuse/demolition. With all new facilities provided in this option, impact to clinical functions and patient inconvenience is minimized. Furthermore, relocations activities may be accommodated in a simple manner without disruption to care delivery. An overview of patient moves follows. Further detail will be provided in the implementation plan.
  - Upon construction completion of the new replacement facilities at the Castle Point campus, nursing home and domiciliary functions will relocate from the Montrose campus and all other clinical, administrative and support functions relocate from the main campus to the new buildings.
- **Historic Buildings Altered:** There are no buildings identified as historic in the CAI. However, based on building age, there are 26 buildings designated as historically eligible. For this BPO, all 26 will be renovated, considered available for reuse or demolished (see the table below). The National Historic Preservation Act requires that a federal agency must assume responsibility for historic properties and Section 106 requires federal agencies to consider historic properties as it plans a project and to consult with the Advisory Council on Historic Preservation. The approval process for renovation can take more than a year and will need to be considered in the implementation planning efforts.

*Table 75: Historic Buildings Altered – BPO 11A*

Title	Building Count
Total Historic or Historically Eligible	26
Altered Historic Projects	26

Note: Values indicate quantity of Historically Eligible buildings as altered by this BPO

## **BPO 11B at Castle Point**

### *BPO 11B Description*

#### *Renovate Existing Facilities and Build New Nursing Home (similar to BPO 10)*

All current services at Castle Point will remain on campus with the exception of Inpatient Spinal Cord Injury services (which are relocated to Bronx VAMC.) Outpatient Spinal Cord Injury services remain on campus.

Build replacement nursing home to accommodate existing Castle Point services and those nursing home beds relocated from Montrose.

Renovate buildings to accommodate existing Castle Point inpatient and ambulatory care services and inpatient psychiatry. Accommodate residential treatment programs transferred from Montrose.

Reuse was not studied in Stage I at Castle Point. Reuse opportunities for available land and buildings at both campuses are being studied in Stage II.

The key constraints for execution of this option are the same as for BPO 10 with the additional parameter of constructing a new domiciliary facility on the slope southwest of the existing main campus and connecting to building 15H through a new sub grade pedestrian connector.

#### Note:

As buildings and land become vacant over the forecast period, the contractor for the programming and design phase of the project should identify in a project schedule the reuse potential of land parcel and vacant building availability.

### *Analysis of Capital Planning Outputs*

- Site Plan: The Projected BPO 11B Site Plan (as depicted in the figure below) illustrates the proposed campus configuration and locations of buildings.
- Building Color Code: Similar to the Existing Current Stage Site Plan, the building color indicates the Departmental Group (Zone) of the primary occupants for each building. Matching the building color key used for the Existing Current State Site Plan, the proposed building color indicates the predominant occupancy of the building. Refer to the Legend regarding the Departmental Groups (Zone) contained therein.

Figure 17: A Diagram of the Projected BPO 11B Site Plan



- **Site Impact during Construction:** Site area calculations for cost estimating purposes are based on land area assigned to specific functions (such as for replacement piping in the utility replacement), new or replaced recreation areas (although none are identified for either of these sites), new or repaved parking areas as determined by projected need and adjacency to new or renovated buildings as defined by the BPO site plan. Where existing parking areas are not needed, the calculation provides for their demolition and replacement with turf. Restoration of existing or installation of new walkways and internal campus vehicular circulation paths are also included in the calculation. For this BPO the total site impact area total for cost calculations is approximately 13 acres excluding affected parking and building footprints.
- **Campus Area and Uses:** The BPO 11 campus configuration as indicated on the site plan is summarized in the following table. There is no dedicated exterior recreation area defined. However, there is sufficient land available for recreational activities. The area totals for primary activities on the portions of the site to be retained exclusively for VA-related functions are indicated in the Campus Area Total below.

*Table 76: Campus Area Total Acreage - BPO 11B*

Campus Area	Acres
Recreation	0
Parking	~ 10
Building & Landscape	~ 45
BPO Total (total of above)	~ 55
Existing Campus Total	~ 115

- **Land Parcels Available for Re-Use:** BPO 11B designates approximately 55 acres (or 47% of the present site) in the northeastern portion of the campus as required for projected VA functions and approximately 60 acres (or 53% of the site) as available for reuse. Buildings and structures associated with replacement of the campus water and sewer system are included as part of the area available for reuse.
- **Buildings Available for Re-Use:** This BPO designates a cluster of buildings in the southwestern portion of the campus (buildings 1, 2, 3, 4, 5, 6, 7, 45, 46, 47 and 48) as available for reuse or demolition.
- **Relocation of Functions:** In BPO 11B, maintaining occupancy through renovation of existing buildings and reducing vacant space therein is achieved to the extent possible. Projected area needs will be provided through a combination of renovation to existing buildings on the main campus and new construction. The existing campus water and sewer system and associated buildings will be replaced as the initial phase of this BPO.

A new nursing home building will be located on the hillside northwest of the building 18 and the southwest of the new and existing water towers. This location requires a multi-phased construction sequence with occupancy to portions of the buildings prior to completion of the later phases.

Existing clinical and administrative building 19, 20 and 21 will be demolished to provide for the new nursing home building and parking.

A new domiciliary building will be constructed on the hillside southwest of the existing roadway and building 15H. A sub grade service tunnel will connect the new building to the main campus at building 15H.

Acute care and ambulatory services will remain in proximity to their present locations. However, multiple internal relocations will be required to accommodate renovation. Ambulatory care and behavioral health services will be located in buildings 16, 15E and new construction southeast of building 15H. Acute care functions will compose the balance of building 15H and a portion of the new construction.

Administration functions will be relocated in the central portion of the main campus in renovated space of buildings 17, 18, 111 and a portion of the lower level of the new nursing home building.

Logistical functions are located in several buildings throughout the main campus but generally concentrated into a group of existing outbuildings to the northeast and the lower level of the nursing home building to the southwest. A new fire station and transportation hub will be incorporated into the new nursing home building.

Existing logistics building 8, 9, 12, 13, 35, 43, 44, 88, 89 and various other minor adjacent buildings will be demolished to provide sufficient parking in proximity to ambulatory care and behavioral health services entries.

The remaining existing buildings located on the campus will be vacated and designated for demolition or reuse.

- The table below indicates the projected area need as assigned to each building on the campus. Departmental Group area totals are provided for each building.

*Table 77: Functional Distribution - BPO 11B*

Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
1	Vacant Quarters		0	5,063
1	Vacant Quarters	Out Lease	5,062	0
2	Quarters		0	5,024
2	Quarters	Administration	5,024	0
3	Quarters		0	5,024
3	Quarters	Administration	5,024	0
4	Quarters		0	5,024
4	Quarters	Administration	5,024	0
5	Quarters		0	5,358
5	Quarters	Administration	5,358	0
6	Garage/Storage		0	1,705
6	Garage/Storage	Administration	1,705	0
7	Vacant Admin.		0	20,133
7	Vacant Admin.	Administration	1,036	0

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Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
7	Vacant Admin.	Out Lease	19,096	0
8	Research		0	12,897
8	Research	Administration	1,396	0
8	Research	Ambulatory Services	1,396	0
8	Research	Out Lease	10,103	0
9	Administration		0	27,123
9	Administration	Acute Care	9,785	0
9	Administration	Administration	1,363	0
9	Administration	Ambulatory Services	2,928	0
9	Administration	Logistics	9,523	0
9	Administration	Out Lease	3,523	0
12	Fire Station/Police Station		0	4,366
12	Fire Station/Police Station	Administration	383	0
12	Fire Station/Police Station	Ambulatory Services	1,048	0
12	Fire Station/Police Station	Logistics	2,772	0
12	Fire Station/Police Station	Out Lease	162	0
13	Education Building		0	11,993
13	Education Building	Acute Care	53	0
13	Education Building	Administration	9,910	0
13	Education Building	Ambulatory Services	53	0
13	Education Building	Behavioral Health	53	0
13	Education Building	Domiciliary	53	0
13	Education Building	Logistics	1,709	0
13	Education Building	Nursing Home	53	0
13	Education Building	Out Lease	53	0
13	Education Building	Research	53	0
16	Patient Care	Acute Care	13,801	0
16	Patient Care	Administration	5,014	39,453
16	Patient Care	Ambulatory Services	14,933	0
16	Patient Care	Behavioral Health	1,172	0
16	Patient Care	Logistics	1,079	0
16	Patient Care	Nursing Home	3,450	0
17	Patient Care	Acute Care	295	0
17	Patient Care	Administration	2,302	16,466
17	Patient Care	Ambulatory Services	11,760	0
17	Patient Care	Behavioral Health	36	0
17	Patient Care	Domiciliary	36	0
17	Patient Care	Logistics	1,679	0
17	Patient Care	Nursing Home	295	0
17	Patient Care	Out Lease	138	0
17	Patient Care	Research	36	113
18	Patient Care	Acute Care	6,656	0
18	Patient Care	Administration	4,770	51,256
18	Patient Care	Ambulatory Services	24,773	0
18	Patient Care	Behavioral Health	1,472	0
18	Patient Care	Domiciliary	311	0
18	Patient Care	Logistics	6,781	0
18	Patient Care	Nursing Home	311	0
18	Patient Care	Out Lease	6,061	0

Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
18	Patient Care	Research	119	0
19	NHCU		0	28,228
19	NHCU	Acute Care	658	0
19	NHCU	Administration	5,905	0
19	NHCU	Ambulatory Services	2,954	0
19	NHCU	Behavioral Health	28	0
19	NHCU	Domiciliary	28	0
19	NHCU	Logistics	10,118	0
19	NHCU	Nursing Home	658	0
19	NHCU	Out Lease	7,850	0
19	NHCU	Research	28	0
20	NHCU		0	42,523
20	NHCU	Logistics	6,222	0
20	NHCU	Nursing Home	36,301	0
21	NHCU		0	37,073
21	NHCU	Acute Care	609	0
21	NHCU	Administration	7,460	0
21	NHCU	Ambulatory Services	863	0
21	NHCU	Behavioral Health	13,153	0
21	NHCU	Domiciliary	719	0
21	NHCU	Logistics	2,047	0
21	NHCU	Out Lease	12,220	0
34	Storage/Old Boiler Plant		0	10,421
35	Boiler Plant/Chiller Plant		0	14,423
44	Warehouse/Carpenter Shop		0	8,113
44	Warehouse/Carpenter Shop	Logistics	8,113	0
45	Quarters		0	5,991
45	Quarters	Administration	5,991	0
46	Child Care Center		0	7,125
46	Child Care Center	Administration	2,374	0
46	Child Care Center	Ambulatory Services	2,374	0
46	Child Care Center	Out Lease	2,374	0
48	Garage for Director's Quarters		0	288
48	Garage for Director's Quarters	Administration	288	0
57	Sewage Treatment Plant	Logistics	0	2,480
59	Generator Building		0	250
61	Recreation		0	947
61	Recreation	Ambulatory Services	947	0
65	Storage		0	188
65	Storage	Logistics	187	0
67	Storage	Logistics	265	265
69	Storage		0	1,967
69	Storage	Ambulatory Services	1,967	0
71	Storage	Logistics	179	180
73	Engineering Storage		0	1,000
73	Engineering Storage	Logistics	1,000	0
75	Sand Storage		0	1,000
80	Generator Building	Logistics	0	200
82	Generator Building		0	200

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Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
86	Engineering Storage		0	300
86	Engineering Storage	Logistics	300	0
87	Engineering Storage		0	202
87	Engineering Storage	Logistics	202	0
88	Labor Shop		0	5,005
88	Labor Shop	Acute Care	125	0
88	Labor Shop	Administration	125	0
88	Labor Shop	Ambulatory Services	125	0
88	Labor Shop	Behavioral Health	125	0
88	Labor Shop	Domiciliary	125	0
88	Labor Shop	Logistics	4,004	0
88	Labor Shop	Nursing Home	125	0
88	Labor Shop	Out Lease	125	0
88	Labor Shop	Research	125	0
89	Linen Hut		0	4,000
89	Linen Hut	Acute Care	1,000	0
89	Linen Hut	Logistics	2,000	0
89	Linen Hut	Nursing Home	1,000	0
90	Engineering Storage		0	252
90	Engineering Storage	Logistics	252	0
91	Generator Building	Logistics	0	200
92	Generator Building		0	200
93	Generator Building		0	200
94	Generator Building		0	200
95	Generator Building	Logistics	0	200
96	Generator Building	Logistics	0	200
98	Water Treatment Plant	Logistics	0	3,136
101	Sani-Pak	Logistics	0	10,000
111	Multipurpose	Administration	0	6,284
111	Multipurpose	Ambulatory Services	6,284	0
15E	Patient Care	Acute Care	17,967	6,898
15E	Patient Care	Administration	2,903	0
15E	Patient Care	Ambulatory Services	35,151	52,082
15E	Patient Care	Behavioral Health	93	0
15E	Patient Care	Domiciliary	93	0
15E	Patient Care	Nursing Home	93	0
15E	Patient Care	Out Lease	345	0
15H	Hamilton Fish Wing	Acute Care	13	31,440
15H	Hamilton Fish Wing	Administration	4,548	0
15H	Hamilton Fish Wing	Ambulatory Services	29,510	0
15H	Hamilton Fish Wing	Behavioral Health	13	13,239
15H	Hamilton Fish Wing	Domiciliary	13	0
15H	Hamilton Fish Wing	Logistics	1,479	0
15H	Hamilton Fish Wing	Nursing Home	8,837	0
15H	Hamilton Fish Wing	Out Lease	249	0
15H	Hamilton Fish Wing	Research	13	0
59A	Generator Bldg		0	225
Z-10	Zone Logistics	Logistics	0	31,259
Z-10-11S	Surface Parking for Zone Logistics	Logistics	0	6,000



Building No.	Building Name	Building Group	Existing BGSF	Proposed BGSF
Z-10A	Fire Station	Logistics	0	12,285
Z-10B	Transportation Hub	Logistics	0	5,424
Z-2	Zone Acute Care	Acute Care	0	66,153
Z-2-11S	Surface Parking for Zone Acute Care	Acute Care	0	76,000
Z-3-11S	Surface Parking for Zone Nursing Home	Nursing Home	0	96,400
Z-3A	Nursing Home (phase 2)	Nursing Home	0	70,882
Z-3B	Nursing Home (phase 4)	Nursing Home	0	54,000
Z-4	Zone Domiciliary	Domiciliary	0	51,394
Z-4-11S	Surface Parking for Zone Domiciliary	Domiciliary	0	39,600
Z-6-11S	Surface Parking for Behav. Health & Research	Behavioral Health	0	9,200
Z-7	Zone Ambulatory Services	Ambulatory Services	0	97,099
Z-7-11S	Surface Parking for Zone Ambulatory Services	Ambulatory Services	0	110,000
Z-9	Zone Administration	Administration	0	4,551
Z-9-11S	Surface Parking for Zone Administration	Administration	0	80,000
Z-Site Info	Site Information	Logistics	0	566,211

Notes:

- There is no research space provided on the campus. However, area projections for this departmental group result from mathematical rounding. Where indicated, this area has been included as part of the overall building projected areas assigned to the largest departmental group within the building.
- If a building group is blank, it identifies unassigned space.
- The plan recognizes that out leased space currently has existing relationships which will be considered in reuse planning.
- **Optimal Use of Existing Buildings:** The majority of existing buildings on the campus are not compatible with modern standards of design for clinical functions. To accommodate projected delivery of care standards, the floor plates are too small (resulting in compromised functional adjacencies); the floor to floor heights are too low (resulting in mechanical systems with insufficient air volume) and with a few exceptions, the resident rooms do not have bathrooms accessible from within the rooms. As a result, proposed renovations to address the projected workload will require additional area to achieve the same goal.
- **Projected Workload Volumes for 2023:** The projected areas as derived from workload volumes (See Stage II Assumptions.) indicate the desired functions require more area than is currently available on the campus.

**Parking:** Portions of the existing surface parking areas will be repaved and expanded to provide parking in the most convenient locations adjacent to building entries. Where existing parking is not required, it will be removed and new landscape will be provided. Distribution of parking by departmental group is indicated in the following table. There is sufficient land available to meet the parking need. Therefore structured parking is not required for this campus.

*Table 78: Parking Distribution – BPO 11B*

Parking Area	Total Surface Spaces	Total Structured Spaces	Surface Area (SF)	Structured Area (SF)	Location
Acute Care	190	0	76,000	0	Southeast of building 15H
Nursing Home	145	0	58,000	0	Northeast of new nursing home
Domiciliary	60	0	24,000	0	Southwest of building 8
Rehabilitation	0	0	0	0	-
Behavioral Health	13	0	5,200	0	Southeast of building 15H
Ambulatory Services	550	0	220,000	0	Southeast of building 15H
Research	1	0	400	0	Northwest of building 17
Administration	160	0	64,000	0	Southeast of building 15H
Logistics	15	0	6,000	0	Northwest of building 17
Total	1,134	0	453,600	0	

Note: There is no research space provided on the campus. However, the projected single parking space resulting from mathematical rounding of projected areas has been included in the logistics parking area on the site plan.

- **Conclusion from the Space Analysis** The projected area need for the campus is approximately 597,000 BGSF (not including out lease space.) Because BPO 1 (Baseline) involves extensive renovation of existing space in addition to the new nursing home construction, the space required is approximately 627,000 Building Gross Square Feet (BGSF.) This projected area provides an increase to the existing campus area of approximately 36%.
- **Construction Phasing:** In this BPO the extent of renovations to existing occupied space demands a complex phasing sequence to minimize disruption to patients and staff. However, due to the location of required renovations within presently occupied buildings, the time frame for construction will be extended and several interim moves are anticipated. A general overview of the phasing sequence is provided below:
  - Replace existing campus water and sewer system.
  - Construct the northern portion of the new nursing home building (including transportation hub & fire station expansion) and relocate a portion of the patients from the Montrose campus.
  - Construct new domiciliary building southwest of building 15H with sub grade service corridor connected to building 15H.
  - Construct new ambulatory and acute care addition southeast of building 15H.
  - Demolish existing logistics building 8, 9, 12, 13, 35, 43, 44, 88, 89 and various other minor adjacent buildings.
  - Renovate buildings 16, 17, 111, 15E and 15H sequentially move patients to renovated areas as construction is completed and renovate the previously occupied areas of the buildings until complete.

- Demolish building 19 and construct the southern portion of the new nursing home building and relocate the remaining portion of the patients from the Montrose campus.
  - Renovate the remaining logistical (engineering) buildings required for campus support
- 
- Construction Schedule: Schedules for construction activities are intended to identify relative duration of new construction or renovated work in order to calculate occupancy date for utilization of space and escalation costs. These schedules provide a base on which the implementation plan activities will be incorporated. The Schedule indicates a brief description of the individual building construction projects and indicates the construction sequence and duration for this option. Commissioning of engineering systems should occur in the last 20% of each project's duration.
  - Existing Building Maintenance Costs: Existing unaltered buildings retained on the campus for the Baseline require ongoing and periodic maintenance costs including buildings which are scheduled for demolition to the point where demolition begins or agreements for reuse are accepted.
  - Capital Cost Estimate: An estimate of projected new construction and renovation costs is indicated in the BPO Capital Cost Estimate. The capital costs are based on campus-wide area projections by Departmental Group (Zone) as indicated in the Projected BPO areas by Departmental Group (Zone.)
  - Construction Cost depends on Function: Construction costs are derived from projected area requirements by Building and non-Building Departmental Groups (Zones.)
  - Soft Costs Standardized: Approved factors as stated in the assumptions for soft costs (such as professional fees, furnishings and equipment) are based on consultant experience and VA standards.

*Evaluation of BPO 11B using Capital Criteria:*

- **Consolidation of Vacated Space:** The vacant square footage area totals for BPO 11B indicate a 100% decrease in vacant space across the campus (see the following table). The approximately 69,000 SF includes that space in vacant buildings that will be demolished or made available for reuse.

*Table 79: Percentage of Vacant Space – BPO 11B*

Title	Vacant BGSF
Existing Vacant	68,708
Vacant BPO	0
Difference	-68,708
Percent Difference	-100%

- **Consolidation of Underutilized Space:** Underutilized space is space not used to its full potential because of physical constraints. Because there is a substantial amount of renovation required for this BPO, additional area is required to achieve a modern, safe and secure environment, resulting in an increase of underutilized space. Comparing the ideal space requirements for the workload to the square footage need for this option results in a 56% overall increase in area need (see the following table).

*Table 80: Percentage of Underutilized Space – BPO 11B*

Title	Total
Projected Ideal BGSF Based on In-House Workload	596,724
Proposed BPO BGSF	627,143
Underutilized Space	30,419
Variance by Percentage	5%

- **Timeliness of Completion:** The proposed BPO 10 requires a 14.5 year (174 months) multi-phased period of construction from initiation in January 2009 with completion to implement improvements to the physical environment starting in January 2010 and completion in July 2023 (see the table below). Key assumptions include:
  - The historic building process begins January 2007 and ends January 2011.
  - Project funding is approved January 2009.
  - There are 4 major construction/relocation phases targeted to implement this BPO.
  - Planning and design for the first series of renovations begins January 2010 and takes 18 months.
  - The first phase of the construction sequence is replacement of the existing campus water and sewer system. Work for this project is projected to begin January 2010 and takes 48 months to complete.
  - Design and construction for the northern portion of the new nursing home, domiciliary and ambulatory addition begins January 2012 and lasts 72 months. Demolition of select logistical buildings vacated from these relocations follows.
  - Design and renovations to buildings 16, 17 and 15H begins July 2015 with multiple renovation and relocation phases with associated completion dates for each building. Simultaneously, renovations to logistical (engineering) buildings occur as coordinated to reduce disruption to clinical services.

- Design and construction for the southern portion of the new nursing home addition begins January 2017 and lasts 60 months. Demolition of select logistical buildings vacated from these relocations follows.
- Demolition of vacated building 19 begins January 2018 with construction of the southern portion of the nursing home to begin thereafter.
- Design and renovations to buildings 15E and 18 begin January 2020 with an anticipated duration of 78 months to allow for multiple renovation and relocation phases with associated completion dates for each building. Simultaneously, renovations to the remaining logistical (engineering) buildings occur as coordinated to reduce disruption to clinical services.

*Table 81: Total Construction Duration – BPO 11B*

	Start Date	Completion Date	Duration
Total Construction Activity	01/01/09	07/01/23	174 Months

- **Timeliness of Urgent Seismic Corrections:** There are 21 buildings on the Castle Point campus identified in the CAI with “seismic non-exempt” or higher status. The priority is for correction of these building to be accommodated as early as possible. However, the sequence of construction required to achieve proposed plan indicates final occupancy of the last few with seismic corrections (buildings 16, 17, 15E and 15H) in 2023. Buildings with seismic deficient status that are not projected for VA occupancy will be demolished as they become eligible for demolition based on the implementation schedule.
- **Size and Complexity of Capital Plan:** Projected areas (BGSF) based on 2023 workload volumes indicate changes to the Castle Point campus as indicated in the following table. It is significant to note that for all departmental groups except behavioral health area requirements are projected to increase.

*Table 82: Campus Area Change – BPO 11B*

Distributions	Acute Care	Nursing Home	Domiciliary	Rehab.	Behavioral Health	Ambulatory Services	Research	Admin.	Logistics	Out Lease
Existing Distribution	50,970	51,130	1,383	0	16,150	137,072	378	77,910	59,917	67,367
Proposed BPO Distribution	104,491	124,882	51,394	0	13,239	149,181	114	118,013	65,829	0
Variance By BGSF	53,521	73,752	50,011	0	-2,911	12,109	-264	40,103	5,912	-67,367

Note: There is no research space provided on the campus. However, the area indicated resulting from mathematical rounding of projected areas has been included in the behavioral health space for distribution on the campus.

- **Patient Moves:** Of the existing 51 buildings on the campus (as identified in the CAI), in this BPO, all 18 buildings with clinical or clinical-related functions will be renovated or identified as available for reuse/demolition. A detailed construction schedule is beyond the scope of this study. However, there are some portions of buildings 15H, 15E, 16, 17 and 18 where renovations and relocations will be complex and that patients may be inconvenienced but care may continue in the buildings during renovations. An overview of patient moves follows. Further detail will be provided in the implementation plan.
  - Upon completion of each portion of the new nursing home patients from the Montrose campus will be relocated. Similarly, other administration and logistical functions will relocate to the support areas of the new building from various locations on the main campus.

- Upon completion of the new domiciliary building patients from the Montrose campus will be relocated.
  - Relocation of administrative areas in building 17 initiates the sequence of internal renovations and relocations throughout the existing buildings proposed to serve clinical areas. Based on the complexity of renovations required and the duration needed to sequence the construction, it is anticipated that there will be significant inconvenience to patient care areas that will continue to operate during construction.
- **Historic Buildings Altered:** There are no buildings identified as historic in the CAI. However, based on building age, there are 26 buildings designated as historically eligible. For this BPO, all 26 will be renovated, considered available for reuse or demolished (see the following table). The National Historic Preservation Act requires that a federal agency must assume responsibility for historic properties and Section 106 requires federal agencies to consider historic properties as it plans a project and to consult with the Advisory Council on Historic Preservation. The approval process for renovation can take more than a year and will need to be considered in the implementation planning efforts.

*Table 83: Historic Buildings Altered – BPO 11B*

Title	Building Count
Total Historic or Historically Eligible	26
Altered Historic Projects	26

Note: Values indicate quantity of Historically Eligible buildings as altered by this BPO

## 5.0 Financial Analysis

A financial analysis, based on the requirements of the VA’s cost effectiveness analysis (CEA) tool, was performed for each of the Stage II BPOs for the Montrose/Castle Point VAMCs. The chapter first describes key assumptions of the financial analysis at Montrose/Castle Point, followed by a high level comparison of the BPOs. The detailed financial outputs for each BPO are described together with the primary factors influencing the results. The chapter concludes with an analysis of several factors to determine the sensitivity of the outcomes of a BPO. For example, if a small change in a factor, such as escalation rates, results in relatively large changes in the outcomes, the outcomes are said to be sensitive to that factor.

### **Key Assumptions for Montrose/Castle Point**

The following key assumptions were considered for the financial analysis of BPOs at Montrose/Castle Point. A comprehensive description of financial assumptions can be found in a separate document entitled Stage II Assumptions, Inputs and Outputs.

- The Stage II BPOs for Montrose and Castle Point are a combination of renovation and new construction sized to accommodate patient demand for 2023. Each BPO involves transferring a varying amount of patient demand from the Montrose campus to the Castle Point campus. To perform a cost comparison among the options, each BPO combines a Montrose BPO and a Castle Point BPO. This allows for consistent workload demand to be compared. The resultant seven BPOs are as follows:
  - Castle Point BPO 1 with Montrose BPO 1 (BPO 1)
  - Castle Point BPO 7 with Montrose BPO 2 (BPO 7-2)
  - Castle Point BPO 7 with Montrose BPO 4 (BPO 7-4)
  - Castle Point BPO 10 with Montrose BPO 2 (BPO 10-2)
  - Castle Point BPO 10 with Montrose BPO 4 (BPO 10-4)
  - Castle Point BPO 11A with Montrose BPO 11A (BPO 11A)
  - Castle Point BPO 11A with Montrose BPO 11B (BPO 11B)
- For each BPO, the VA estimated annual workload is the same across the planning horizon of 2003 to 2033. The workload assumes consistent inpatient services and outpatient services. Inpatient services include: medicine and observation, nursing home, psychiatric and substance abuse, spinal cord injury, residential rehabilitation and domiciliary and other VA mental health. The two sites offer a full range of outpatient services.
- Facilities are sized to meet the 2023 forecasted workload.
- The construction and capital investment schedules assume a 4 year historical building requirement for demolition.
- Changes in the way healthcare is provided each year, e.g., provided in-house in the same, renovated or newly constructed facility; timing of occupying renovated or new facilities; modified square feet both in building or land; and other factors result in changes to the operating costs.
- There is a minimal need for short-term contracting in the analysis except for BPO 10-2, BPO 10-4 and BPO 11B. In BPOs 10-2 and 10-4, care for the Montrose nursing home, psychiatry and substance abuse and other VA mental health inpatient demand is assumed

to be contracted to the community from 2015 through 2023 until the Castle Point facilities are ready. In BPO 11B, care for the Montrose nursing home, psychiatry and substance abuse, other VA mental health, and residential rehabilitation and domiciliary demand is assumed to be contracted to the community from 2016 through 2023 until the Castle Point facilities are ready.

- The capital plan assumptions, e.g., renovated or new construction, modified square feet requirements, timing of occupying new space, etc. affect the capital investment costs.
- Reuse assumptions regarding the type of reuse, availability of land and buildings, etc. affect the non-recurring capital costs offset by reuse.
- Capital investment costs (for options other than the baseline), as shown in the report, are offset by revenue from reuse or other in-kind considerations.

## **BPO Comparison**

The following table presents a comparison of the key financial outputs for each BPO. Three primary components are considered in this analysis: recurring operating costs, non-recurring capital costs and non-recurring considerations (costs/revenues). Recurring operating costs include direct variable, indirect fixed and direct fixed costs. All of the costs are discussed in terms of net present costs (NPC). This term refers to the process of discounting the dollars from each year over the study period (2003 to 2033) to the year 2003 dollars. The intent is to allow for the costs to be compared across BPOs independent of what year the expense or revenue occurs.

*Table 84: BPO Comparison*

**2003 Net Present Dollars – (\$ in Millions)**  
**BPO Comparison**  
 2003 Net Present Dollars (\$ Millions)  
 Reflects Period 2003-2033

	<b>BPO 1</b>	<b>BPO 7-2</b>	<b>BPO 7-4</b>	<b>BPO 10-2</b>	<b>BPO 10-4</b>	<b>BPO 11A</b>	<b>BPO 11B</b>
Recurring Operating Cost	\$ 3,064	\$ 3,014	3,014	2,950	2,950	3,061	2,965
Non-recurring Capital Investment	\$ 499	\$ 408	\$ 414	\$ 392	\$ 398	\$ 400	\$ 396
Non-recurring Periodic	13	17	\$ 17	\$ 12	\$ 12	\$ 17	\$ 12
<b>Total Net Present Cost</b>	<b>\$ 3,576</b>	<b>\$ 3,439</b>	<b>\$ 3,445</b>	<b>\$ 3,354</b>	<b>\$ 3,360</b>	<b>\$ 3,478</b>	<b>\$ 3,373</b>
Compared to BPO 1	N/A	\$ 50	\$ 50	\$ 114	\$ 114	\$ 3	\$ 99

The Net Present Cost (NPC) is the sum of the annual discounted expense for each BPO over the study period. Discounting allows the NPC for each BPO to be compared to the other BPOs for the study site. The NPC is the sum of the operating costs, the capital costs (both capital investments and periodic maintenance/replacement costs), and the considerations in discounted dollars. Capital costs are offset by reuse revenue and savings.

The NPC for the seven combined BPOs ranges from a high of \$3,576 million for BPO 1 to a low of \$3,354 million for BPO 10-2. This equals a range of 6.6 percent from high to low. BPOs 10-2 and 10-4 are the lowest NPC with about a \$6 million difference between the two BPOs. BPOs 10-2 and 10-4 show \$203-222 million savings from BPO 1. The NPC for BPOs 7-2 and BPOs 7-4 represent a savings of \$131-137 million from BPO 1. There is about a \$6 million difference between BPOs 7-2 and 7-4. The NPC for BPO 11A is about \$98 million less than BPO 1.



The recurring operating costs represent the majority, between 86 to 88 percent, of the NPC for each of the BPOs. BPO 1 has the highest operating cost, at \$3,064 million over the study period. BPOs 7-2 and 7-4 have identical operating costs. BPOs 10-2 and 10-4 have identical operating costs. These options have identical campus size changes and workload shifts.

Non-recurring capital costs include non-recurring investment costs, such as major renovation and/or new construction and non-recurring periodic maintenance/replacement costs. Non-recurring considerations (reuse, in-kind) include costs and/or revenues associated with the reuse of part of the facility. The timing of capital costs is based on the year in which obligations occur and therefore may differ from the capital plan which is based on schedule and construction duration.

With respect to the non-recurring capital investments, BPO 1 has the highest capital investment cost at \$499 million. Reuse is not considered in the baseline. The other BPOs have similar non-recurring capital investment costs, ranging from \$392 million to \$414 million. The reuse revenues have a material effect on the NPC of the capital costs and the total NPC. Non-recurring periodic maintenance/replacement costs range from \$12 to \$17 million for the seven BPOs. The differences in costs are a result of the timing of activation of the construction/renovation and the nature of the non-recurring periodic maintenance/replacement costs.

The table below presents a breakdown of the operating costs for each BPO categorized by direct fixed, indirect fixed and direct variable.

*Table 85: Operating Cost Breakdown by BPO (\$ in thousands)*

	BPO 1		BPO 7-2		BPO 7-4		BPO 10-2		BPO 10-4		BPO 11A		BPO 11B	
	\$ Millions	%	\$ Millions	%	\$ Millions	%	\$ Millions	%	\$ Millions	%	\$ Millions	%	\$ Millions	%
Direct Fixed	\$ 114	3.7%	\$ 113	3.7%	\$ 113	3.7%	\$ 105	3.6%	\$ 105	3.6%	\$ 112	3.7%	\$ 104	3.5%
Indirect Fixed	\$ 1,321	43.1%	\$ 1,273	42.2%	\$ 1,273	42.2%	\$ 1,222	41.4%	\$ 1,222	41.4%	\$ 1,321	43.2%	\$ 1,227	41.4%
Direct Variable	\$ 1,629	53.2%	\$ 1,628	54.0%	\$ 1,628	54.0%	\$ 1,623	55.0%	\$ 1,623	55.0%	\$ 1,628	53.2%	\$ 1,633	55.1%
<b>Total Operating Costs</b>	<b>\$ 3,064</b>	<b>100%</b>	<b>\$ 3,014</b>	<b>100%</b>	<b>\$ 3,014</b>	<b>100%</b>	<b>\$ 2,950</b>	<b>100%</b>	<b>\$ 2,950</b>	<b>100%</b>	<b>\$ 3,061</b>	<b>100%</b>	<b>\$ 2,965</b>	<b>100%</b>

All BPOs have similar operating costs that are within 96% and 100% of BPO 1. BPO 1 results in the highest building gross square feet while the other BPOs have similar building gross square feet. In addition, the location in which workload is performed is relatively similar in each option. Building gross square feet and workload are the major drivers of total operating costs. BPOs 10-2, 10-4 and 11B have slightly lower operating cost because for a period of 9 years inpatient psychiatry and nursing home services are assumed to be contracted out.

Operating costs for BPO 11A are higher than BPO 2&7 because BPO 11A includes the transfer of domiciliary from the Montrose to Castle Point campus. BPO 7-2 does not include the transfer of domiciliary between Montrose and Castle Point campuses. Indirect fixed costs associated with domiciliary are adjusted by different percentages for the two different BPOs. In BPO 7-2, domiciliary stays at the Montrose campus, where overall indirect fixed costs decrease due to the reduction in building footprint and workload. In BPO 11A, domiciliary is transferred to the Castle Point campus where overall indirect fixed costs increase due to the increase in building footprint and workload. This results in indirect fixed costs for domiciliary being higher for BPO 11A than BPO 7-2.

Direct variable costs (i.e., costs of direct patient care that vary directly and proportionately with fluctuations in workload, such as salaries of nurses and providers) account for the largest proportion (53-55%) of total operating costs. These costs fluctuate proportionately as the forecasted workload changes. As agreed in the assumptions, direct variable costs are not affected by efficiencies per study methodology.

Indirect fixed costs account for the second largest proportion (41-43%) of total operating costs. These represent costs not directly related to patient care, such as utilities and maintenance. Indirect fixed costs are adjusted during the study period based on changes in building gross square feet and changes in the overall size (acreage) of the campus.

Direct fixed costs represent a small proportion (3-4%) of the total operating costs. These are costs of direct patient care that do not vary in direct proportion to the volume of patient activity, such as depreciation of medical equipment and salaries of administrative personnel. Although direct fixed costs do not fluctuate in direct proportion to volume, etc., this does not mean that they do not change. Adjustments to direct fixed costs occur during the study period as workload changes (not in direct proportion).

### **BPO 1 - Baseline**

BPO 1, the baseline, is the option under which there would not be significant changes in either the location or type of services provided in the study site, other than those described in the Secretary's Decision. BPO 1 updates the existing facilities to modern, safe and secure standards through renovation of selected buildings required to house the necessary services. At Castle Point, existing buildings containing inpatient and outpatient services are renovated in phased renovations. New space is constructed to accommodate inpatient psychiatry and nursing home services which are relocated from Montrose to Castle Point in 2017. At Montrose, there are no changes to the programs except for nursing home and psychiatry (which under the Secretary's decision relocate to Castle Point.) Outpatient Mental Health, medical clinics, and residential treatment programs (domiciliary) services remain at Montrose.

Reuse is not considered in the baseline, however, some acreage as well as vacant buildings, may be considered for reuse at some point in the future.

### **Inputs and Assumptions**

The workload for BPO 1 is performed on the Montrose/Castle Point campus. The newly renovated facility is planned to meet the workload demand projection for 2023. No additional land purchases are required. A comprehensive description of financial assumptions can be found in a separate document entitled Stage II Assumptions, Inputs and Outputs.

## Outputs

### Net Present Cost (NPC)

The following table summarizes NPC, total operating costs, non-recurring capital investment costs (baseline option does not include reuse considerations), and non-recurring periodic maintenance costs for BPO 1.

*Table 86: BPO 1 Financial Summary Outputs (\$ in millions)*

<b>Costs</b>		<b>BPO 1</b>	
Total Recurring Operating Costs	\$	3,064	86%
Non-recurring Capital Investment	\$	499	14%
Non-Recurring Periodic Maintenance		13	0%
<b>Total Net Present Costs</b>	<b>\$</b>	<b>3,576</b>	<b>100%</b>

The Net Present Cost (NPC) is the sum of the annual discounted expense for each BPO over the study period. Discounting allows the NPC for each BPO to be compared to the other BPOs for the study site. The NPC is the sum of the operating costs, the capital costs (both capital investments and periodic maintenance/replacement costs), and the considerations in discounted dollars.

The NPC for BPO 1 is estimated at \$3,576 million for the study period. Higher operating costs (\$3,064 million) and higher capital investment (\$499 million) are the two primary factors driving the higher NPC for BPO 1 as compared to the other BPOs.

Generally, adjustments to the operating costs associated with providing healthcare (e.g., nursing salaries, utilities, etc.) over the study period have a much greater impact on NPC than any changes to capital expenditures. A reduction in operating costs is not as heavily reflected in BPO 1 because BPO 1 has the largest amount of building gross square feet for any of the combined options.

Capital investment costs, which include reuse considerations in the other BPOs, are higher for BPO 1, due to the extensive renovation required in BPO 1 and the lack of reuse proceeds. BPO 1 requires renovation of about 0.8 million building gross square feet in existing buildings. The use of existing buildings for services for which they were not originally designed and new design requirements, results in a requirement for more space and subsequently more space being renovated compared to the other BPOs.

The baseline assumption does not consider reuse of land or buildings. However, due to the configuration of the proposed BPO, portions of the site may be considered for reuse.

### Total Operating Costs

BPO 1's total operating costs of \$3,064 million are the largest cost within the overall NPC, accounting for approximately 86% of the NPC. As a percentage of total operating costs for the study period, direct variable, indirect fixed, and direct fixed costs account for 53% (\$1,629 million), 43% (\$1,321 million), and 4% (\$114 million) respectively. Demand for nursing home, residential rehabilitation and domiciliary services and primary care and related outpatient services are the services that drive total operating costs at Montrose/Castle Point (about 53%).

Direct variable costs fluctuate proportionately as the forecasted workload demand changes. As a percentage of operating costs by year over the 30-year study period, direct variable costs range from 50% to 55% of total operating costs per year. The percentage changes primarily because of a reduction in indirect fixed costs. As indirect fixed costs change and direct variable costs remain the same, direct variable costs change as a portion of total operating costs. Short-term contracting costs due to capacity constraints over the study period are reflected in direct variable costs. However, the need for short-term contracting at Montrose/Castle Point is minimal over the 2003 through 2033 study period in BPO 1.

Indirect fixed costs, i.e., costs not directly related to patient care, account for about 40% to 45% of total operating costs each year over the 2003 through 2033 period. Upon completion of the renovations, indirect fixed costs are adjusted to consider the change in costs that result from the change in Montrose/Castle Point's campus design. The Castle Point fixed indirect costs are adjusted to 129% of 2016 costs in 2017. The Montrose fixed indirect costs are adjusted to 92% of 2016 costs in 2017. Inpatient nursing home, inpatient psychiatric, and other VA mental health inpatient costs no longer exist at Montrose when those services are transferred to Castle Point in 2017. The combined campuses have about 304 acres of ground.

Direct fixed costs are costs of direct patient care that do not vary in direct proportion to the volume of patient activity. Direct fixed cost adjustments are incorporated each year based on changes in utilization. These costs account for about 4% of total operating costs for the 2003 through 2033 study period.

### **Capital Costs**

The total capital costs of \$499 million account for approximately 14% of the NPC. The non-recurring capital investment costs for BPO 1 are associated with updates to the existing facility to modern, safe and secure standards, where conditions allow, through renovation of selected buildings required to house the necessary services. The reuse revenues and savings are not available under the baseline to offset the capital investment costs.

The non-recurring capital investment costs are incurred between 2010 and 2016. Capital investment costs are incurred at the beginning of the construction phases. Activation costs (start-up equipment, furnishings, moving costs, etc) of 20% of new construction and renovation costs are assumed to occur in the last year of construction. BPO 1 requires renovation of approximately 0.8 million in building gross square feet and the new construction of approximately 0.25 million building gross square feet. The use of existing buildings for services, for which they were not designed, requires more space to be used and subsequently more space being renovated than the amount of new space required in the other BPOs.

There are periodic maintenance / replacement costs of \$13 million beginning in FY2030 through FY2033. These costs do not include maintenance/replacement costs for buildings that are not planned for use. Periodic maintenance and replacement costs are driven by the maintenance/replacement schedule (15, 25, 30 years) of major items or projects.

## **BPO 2 & BPO 7**

### ***Construct Replacement Facility at Castle Point and Construct New Residential Treatment Programs and Ambulatory Care Facility at Montrose (North Campus)***

BPO 7-2 is a combined BPO of BPO 7 at Castle Point and BPO 2 at Montrose. BPO 7 at Castle Point constructs a replacement facility on vacant land west of the existing buildings. The buildings accommodate all inpatient, ambulatory care, and nursing home services including services relocated from Montrose (inpatient psychiatry and nursing home.) In addition, inpatient spinal cord injury services are relocated to Bronx VAMC and outpatient spinal cord injury services remain on campus. Parking is improved and expanded. Water and sewage treatment capacity and fire station capability are maintained. All other buildings on the campus will be vacated. Parcels 1, 4, 7 and 8 and related buildings and infrastructure are available for reuse.

BPO 2 at Montrose places outpatient mental health, medical clinics, and residential treatment programs in new construction on the northeastern part of the campus. Most other existing buildings and infrastructure would be available for reuse opportunities. Parcels 1, 2, 3, 5, 6, and 7 and portions of parcel 4 are available for reuse.

## **Inputs and Assumptions**

The campuses are sized to meet the workload demand projection for 2023. A comprehensive description of financial assumptions can be found in a separate document entitled Stage II Assumptions, Inputs and Outputs. Inpatient psychiatric and nursing home services at Montrose are transferred to Castle Point in 2016.

## **Outputs**

### ***Net Present Cost (NPC)***

The table below summarizes NPC, total operating costs, non-recurring capital investment costs including reuse considerations, and non-recurring periodic maintenance costs for BPO 7-2.

Table 87: BPO 7-2 Financial Summary Outputs (\$ in millions)

<b>Costs</b>	<b>BPO 7-2</b>	
Total Recurring Operating Costs	\$ 3,014	88%
Non-recurring Capital Investment Offset by Re-use	\$ 408	12%
Non-Recurring Periodic Maintenance	\$ 17	0%
<b>Total Net Present Costs</b>	<b>\$ 3,439</b>	<b>100%</b>
<b>Operating Cost Efficiencies Compared to BPO 1</b>	<b>\$ 50</b>	

The Net Present Cost (NPC) is the sum of the annual discounted expense for each BPO over the 2003 through 2033 study period. Discounting allows the NPC for each BPO to be compared to the other BPOs for the study site. The NPC is the sum of the operating costs, the capital costs (both capital investments and periodic maintenance/replacement costs), and the considerations in discounted dollars.

The NPC for BPO 7-2 is estimated at \$3,439 million for the study period from 2003 to 2033. This is comprised of \$3,014 million (88%) in recurring operating costs, \$408 million (12%) in non-recurring capital investment costs (including reuse considerations) and \$17 million in non-recurring periodic maintenance/replacement costs.

BPO 7-2’s NPC of \$3,439 million is approximately \$137 million less than BPO 1, which represents about 4% in cost savings. The primary drivers of the cost savings are the \$50 million reduction in operating costs and \$91 million reduction in capital investment costs offset by reuse as compared to BPO 1. The lower operating costs of BPO 7-2 are due to operating efficiencies that are reflected in lower indirect fixed costs (maintenance, utilities, etc.) due to smaller, right-sized campuses.

Starting in 2010, capital investment dollars of \$408 million (including reuse considerations) are spent to build the new facilities. The capital costs for BPO 7-2 are approximately \$91 million less than BPO 1 due to almost all new construction and an offset for reuse considerations. This includes a 20% activation cost (moving costs, start-up equipment, furnishings, etc.) incurred in the final year of construction. Starting in 2029, \$17 million of periodic maintenance (nonrecurring capital costs) are spent to maintain the facility, based on the capital maintenance plan requirements. These costs represent less than 1% of the NPC.

### **Total Operating Costs**

Total operating costs for BPO 7-2, of \$3,014 million, are the largest cost within the overall NPC, accounting for about 88% of the NPC. As a percentage of total operating costs for the 2003 through 2033 study period, direct variable, indirect fixed, and direct fixed costs account for 54% (\$1,628 million), 42% (\$1,273 million), and 4% (\$113 million), respectively.

Direct variable costs fluctuate proportionately as the forecasted workload demand changes. The total direct variable costs of \$1,628 million for the study period are very similar for all of the BPOs. This is because the workload is constant and the costs to contract out, while lower than providing the services in-house, are not significantly so.

Indirect fixed costs (i.e., costs not directly related to patient care) account for about 42% of total operating costs over the 2003 through 2033 study period. Indirect fixed costs remain constant from 2003 until 2015. Upon completion of the construction in 2016, indirect fixed costs are

adjusted to consider the change in costs that result from the change in Montrose/Castle Point's campus design. The Castle Point fixed indirect costs are adjusted to 120% of 2015 costs in 2016. The Montrose fixed indirect costs are adjusted to 84% of 2015 costs in 2016. Inpatient nursing home, inpatient psychiatric, and other VA mental health inpatient costs no longer exist at Montrose when those services are transferred to Castle Point in 2016. The square footage changes from about 1.1 million to 0.9 million building gross square feet and the reduction in campus size from 304 to 59 acres. These two factors are the primary driver of the operating costs savings.

Direct fixed costs, i.e., costs of direct patient care which do not vary in direct proportion to the volume of patient activity, account for about 4% of total operating costs for the study period. The total direct fixed costs of \$113 million are relatively constant across all of the combined BPOs as those costs fluctuate based on workload.

### **Capital Costs**

The non-recurring capital investment costs for BPO 7-2 are associated with the construction and periodic maintenance/replacement costs on the campus for primarily new facilities. The non-recurring capital investment costs, which are offset by reuse considerations, are estimated to be \$408 million for construction and \$17 million for periodic maintenance/replacement. The reuse revenues have a material effect on the NPC of the capital costs, but not on the total NPC.

The construction costs are primarily incurred in 2010. Capital investment costs are incurred at the beginning of the construction phases. Periodic maintenance and replacement costs are driven by the maintenance/ replacement schedule (15, 25, 30 years) of major items or projects. The periodic maintenance/replacement costs of \$17 million start in FY2029, which begins 15 years after the activation of the new facility. The total net capital costs of \$408 million represent about 12% of the NPC.

### **BPO 4 & BPO 7**

***Construct Replacement Facility at Castle Point and Construct New Residential Treatment Programs and Construct New Residential Treatment Programs and Ambulatory Care Facility at Montrose South of Fire Station***

BPO 7-4 is a combined BPO of BPO 7 at Castle Point and BPO 4 at Montrose. BPO 7 at Castle Point constructs a replacement facility on vacant land west of the existing buildings. The buildings accommodate all inpatient, ambulatory care, and nursing home services including services relocated from Montrose (inpatient psychiatry and nursing home.) In addition, inpatient spinal cord injury services are relocated to Bronx VAMC and outpatient spinal cord injury services remain on campus. Parking is improved and expanded. Water and sewage treatment capacity and fire station capability are maintained. All other buildings on the campus will be vacated. Parcels 1, 4, 7 and 8 and related buildings and infrastructure are available for reuse.

BPO 4 at Montrose places outpatient mental health, medical clinics, and residential treatment programs in new construction south of the fire station on the site of Buildings 13 and 14. Buildings 12, 13, 14 and 15 will be demolished to provide the necessary space for the new facilities. All other existing buildings and infrastructure would be available for reuse opportunities. Parcels 1, 2, 4, 5, 6, & 7 and portions of parcel 3 are available for reuse.

## Inputs and Assumptions

The campuses are sized to meet the workload demand projection for 2023. A comprehensive description of financial assumptions can be found in a separate document entitled Stage II Assumptions, Inputs and Outputs. Inpatient psychiatric and nursing home services at Montrose are transferred to Castle Point in 2016.

## Outputs

### *Net Present Cost (NPC)*

The table below summarizes NPC, total operating costs, non-recurring capital investment costs including reuse considerations, and non-recurring periodic maintenance costs for BPO 7-4.

*Table 88: BPO 7-4 Financial Summary Outputs (\$ in millions)*

<b>Costs</b>	<b>BPO 7-4</b>
Total Recurring Operating Costs	3,014
Non-Recurring Capital Investment Offset by Re-use	414
Non-Recurring Periodic Maintenance	17
<b>Total Net Present Costs</b>	<b>\$ 3,445</b>
Operating Cost Efficiencies Compared to BPO 1	\$ 50

The Net Present Cost (NPC) is the sum of the annual discounted expense for each BPO over the 2003 through 2033 study period. Discounting allows the NPC for each BPO to be compared to the other BPOs for the study site. The NPC is the sum of the operating costs, the capital costs (both capital investments and periodic maintenance/replacement costs), and the considerations in discounted dollars.

The NPC for BPO 7-4 is estimated at \$3,445 million for the study period from 2003 to 2033. This is comprised of \$3,014 million (87%) in recurring operating costs, \$414 million (12%) in non-recurring capital investment costs (including reuse considerations) and \$17 million in non-recurring periodic maintenance/replacement costs.

BPO 7-4's NPC of \$3,445 million is approximately \$131 million less than BPO 1, which represents about 4% in cost savings. The primary drivers of the cost savings are the \$50 million reduction in operating costs and \$85 million reduction in capital investment costs offset by reuse as compared to BPO 1. The lower operating costs of BPO 7-4 are due to operating efficiencies that are reflected in lower indirect fixed costs (maintenance, utilities, etc.) due to smaller, right-sized campuses.

Starting in 2010, capital investment dollars of \$414 million (including reuse considerations) are spent to build the new facilities. The capital costs for BPO 7-4 are approximately \$85 million less than BPO 1 due to almost all new construction and an offset for reuse considerations. This includes a 20% activation cost (moving costs, start-up equipment, furnishings, etc.) incurred in the final year of construction. Starting in 2029, \$17 million of periodic maintenance (nonrecurring capital costs) are spent to maintain the facility, based on the capital maintenance plan requirements. These costs represent less than 1% of the NPC.



## **Total Operating Costs**

Total operating costs for BPO 7-4, of of \$3,014 million, are the largest cost within the overall NPC, accounting for about 88% of the NPC. As a percentage of total operating costs for the 2003 through 2033 study period, direct variable, indirect fixed, and direct fixed costs account for 54% (\$1,628 million), 42% (\$1,273 million), and 4% (\$113 million), respectively.

Direct variable costs fluctuate proportionately as the forecasted workload demand changes. The total direct variable costs of \$1,628 million for the study period are very similar for all of the BPOs. This is because the workload is constant and the costs to contract out, while lower than providing the services in-house, are not significantly so.

Indirect fixed costs (i.e., costs not directly related to patient care) account for about 42% of total operating costs over the 2003 through 2033 study period. Indirect fixed costs remain constant from 2003 until 2015. Upon completion of the construction in 2015, indirect fixed costs are adjusted to consider the change in costs that result from the change in Montrose/Castle Point's campus design. The Castle Point fixed indirect costs are adjusted to 120% of 2015 costs in 2016. The Montrose fixed indirect costs are adjusted to 84% of 2015 costs in 2016. Inpatient nursing home, inpatient psychiatric, and other VA mental health inpatient costs no longer exist at Montrose when those services are transferred to Castle Point in 2016. The square footage changes from about 1.1 million to 0.9 million building gross square feet and the reduction in campus size from 304 to 51 acres. These two factors are the primary driver of the operating costs savings.

Direct fixed costs, i.e., costs of direct patient care which do not vary in direct proportion to the volume of patient activity, account for about 4% of total operating costs for the study period. The total direct fixed costs of \$113 million are relatively constant across all of the combined BPOs as those costs fluctuate based on workload.

## **Capital Costs**

The non-recurring capital investment costs for BPO 7-4 are associated with the construction and periodic maintenance/replacement costs on the campus for primarily new facilities. The non-recurring capital investment costs, which are offset by reuse considerations, are estimated to be \$414 million for construction and \$17 million for periodic maintenance/replacement. The reuse revenues have a material effect on the NPC of the capital costs, but not on the total NPC.

The construction costs are primarily incurred in 2010. Capital investment costs are incurred at the beginning of the construction phases. Periodic maintenance and replacement costs are driven by the maintenance/ replacement schedule (15, 25, 30 years) of major items or projects. The periodic maintenance/replacement costs of \$17 million start in FY2029, which begins 15 years after the activation of the new facility. The total net capital costs of \$414 million represent about 12% of the NPC.

## **BPO 2 & BPO 10**

### ***Build New Nursing Home and Renovate Existing Facility at Castle Point and Construct New Residential Treatment Programs and Ambulatory Care Facility at Montrose (North Campus)***

BPO 10-2 is a combined BPO of BPO 10 at Castle Point and BPO 2 at Montrose. In BPO 10 at Castle Point all current services remain on campus with the exception of inpatient spinal cord injury services (which are relocated to Bronx VAMC.) Outpatient spinal cord injury services remain on campus. In addition, a replacement nursing home is built to accommodate existing Castle Point services and those nursing home beds relocated from Montrose. In addition, buildings will be renovated to accommodate existing Castle Point inpatient and ambulatory care services and inpatient psychiatry transferred from Montrose. Parcels 4, 7 and 8, portions of parcel 3 and related buildings and infrastructure are available for reuse.

BPO 2 at Montrose places outpatient mental health, medical clinics, and residential treatment programs in new construction on the northeastern part of the campus. Most other existing buildings and infrastructure (including the water distribution system and waste water treatment plant) would be available for reuse opportunities. Parcels 1, 2, 3, 5, 6, & 7 and portions of parcel 4 are available for reuse.

## **Inputs and Assumptions**

The campuses are sized to meet the workload demand projection for 2023. A comprehensive description of financial assumptions can be found in a separate document entitled Stage II Assumptions, Inputs and Outputs. Inpatient psychiatric and nursing home services at Montrose are contracted out to the community starting in 2015 until the facilities at Castle Point are ready in 2024.

## Outputs

### *Net Present Cost (NPC)*

The table below summarizes NPC, total operating costs, non-recurring capital investment costs including reuse considerations, and non-recurring periodic maintenance costs for BPO 10-2.

*Table 89: BPO 10-2 Financial Summary Outputs (\$ in millions)*

<b>Costs</b>	<b>BPO 10-2</b>
Total Recurring Operating Costs	2,950
Non-Recurring Capital Investment Offset by Re-use	392
Non-Recurring Periodic Maintenance	12
<b>Total Net Present Costs</b>	<b>\$ 3,354</b>
<b>Operating Cost Efficiencies Compared to BPO 1</b>	<b>\$ 114</b>

The Net Present Cost (NPC) is the sum of the annual discounted expense for each BPO over the 2003 through 2033 study period. Discounting allows the NPC for each BPO to be compared to the other BPOs for the study site. The NPC is the sum of the operating costs, the capital costs (both capital investments and periodic maintenance/replacement costs), and the considerations in discounted dollars.

The NPC for BPO 10-2 is estimated at \$3,354 million for the study period from 2003 to 2033. This is comprised of \$2,950 million (88%) in recurring operating costs, \$392 million (12%) in non-recurring capital investment costs (including reuse considerations) and \$12 million in non-recurring periodic maintenance/replacement costs.

BPO 10-2's NPC of \$3,354 million is approximately \$222 million less than BPO 1, which represents about 6% in cost savings. The primary drivers of the cost savings are the \$114 million reduction in operating costs and \$107 million reduction in capital investment costs offset by reuse as compared to BPO 1. The lower operating costs of BPO 10-2 are due to operating efficiencies that are reflected in lower indirect fixed costs (maintenance, utilities, etc.) due to smaller, right-sized campuses.

Starting in 2010, capital investment dollars of \$392 million (including reuse considerations) are spent to build the new facilities and renovate selected buildings. BPO 10-2's capital costs are approximately \$107 million less than BPO 1. This is due to the amount of new construction versus amount of renovation and the resultant lower amount of building gross square feet required. It also results from the offset for reuse considerations. The construction and renovation costs include a 20% activation cost (moving costs, start-up equipment, furnishings, etc.) incurred in the final year of construction. In 2029, \$12 million of periodic maintenance (nonrecurring capital costs) are spent to maintain the facility, which would then be 15 years old. These costs represent less than 1% of the NPC.

### **Total Operating Costs**

BPO 10-2's total operating costs of \$2,950 million are the largest cost within the overall NPC, accounting for about 88% of the NPC. As a percentage of total operating costs for the 2003 through 2033 study period, direct variable, indirect fixed, and direct fixed costs account for 55% (\$1,623 million), 41% (\$1,222 million), and 4% (\$105 million), respectively.

Direct variable costs fluctuate proportionately as the forecasted workload demand changes. The total direct variable costs of \$1,623 million for the study period are very similar for all of the BPOs. This is because the workload is constant and there is little difference in the cost to contract out versus providing inpatient nursing home, inpatient psychiatry and other VA mental health services.

Indirect fixed costs (i.e., costs not directly related to patient care) account for about 41% of total operating costs over the 2003 through 2033 study period. Indirect fixed costs remain constant from 2003 until 2014. Upon completion of the construction in 2015, indirect fixed costs are adjusted to consider the change in costs that result from the change in Montrose/Castle Point's campus design and the need to contract out. The Montrose fixed indirect costs are adjusted to 84% of 2014 costs in 2015. Inpatient nursing home, inpatient psychiatric, and other VA mental health inpatient costs no longer exist at Montrose in 2015. Because of the construction schedule at Castle Point, the workload transferring from Montrose to Castle Point will need to be contracted from the community from 2015 through 2023. The Castle Point fixed indirect costs are adjusted to 123% of 2023 costs in 2024 when these services are brought back in house. The square footage changes from about 1.1 million to 0.9 million building gross square feet and the reduction in campus size from 304 to 80 acres. These factors are the primary driver of the operating costs savings.

Direct fixed costs, i.e., costs of direct patient care which do not vary in direct proportion to the volume of patient activity, account for about 4% of total operating costs for the study period. The total direct fixed costs of \$105 million are similar for all of the combined BPOs as those costs fluctuate based on workload.

### **Capital Costs**

The non-recurring capital investment costs for BPO 10-2 are associated with the construction and periodic maintenance/replacement costs of the two campuses. The non-recurring capital investment costs, which are offset by reuse considerations, are estimated to be \$392 million for construction and \$12 million for periodic maintenance/replacement. The reuse revenues have a material effect on the NPC of the capital costs, but not on the total NPC.

The construction costs are primarily incurred in 2010. Capital investment costs are incurred at the beginning of the construction phases. There is about 0.7 million building gross square feet of new construction and 0.3 million building gross square feet of renovated building gross square feet. Periodic maintenance and replacement costs are driven by the maintenance/ replacement schedule (15, 25, 30 years) of major items or projects. The periodic maintenance/replacement costs of \$12 million are incurred in FY2029, which begins 15 years after the activation of the new facility. The total net capital costs of \$404 million represent about 12% of the NPC.

## **BPO 4 & BPO 10**

### ***Build New Nursing Home and Renovate Existing Facility at Castle Point and Construct New Residential Treatment Programs and Ambulatory Care Facility at Montrose South of Fire Station***

BPO 10-4 is a combined BPO of BPO 10 at Castle Point and BPO 4 at Montrose. In BPO 10 at Castle Point all current services remain on campus with the exception of inpatient spinal cord injury services (which are relocated to Bronx VAMC.) Outpatient spinal cord injury services remain on campus. In addition, a replacement nursing home is built to accommodate existing Castle Point services and those nursing home beds relocated from Montrose. In addition, buildings will be renovated to accommodate existing Castle Point inpatient and ambulatory care services and inpatient psychiatry transferred from Montrose. Parcels 4, 7 and 8, portions of parcel 3 and related buildings and infrastructure are available for reuse.

BPO 4 at Montrose places outpatient mental health, medical clinics, and residential treatment programs in new construction south of the fire station on the site of Buildings 13 and 14. Buildings 12, 13, 14 and 15 will be demolished to provide the necessary space for the new facilities. All other existing buildings and infrastructure (including the water distribution system and waste water treatment plant) would be available for reuse opportunities. Parcels 1, 2, 4, 5, 6, & 7 and portions of parcel 3 are available for reuse.

## **Inputs and Assumptions**

The campuses are sized to meet the workload demand projection for 2023. A comprehensive description of financial assumptions can be found in a separate document entitled Stage II Assumptions, Inputs and Outputs. Inpatient psychiatric and nursing home services at Montrose are contracted out to the community starting in 2015 until the facilities at Castle Point are ready in 2024.

## **Outputs**

### ***Net Present Cost (NPC)***

The table below summarizes NPC, total operating costs, non-recurring capital investment costs including reuse considerations, and non-recurring periodic maintenance costs for BPO 10-4.

*Table 90: BPO 10-4 Financial Summary Outputs (\$ in millions)*

<b>Costs</b>	<b>BPO 10-4</b>
Total Recurring Operating Costs	2,950
Non-Recurring Capital Investment Offset by Re-use	398
Non-Recurring Periodic Maintenance	12
<b>Total Net Present Costs</b>	<b>\$ 3,360</b>
<b>Operating Cost Efficiencies Compared to BPO 1</b>	<b>\$ 114</b>

The Net Present Cost (NPC) is the sum of the annual discounted expense for each BPO over the 2003 through 2033 study period. Discounting allows the NPC for each BPO to be compared to the other BPOs for the study site. The NPC is the sum of the operating costs, the capital costs (both capital investments and periodic maintenance/replacement costs), and the considerations in discounted dollars.

The NPC for BPO 10-4 is estimated at \$3,360 million for the study period from 2003 to 2033. This is comprised of \$2,950 million (88%) in recurring operating costs, \$398 million (12%) in non-recurring capital investment costs (including reuse considerations) and \$12 million in non-recurring periodic maintenance/replacement costs.

BPO 10-4's NPC of \$3,360 million is approximately \$216 million less than BPO 1, which represents about 6% in cost savings. The primary drivers of the cost savings are the \$114 million reduction in operating costs and \$103 million reduction in capital investment costs offset by reuse as compared to BPO 1. The lower operating costs of BPO 10-4 are due to operating efficiencies that are reflected in lower indirect fixed costs (maintenance, utilities, etc.) due to smaller, right-sized campuses.

Starting in 2010, capital investment dollars of \$398 million (including reuse considerations) are spent to build the new facilities and renovate selected buildings. BPO 10-4's capital costs are approximately \$107 million less than BPO 1. This is due to the amount of new construction versus amount of renovation and the resultant lower amount of building gross square feet required. It also results from the offset for reuse considerations. The construction and renovation costs include a 20% activation cost (moving costs, start-up equipment, furnishings, etc.) incurred in the final year of construction. In 2029, \$12 million of periodic maintenance (nonrecurring capital costs) are spent to maintain the facility, which would then be 15 years old. These costs represent less than 1% of the NPC.

### **Total Operating Costs**

BPO 10-4's total operating costs of \$2,950 million are the largest cost within the overall NPC, accounting for about 88% of the NPC. As a percentage of total operating costs for the 2003 through 2033 study period, direct variable, indirect fixed, and direct fixed costs account for 55% (\$1,623 million), 41% (\$1,222 million), and 4% (\$105 million), respectively.

Direct variable costs fluctuate proportionately as the forecasted workload demand changes. The total direct variable costs of \$1,623 million for the study period are very similar for all of the BPOs. This is because the workload is constant and there is little difference in the cost to contract out versus providing inpatient nursing home, inpatient psychiatry and other VA mental health services.

Indirect fixed costs (i.e., costs not directly related to patient care) account for about 41% of total operating costs over the 2003 through 2033 study period. Indirect fixed costs remain constant from 2003 until 2014. Upon completion of the construction in 2015, indirect fixed costs are adjusted to consider the change in costs that result from the change in Montrose/Castle Point's campus design and the need to contract out. The Montrose fixed indirect costs are adjusted to 84% of 2014 costs in 2015. Inpatient nursing home, inpatient psychiatric, and other VA mental health inpatient costs no longer exist at Montrose in 2015. Because of the construction schedule at Castle Point, the workload transferring from Montrose to Castle Point will need to be contracted from the community from 2015 through 2023. The Castle Point fixed indirect costs are adjusted to 123% of 2023 costs in 2024 when these services are brought back in house. The square footage changes from about 1.1 million to 0.9 million building gross square feet and the reduction in campus size from 304 to 72 acres. These factors are the primary driver of the operating costs savings.

Direct fixed costs, i.e., costs of direct patient care which do not vary in direct proportion to the volume of patient activity, account for about 4% of total operating costs for the study period. The total direct fixed costs of \$105 million are similar for all of the combined BPOs as those costs fluctuate based on workload.

### **Capital Costs**

The non-recurring capital investment costs for BPO 10-4 are associated with the construction and periodic maintenance/replacement costs of the two campuses. The non-recurring capital investment costs, which are offset by reuse considerations, are estimated to be \$398 million for construction and \$12 million for periodic maintenance/replacement. The reuse revenues have a material effect on the NPC of the capital costs, but not on the total NPC.

The construction costs are primarily incurred in 2010. Capital investment costs are incurred at the beginning of the construction phases. There is about 0.7 million building gross square feet of new construction and 0.3 million building gross square feet of renovated building gross square feet. Periodic maintenance and replacement costs are driven by the maintenance/ replacement schedule (15, 25, 30 years) of major items or projects. The periodic maintenance/replacement costs of \$12 million are incurred in FY2029, which begins 15 years after the activation of the new facility. The total net capital costs of \$404 million represent about 12% of the NPC.

## **BPO 11A**

### ***Construct Replacement Facility at Castle Point, Relocate Montrose Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building at Montrose***

At Castle Point (similar to BPO 7), a replacement facility on vacant land is constructed. In addition, all inpatient, ambulatory care, and nursing home services including services relocated from Montrose (inpatient psychiatry, nursing home and residential treatment programs) are accommodated. At Montrose, a new building for ambulatory care services is constructed. All other services (inpatient psychiatry, other VA mental health, nursing home and residential treatment programs) are relocated to Castle Point. Inpatient spinal cord injury services are relocated to the Bronx VAMC while outpatient spinal cord injury services remain at Montrose. At Castle Point, parcels 1, 4, 7, and 8 and the related buildings and infrastructure are available for reuse. At Montrose, parcels 1, 2, 3, 5, 6, and 7 and portions of parcel 4 and related buildings and infrastructure are available for reuse.

## **Inputs and Assumptions**

The campuses are sized to meet the workload demand projection for 2023. A comprehensive description of financial assumptions can be found in a separate document entitled Stage II Assumptions, Inputs and Outputs. Inpatient psychiatric, nursing home and residential rehabilitation and domiciliary services at Montrose are transferred to Castle Point in 2016.

## **Outputs**

### ***Net Present Cost (NPC)***

The following table summarizes NPC, total operating costs, non-recurring capital investment costs including reuse considerations, and non-recurring periodic maintenance costs for BPO 11A.

*Table 91: BPO 11A Financial Summary Outputs (\$ in millions)*

<b><u>Costs</u></b>	<b><u>BPO 11A</u></b>
Total Recurring Operating Costs	3,061
Non-Recurring Capital Investment Offset by Re-use	400
Non-Recurring Periodic Maintenance	17
<b>Total Net Present Costs</b>	<b>\$ 3,478</b>
Operating Cost Efficiencies Compared to BPO 1	\$ 3

The Net Present Cost (NPC) is the sum of the annual discounted expense for each BPO over the 2003 through 2033 study period. Discounting allows the NPC for each BPO to be compared to the other BPOs for the study site. The NPC is the sum of the operating costs, the capital costs (both capital investments and periodic maintenance/replacement costs), and the considerations in discounted dollars.

The NPC for BPO 11A is estimated at \$3,478 million for the study period from 2003 to 2033. This is comprised of \$3,061 million (88%) in recurring operating costs, \$400 million (12%) in non-recurring capital investment costs (including reuse considerations) and \$17 million in non-recurring periodic maintenance/replacement costs.



BPO 11A's NPC of \$3,478 million is approximately \$98 million less than BPO 1, which represents about 3% in cost savings. The primary drivers of the cost savings are the \$3 million reduction in operating costs and \$99 million reduction in capital investment costs offset by reuse as compared to BPO 1. The lower costs of BPO 11A are due to lower capital investment costs.

Starting in 2010, capital investment dollars of \$400 million (including reuse considerations) are spent to build the new facilities and renovate selected buildings. BPO 11A's capital costs are approximately \$99 million less than BPO 1 due to the amount of new construction versus renovation and the resultant lower amount of required building gross square feet as well as the offset for reuse considerations. The construction and renovation costs include a 20% activation cost (moving costs, start-up equipment, furnishings, etc.) incurred in the final year of construction. In 2029 and 2030, a total of \$17 million of periodic maintenance (nonrecurring capital costs) are spent to maintain the facility, which would then be 15 years old. These costs represent less than 1% of the NPC.

### **Total Operating Costs**

BPO 11A's total operating costs of \$3,061 million are the largest cost within the overall NPC, accounting for about 88% of the NPC. As a percentage of total operating costs for the 2003 through 2033 study period, direct variable, indirect fixed, and direct fixed costs account for 53% (\$1,628 million), 43% (\$1,321 million), and 4% (\$112 million), respectively.

Direct variable costs fluctuate proportionately as the forecasted workload demand changes. The total direct variable costs of \$1,628 million for the study period are very similar for all of the BPOs. This is because the workload is constant and there is little difference in cost as to whether services are provided directly by the VA or contracted to the community.

Indirect fixed costs (i.e., costs not directly related to patient care) account for 43% of total operating costs over the 2003 through 2033 study period. Indirect fixed costs remain constant from 2003 until 2016. Upon completion of the construction in 2015, indirect fixed costs are adjusted to consider the change in costs that result from the smaller campus design, both facilities and acreage. Indirect fixed costs fall to 72% of 2015 values. Indirect fixed cost adjustments are driven by a drop in square footage from 1.1 million to about 0.9 million sq ft, and the reduction in campus size from 304 to 59 acres. These two factors are the primary drivers of the operating costs savings.

Direct fixed costs, i.e., costs of direct patient care which do not vary in direct proportion to the volume of patient activity, account for about 4% of total operating costs for the study period. The total direct fixed costs of \$112 million are similar for all of the combined BPOs as those costs fluctuate based on workload.

### **Capital Costs**

The non-recurring capital investment costs for BPO 11A are associated with the construction and periodic maintenance/replacement costs of the two campuses. The non-recurring capital investment costs, which are offset by reuse considerations, are estimated to be \$400 million for

construction and \$17 million for periodic maintenance/replacement. The reuse revenues have a material effect on the NPC of the capital costs, but not on the total NPC.

The construction costs are primarily incurred in 2010. Capital investment costs are incurred at the beginning of the construction phases. There is about 0.9 million building gross square feet of new construction and less than 0.1 million building gross square feet of renovated building gross square feet. Periodic maintenance and replacement costs are driven by the maintenance/replacement schedule (15, 25, 30 years) of major items or projects. The periodic maintenance/replacement costs of \$17 million are incurred in FY2029 and 2030, which begins 15 years after the activation of the new facility. The total net capital costs of \$400 million represent about 12% of the NPC.

### **BPO 11B**

#### ***Renovate Existing Facilities and Build New Nursing Home at Castle Point, Relocate Montrose Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building at Montrose***

At Castle Point (similar to BPO 10), a replacement nursing home is built to accommodate the existing Castle Point services and those nursing home beds relocated from Montrose. In addition, buildings are renovated to accommodate existing Castle Point inpatient and ambulatory care services and inpatient psychiatry. Inpatient residential treatment programs transferred from Montrose are also accommodated. All current services at Castle Point remain on campus with the exception of inpatient spinal cord injury services (which are relocated to Bronx VAMC.) At Montrose a new building for ambulatory care services is constructed. All other services (inpatient psychiatry, other VA mental health, nursing home and residential treatment programs) are relocated to Castle Point. At Castle Point, parcels 4, 7, 8 and portions parcel 3 and the related buildings and infrastructure are available for reuse. At Montrose, parcels 1, 2, 3, 5, 6, and 7 and portions of parcel 4 and related buildings and infrastructure are available for reuse.

### **Inputs and Assumptions**

The campuses are sized to meet the workload demand projection for 2023. A comprehensive description of financial assumptions can be found in a separate document entitled Stage II Assumptions, Inputs and Outputs. Inpatient psychiatric, other VA mental health, nursing home and residential rehabilitation and domiciliary services at Montrose are transferred to Castle Point in 2016.

## Outputs

### *Net Present Cost (NPC)*

The table below summarizes NPC, total operating costs, non-recurring capital investment costs including reuse considerations, and non-recurring periodic maintenance costs for BPO 11B.

*Table 92: BPO 11B Financial Summary Outputs (\$ in millions)*

<b>Costs</b>	<b>BPO 11B</b>
Total Recurring Operating Costs	2,965
Non-Recurring Capital Investment Offset by Re-use	396
Non-Recurring Periodic Maintenance	12
<b>Total Net Present Costs</b>	<b>\$ 3,373</b>
Operating Cost Efficiencies Compared to BPO 1	\$ 99

The Net Present Cost (NPC) is the sum of the annual discounted expense for each BPO over the 2003 through 2033 study period. Discounting allows the NPC for each BPO to be compared to the other BPOs for the study site. The NPC is the sum of the operating costs, the capital costs (both capital investments and periodic maintenance/replacement costs), and the considerations in discounted dollars.

The NPC for BPO 11B is estimated at \$3,373 million for the study period from 2003 to 2033. This is comprised of \$2,965 million (88%) in recurring operating costs, \$396 million (12%) in non-recurring capital investment costs (including reuse considerations) and \$12 million in non-recurring periodic maintenance/replacement costs.

BPO 11B's NPC of \$3,373 million is approximately \$203 million less than BPO 1, which represents about 6% in cost savings. The primary drivers of the cost savings are the \$99 million reduction in operating costs and \$103 million reduction in capital investment costs offset by reuse as compared to BPO 1. The lower costs of BPO 11B are due to lower capital investment costs and operating efficiencies that are reflected in lower indirect fixed costs (maintenance, utilities, etc.) due to smaller, right-sized campuses.

Starting in 2010, capital investment dollars of \$396 million (including reuse considerations) are spent to build the new facilities and renovate selected buildings. BPO 11B's capital costs are approximately \$103 million less than BPO 1 due to the amount of new construction versus renovation and the resultant lower amount of required building gross square feet as well as the offset for reuse considerations. The construction and renovation costs include a 20% activation cost (moving costs, start-up equipment, furnishings, etc.) incurred in the final year of construction. Starting in 2028, a total of \$12 million of periodic maintenance (nonrecurring capital costs) are spent to maintain the facility, which would then be 15 years old. These costs represent less than 1% of the NPC.

### **Total Operating Costs**

BPO 11B's total operating costs of \$2,965 million are the largest cost within the overall NPC, accounting for about 88% of the NPC. As a percentage of total operating costs for the 2003 through 2033 study period, direct variable, indirect fixed, and direct fixed costs account for 55% (\$1,633 million), 41% (\$1,227 million), and 4% (\$104 million), respectively.

Direct variable costs fluctuate proportionately as the forecasted workload demand changes. The total direct variable costs of \$1,633 million for the study period are very similar for all of the BPOs. This is because the workload is constant and there is little difference in cost as to whether services are provided directly by the VA or contracted to the community.

Indirect fixed costs (i.e., costs not directly related to patient care) account for 41% of total operating costs over the 2003 through 2033 study period. Indirect fixed costs remain constant from 2003 until 2015. In 2015, patient demand from Montrose for inpatient nursing home, psychiatry, other VA mental health, and residential rehabilitation and domiciliary services are contracted out until the facilities are finished at Castle Point in 2024. In 2015, indirect fixed costs are assumed to be adjusted to consider the change in costs that result from the smaller campus design, both facilities and acreage. Indirect fixed costs at Montrose fall to 72% of 2015 values. Indirect fixed costs at Castle Point increase to 133% of 2023 costs in 2024 when the services from Montrose are brought in house at Castle Point. Indirect fixed cost adjustments are driven by a drop in square footage from 1.1 million to about 0.9 million sq ft, and the reduction in campus size from 304 to 80 acres. These two factors are the primary drivers of the operating costs savings.

Direct fixed costs, i.e., costs of direct patient care which do not vary in direct proportion to the volume of patient activity, account for about 4% of total operating costs for the study period. The total direct fixed costs of \$104 million are similar for all of the combined BPOs as those costs fluctuate based on workload.

### **Capital Costs**

The non-recurring capital investment costs for BPO 11B are associated with the construction and periodic maintenance/replacement costs of the two campuses. The non-recurring capital investment costs, which are offset by reuse considerations, are estimated to be \$396 million for construction and \$12 million for periodic maintenance/replacement. The reuse revenues have a material effect on the NPC of the capital costs, but not on the total NPC.

The construction costs are primarily incurred in 2010 and 2012. Capital investment costs are incurred at the beginning of the construction phases. There is about 0.66 million building gross square feet of new construction and about 0.26 million building gross square feet of renovated building gross square feet. Periodic maintenance and replacement costs are driven by the maintenance/ replacement schedule (15, 25, 30 years) of major items or projects. The periodic maintenance/replacement costs of \$12 million are incurred starting in FY2028, which begins 15 years after the activation of the new facility. The total net capital costs of \$396 million represent about 12% of the NPC.

## Sensitivity Analysis

A sensitivity analysis, based on the outputs of the financial analysis, was performed for each of the Stage II BPOs for the Montrose/Castle Point Study. A sensitivity analysis is a procedure performed to determine the sensitivity of the outcomes of a BPO. For example, if a small change in a factor, such as escalation rates, results in relatively large changes in the outcomes, the outcomes are said to be sensitive to that factor. This section first describes key factors of the sensitivity analysis at Montrose/Castle Point, followed by a discussion of the financial outputs associated with each factor.

### Key Factors for Montrose/Castle Point

The following key factors were considered in the sensitivity analysis for each BPO at Montrose/Castle Point. These factors were selected based on the outputs from the financial analysis and the discussions conducted during the Independent Review Panel. Whereas historic building considerations were a factor in other CARES study sites, they did not impact the implementation schedules of the Montrose/ Castle Point BPOs and were not included in the sensitivity analysis.

- Capital investment escalation rates – a change in capital investment escalation rates from 4% to 6.5% which was selected based on the last two years of construction cost history from RSMean, a cost estimating organization
- Variable costs efficiencies related to recurring operating costs based on 2% for renovation and 4% for new construction
- Services are maintained at Montrose Campus until new Castle Point facilities are constructed. This avoids the need to contract out services to the community while new Castle Point facilities are constructed.

### *Capital Investment Escalation Rates*

The following shows the sensitivity of the BPOs to the capital investment escalation rates used for each BPO. In this analysis the assumption for capital investment costs are increased to 6.5% per year instead of 4.0%. The reason for this sensitivity analysis is to identify the sensitivity the individual BPOs have to the escalation rate for construction. Recently, construction rates have increased at a higher rate than expected. Therefore, this sensitivity analysis provides insight into what happens to a BPO if this trend continues.

*Table 93: BPO Comparison for Capital Investment Escalation Factor (\$ in millions)*

BPO Comparison							
2003 Net Present Dollars (\$ Millions)							
Reflects 2003-2033							
	BPO 1	BPO 7-2	BPO 7-4	BP0 10-2	BPO 10-4	BPO 11A	BPO 11B
Total Net Present Cost	\$ 3,576	\$ 3,439	\$ 3,445	\$ 3,354	\$ 3,360	\$ 3,478	\$ 3,373
Total Net Present Cost Modified for Construction Escalation	\$ 3,704	\$ 3,518	\$ 3,524	\$ 3,456	\$ 3,462	\$ 3,555	\$ 3,477

As shown, the NPC increases for all BPOs. The overall increase is between 2.2 and 3.6%, depending on the BPO, when comparing the 4.0% to 6.5% capital investment escalation assumption. The changes in net present cost are driven by the timing of the investment and the

construction cost estimate. The BPOs remain in the same order from most expensive to least expensive, i.e., BPO 1 being the most expensive and BPOs 10-2 and 10-4 being the least expensive.

### ***Variable Cost Efficiencies***

Variable costs comprise about 54% of total operating costs for the Montrose/ Castle Point study. Variable costs were only subject to changes arising from workload in the financial analysis. Generally, it is anticipated that efficiencies in these variable costs are gained as a result of renovation and new construction. These efficiencies relate to buildings and functions being in closer proximity to each other, facilities built to provide state of the art medical care, and other enhancements such as technological improvements and private inpatient rooms. The following shows the results of the sensitivity analysis. The assumptions are that operating efficiencies of 2% and 4% are realized for renovations and new construction, respectively.

*Table 94: BPO Comparison for Variable Cost Efficiencies Factor (\$ in millions)*

<b>BPO Comparison</b>							
<small>2003 Net Present Dollars (\$Millions) Reflects 2003-2033</small>							
	<b>BPO 1</b>	<b>BPO 7-2</b>	<b>BPO 7-4</b>	<b>BPO 10-2</b>	<b>BPO 10-4</b>	<b>BPO 11A</b>	<b>BPO 11B</b>
<b>Total Net Present Cost</b>	\$ 3,576	\$ 3,439	\$ 3,445	\$ 3,354	\$ 3,360	\$ 3,478	\$ 3,373
<b>Total Net Present Cost Modified for Operating Efficiencies</b>	\$ 3,567	\$ 3,429	\$ 3,435	\$ 3,348	\$ 3,353	\$ 3,468	\$ 3,367

As shown, the savings that result from the operating efficiencies range from about \$6 to \$10 million in NPC. Efficiencies occur in each of the options. BPOs 7-2, 7-4, and BPO 11A have the greatest savings of \$10 million, followed by BPO 1 with savings of about \$9 million. BPOs 10-2 and BPO 11B have the lowest savings of about \$6 million. The savings for each BPO are limited to the timeframe after which activation of the facility has occurred through 2033. The fact that the savings occur in the later years reduces the amount of the savings in this analysis as they are calculated on a net present cost basis.

### ***Services Are Maintained At Montrose Campus Until New Castle Point Facilities Are Constructed.***

BPO 10 assumes that inpatient psychiatry and nursing home services will be contracted out to the community for a period of 8 years from 2015 to 2023 while facilities to accommodate them at Castle Point are constructed. BPO 11B also assumes that inpatient psychiatry and nursing home services, as well as domiciliary services will be contracted out to the community for a period of 7 years from 2016 to 2023 while facilities to accommodate them at Castle Point are constructed. These assumptions about contracting for care with the community do not reflect VA’s plans; they are the result of methodology limits which were agreed upon at the beginning of Stage II. The other BPOs do not require contracting out for care.

A sensitivity analysis was conducted to determine the impact of an alternative scenario which would involve maintaining inpatient psychiatry and nursing home services at Montrose for an additional 7 and 8 years while the new facilities at Castle Point are constructed. This would avoid the need for contracting out. The following shows the results on the NPC for BPOs 10-2, 10-4 and 11B.

*Table 95: BPO Comparison for Maintaining Services at Montrose Factor (\$ in millions)*

<b>BPO Comparison</b>							
2003 Net Present Dollars (\$ Millions)							
Reflects 2003-2033							
	<b>BPO 1</b>	<b>BPO 7-2</b>	<b>BPO 7-4</b>	<b>BPO 10-2</b>	<b>BPO 10-4</b>	<b>BPO 11A</b>	<b>BPO 11B</b>
<b>Total Net Present Cost</b>	\$ 3,576	\$ 3,439	\$ 3,445	\$ 3,354	\$ 3,360	\$ 3,478	\$ 3,373
<b>Total Net Present Cost without Contracting to the Community</b>	\$ 3,576	\$ 3,439	\$ 3,445	\$ 3,490	\$ 3,495	\$ 3,478	\$ 3,525

As shown, the delay in moving inpatient psychiatry and nursing home services off the Montrose campus has the effect of increasing the net present cost of BPOs 10-2, 10-4 and 11B. This changes the rank order of the options. While BPO 1 remains the most expensive option, BPOs 7-2, 7-4 and 11A become the least expensive options, and BPOs 10-2, 10-4 and 11B become comparatively more expensive options. The change in the rank order of the options is driven by the cost savings from contracting out for care, which is no-longer included in BPOs 10-2, 10-4 and 11B. Without these savings included, the most important factor impacting the rank order of the options is the lower cost of new construction in BPOs 7-2, 7-4 and 11A.

## 6.0 Ability to Support Other VA Programs

As noted previously, the purpose of this study is to determine how BPOs may support or jeopardize specific programs that VA has identified as primary initiatives. These initiatives include enhanced One-VA integration and enhancement of services to veterans. The following summarizes the current position of the Montrose and Castle Point VAMCs with respect to the criteria for this study:

### *One-VA Integration*

There is neither a VBA nor a NCA office on the Montrose or Castle Point campuses. The closest VBA office to Montrose is in New York, NY and the closest NCA office to Montrose is in Brooklyn, NY. The closest VBA office to Castle Point is in Newark, NJ and the closest NCA office to Castle Point is in Brooklyn, NY.

### *Proposed Enhancement of Services*

#### Montrose Campus:

The reuse analysis indicates the best uses for the Montrose VAMC will be predominantly residential. Residential reuse complements the surrounding uses and is consistent with the political and regulatory environment. Potential residential uses include multi-family apartments, senior apartments, independent living, assisted living, skilled nursing, and continuing care retirement communities (CCRCs).

These types of facilities could be accommodated through some of the existing buildings or through new construction on vacant land parcels. These facilities could complement the existing healthcare services provided at the Montrose campus and provide an alternative living option for veterans in close proximity to a VAMC that would provide specialized veterans services such as outpatient mental health services.

It is important to note that there is very little difference between the BPOs from a reuse perspective. BPOs 2, 11A, and 11B are identical in the underutilized assets that are available for reuse, and BPO 4 varies only slightly from the other three options. Therefore, there are no significant differences in reuse potential between the BPOs.

#### Castle Point Campus:

The reuse analysis indicates the best uses for the Castle Point VAMC are a mixture of residential options serving workforce families, young adults and seniors across all spectrums of the aging continuum. Residential reuse complements the surrounding uses and is consistent with the political and regulatory environment. Potential uses include workforce rental housing, market-rate rental housing, for-rent age-restricted housing, independent living, assisted living, and continuing care.

These types of facilities could be accommodated through some of the existing buildings or through new construction on vacant land parcels. These facilities could complement the existing healthcare services provided at the Castle Point campus and provide an alternative living option for veterans in close proximity to a VAMC.



It is important to note that there is very little difference between the BPOs from a reuse perspective. BPOs 7, and 11A and 10 and 11B are identical in the underutilized assets that are available for reuse. BPO's 10 and 11B have a slightly higher market for potential reuse and a slightly lower execution risk than BPO's 7 and 11A. Otherwise, there are no differences in reuse potential between the BPOs.

**Montrose:**

**BPO 1 - Baseline**

The table below summarizes the impact of BPO 1 on the evaluation criteria.

*Table 96: Ability to Support Other VA Programs Assessment – BPO 1*

Evaluation Criteria	Impact
One-VA Integration	<ul style="list-style-type: none"> <li>In Option 1, the area VBA and NCA offices remain at their respective locations in New York, Brooklyn and Newark, and they are not collocated with the VAMC on the Montrose campus. Thus, there is no impact on One-VA Integration.</li> </ul>
Proposed Enhancement of Services	<ul style="list-style-type: none"> <li>If reuse of the proposed buildings and parcels were to be implemented in the baseline, the reuse plan includes plans for residential facilities. The complementary services of these facilities have the potential to provide enhancement of services to those to be provided in the buildings on main campus.</li> </ul>

**BPO 2**

***Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus)***

The table below summarizes the impact of BPO 2 on the evaluation criteria.

*Table 97: Ability to Support Other VA Programs Assessment – BPO 2*

Evaluation Criteria	Impact
One-VA Integration	<ul style="list-style-type: none"> <li>In Option 2, the area VBA and NCA offices remain at their respective locations in New York, Brooklyn and Newark, and they are not collocated with the VAMC on the Montrose campus. Thus, there is no impact on One-VA Integration.</li> </ul>
Proposed Enhancement of Services	<ul style="list-style-type: none"> <li>The reuse plan for Option 2 includes the establishment of residential facilities. Similar to baseline, the complementary services of these types of facilities have the potential to provide enhancement of services to those to be provided in the newly constructed facilities on the North Campus.</li> </ul>

**BPO 4**

***Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station (Site of Buildings 13 and 14)***

The table below summarizes the impact of BPO 4 on the evaluation criteria.

*Table 98: Ability to Support Other VA Programs Assessment – BPO 4*

Evaluation Criteria	Impact
One-VA Integration	<ul style="list-style-type: none"> <li>In Option 4, the area VBA and NCA offices remain at their respective locations in New York, Brooklyn and Newark, and they are not collocated with the VAMC on the Montrose campus. Thus, there is no impact on One-VA Integration.</li> </ul>
Proposed Enhancement of Services	<ul style="list-style-type: none"> <li>The reuse plan for Option 4 includes the establishment of residential facilities. Similar to baseline, the complementary services of these types of facilities have the potential to provide enhancement of services to those to be provided in the newly constructed facilities south of the fire station.</li> </ul>

**BPO 11A & 11B**

***Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location***

The table below summarizes the impact of BPO 11A and 11B on the evaluation criteria.

*Table 99: Ability to Support Other VA Programs Assessment – BPO 11A and 11B*

Evaluation Criteria	Impact
One-VA Integration	<ul style="list-style-type: none"> <li>In Option 11A and 11B, the area VBA and NCA offices remain at their respective locations New York, Brooklyn and Newark, and they are not collocated with the VAMC on the Montrose campus. Thus, there is no impact on One-VA Integration.</li> </ul>
Proposed Enhancement of Services	<ul style="list-style-type: none"> <li>The reuse plan for Options 11A and 11B include the establishment of residential facilities. Similar to baseline, the complementary services of these types of facilities have the potential to provide enhancement of services to those to be provided in the newly constructed facilities East of the former fire station location.</li> </ul>

**Castle Point:**

**BPO 1 - Baseline**

The table below summarizes the impact of BPO 1 on the evaluation criteria.

*Table 100: Ability to Support Other VA Programs Assessment – BPO 1*

Evaluation Criteria	Impact
One-VA Integration	<ul style="list-style-type: none"> <li>In Option 1, the area VBA and NCA offices remain at their respective locations in New York, Brooklyn and Newark, and they are not collocated with the VAMC on the Castle Point campus. Thus, there is no impact on One-VA Integration.</li> </ul>
Proposed Enhancement of Services	<ul style="list-style-type: none"> <li>If reuse of the proposed buildings and parcels were to be implemented in the baseline, the reuse plan includes plans for residential facilities. The complementary services of these facilities have the potential to provide enhancement of services to those to be provided in the buildings on main campus.</li> </ul>

**BPO 7**

***Construct Replacement Facility West of Existing Buildings***

The table below summarizes the impact of BPO 7 on the evaluation criteria.

*Table 101: Ability to Support Other VA Programs Assessment – BPO 7*

Evaluation Criteria	Impact
One-VA Integration	<ul style="list-style-type: none"> <li>In Option 7, the area VBA and NCA offices remain at their respective locations in New York, Brooklyn and Newark, and they are not collocated with the VAMC on the Castle Point campus. Thus, there is no impact on One-VA Integration.</li> </ul>
Proposed Enhancement of Services	<ul style="list-style-type: none"> <li>The reuse plan for Option 7 includes the establishment of residential facilities. Similar to baseline, the complementary services of these types of facilities have the potential to provide enhancement of services to those to be provided in the newly constructed facilities West of the existing buildings.</li> </ul>

**BPO 10**

***Build New Nursing Home and Renovate Existing Facility***

The table below summarizes the impact of BPO 10 on the evaluation criteria.

*Table 102: Ability to Support Other VA Programs Assessment – BPO 10*

Evaluation Criteria	Impact
One-VA Integration	<ul style="list-style-type: none"> <li>In Option 10, the area VBA and NCA offices remain at their respective locations in New York, Brooklyn and Newark, and they are not collocated with the VAMC on the Castle Point campus. Thus, there is no impact on One-VA Integration.</li> </ul>
Proposed Enhancement of Services	<ul style="list-style-type: none"> <li>The reuse plan for Option 10 includes the establishment of residential facilities. Similar to baseline, the complementary services of these types of facilities have the potential to provide enhancement of services to those to be provided in the newly constructed nursing home and renovated facilities.</li> </ul>

**BPO 11A**

***Construct Replacement Facility (Similar to BPO 7)***

The table below summarizes the impact of BPO 11A on the evaluation criteria.

*Table 103: Ability to Support Other VA Programs Assessment – BPO 11A*

Evaluation Criteria	Impact
One-VA Integration	<ul style="list-style-type: none"> <li>In Option 11A, the area VBA and NCA offices remain at their respective locations in New York, Brooklyn and Newark, and they are not collocated with the VAMC on the Castle Point campus. Thus, there is no impact on One-VA Integration.</li> </ul>
Proposed Enhancement of Services	<ul style="list-style-type: none"> <li>The reuse plan for Option 11A includes the establishment of residential facilities. Similar to Option 7, the complementary services of these types of facilities have the potential to provide enhancement of services to those to be provided in the newly constructed facilities West of the existing buildings</li> </ul>

**BPO 11B**

***Renovate Existing Facilities and Build New Nursing Home (similar to BPO 10)***

The table below summarizes the impact of BPO 11B on the evaluation criteria.

*Table 104: Ability to Support Other VA Programs Assessment – BPO 11B*

Evaluation Criteria	Impact
One-VA Integration	<ul style="list-style-type: none"> <li>In Option 11B, the area VBA and NCA offices remain at their respective locations in New York, Brooklyn and Newark, and they are not collocated with the VAMC on the Castle Point campus. Thus, there is no impact on One-VA Integration.</li> </ul>
Proposed Enhancement of Services	<ul style="list-style-type: none"> <li>The reuse plan for Option 11B includes the establishment of residential facilities. Similar to Option 10, the complementary services of these types of facilities have the potential to provide enhancement of services to those to be provided in the newly constructed nursing home and renovated facilities.</li> </ul>

## 7.0 Stakeholder and LAP Input Analysis

The purpose of the stakeholder element in the CARES study was to encourage a meaningful dialogue among veterans, veterans advocacy groups, employees, elected officials, and other interested parties about the options being considered for the Montrose-Castle Point study site. Feedback from stakeholders was considered by Team PwC in developing and evaluating BPOs and in developing implementation plans and risk mitigation strategies for each BPO. This feedback will also be used by VA decision makers in weighing the advantages and disadvantages of each BPO and its associated implementation plans.

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 Montrose/Castle Point LAP consists of eight members: MaryAnn Musumeci, Joanne Malina, MD, Arthur Weintraub, Benjamin Weisbroth, John Lamoree, Ben Spadaro, John Testa, and Robert Cahill. Two of the members are VA staff, the rest are representatives of the community or veteran service organizations.

The LAP held public meetings at which stakeholders had an opportunity to present testimony and comment on the work performed by Team PwC and the deliberations of the LAP. The LAP public meetings were one of a series of communication channels provided to stakeholders to express their interests, concerns, and priorities for the study. Stakeholders could give oral and written testimony at the LAP meetings, submit written comments or proposals to the central mailing address, or complete one of the comment forms specific to the options being studied in Stage I or Stage II.

### **Recap of LAP Meeting 2 Stakeholder and LAP Input**

Approximately 100 members of the public attended the second LAP meeting held on September 22, 2005 during Stage I of the CARES study. A total of 97 forms of stakeholder input (oral, written, and electronic) were received between April 20 and October 2, 2005. At the second LAP meeting stakeholders were given the opportunity to provide feedback regarding the specific BPOs being considered for further study in Stage II by Team PwC. 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 on the BPOs being considered for further study in Stage II are provided in the table below. Because BPO 11 was added by the LAP at the second LAP meeting, that option was not included on the LAP 2 comment form:

*Table 105: LAP Meeting 2 Stakeholder Comment Form Results for Stage II Study BPOs*

<b>BPO</b>	<b>Label</b>	<b>Favor</b>	<b>Neutral</b>	<b>Not Favor</b>
1	Baseline	1	2	7
2	At Montrose, Construct New Domiciliary and Ambulatory Care Facility West of Fire Station (North Campus)	0	4	6
4	At Montrose, Construct New Domiciliary and Ambulatory Care Facility South of Fire Station (Site of Buildings 13 and 14)	3	1	6
7	At Castle Point, Construct All New Facilities West of Existing Buildings	1	1	7
10	At Castle Point, Renovate and Build New Nursing Home on Northeastern Campus	1	1	7

Overall the limited number of comment forms received during the second LAP meeting indicated that the majority of stakeholders did not support any of the BPOs. The most stakeholders showed support for BPO 4 which constructs a new domiciliary and ambulatory care facility south of the fire station at Montrose; however the majority of stakeholders who commented on this BPO indicated a lack of support. The most stakeholders indicated they are not in favor of BPO 9 which constructs all new facilities on the western campus of Castle Point, adjacent to River Road.

At the second LAP meeting a number of veterans, veteran advocates, elected officials, and other interested parties provided oral testimony. There was a range of views expressed about the merits of maintaining the existing facilities. Many stakeholders expressed their desire to maintain the Montrose and Castle Point facilities so that they are available for the veterans returning from current conflicts.

Following the presentation of public comments at the second LAP meeting, the LAP conducted its deliberation on the BPOs presented by Team PwC. The following table presents the results of LAP deliberations at the second public meeting on the BPOs being considered for further study in Stage II:

Table 106: LAP Meeting 2 BPO Recommendations

BPO	Label	Yes	No
1	Baseline	Not Voted	Not Voted
2	At Montrose, Construct New Domiciliary and Ambulatory Care Facility West of Fire Station (North Campus)	4	2
4	At Montrose, Construct New Domiciliary and Ambulatory Care Facility South of Fire Station (Site of Buildings 13 and 14)	6	0
7	At Castle Point, Construct All New Facilities West of Existing Buildings	6	0
10	At Castle Point, Renovate and Build New Nursing Home on Northeastern Campus	1	5
11 <sup>4</sup>	At Montrose, Construct New Outpatient Building, Transfer Domiciliary to Castle Point, and Close Fire Station	6	0

**LAP Voting Rationale:**

BPO 2: The LAP recommended this by a vote of 4 (yes) to 2 (no). The principal factors influencing a favorable vote were the new facilities, and their location in a compact area near the currently used – and familiar to veterans and staff – portions of the campus.

BPO 4: The LAP recommended this by a vote of 6 (yes) to 0 (no). The principal factors influencing a favorable vote were the new facilities, and their location in a compact area near the currently used – and familiar to veterans and staff – portions of the campus. Note that while BPO 4 also requires demolition the LAP felt that the level of disruption during implementation would be less, and generally preferred the location suggested by BPO 4.

BPO 7: The LAP recommended this by a vote of 6 (yes) to 0 (no). The principal factors influencing a favorable vote were the new facilities, and their location on a highly attractive portion of the campus – the hilltop which is easily identified on entrance to the site, and also affords terrific views of the Hudson River Valley.

BPO 10: The LAP did not recommend this to the Secretary by a vote of 1 (yes) to 5 (no). The principal factor influencing this decision was the fact that this BPO does not result in all-new facilities for veterans, and that given the combination of renovation and new construction, implementation would be more risky.

BPO 11: The LAP recommended this by a vote of 6 (yes) to 0 (no). The principal factor influencing a favorable vote was the logic that, by consolidating all inpatient care at Castle Point, operating costs at Montrose would be dramatically improved. In addition, there was a sense that having all inpatient care at Castle Point would also enhance continuity. The LAP acknowledged that the consolidation of all inpatient care at Castle Point was outside the bounds of the Secretary’s Decision, but felt the potential operating efficiencies merited further study.

<sup>4</sup> New BPO added by the LAP

## **Summary of LAP Meeting 3 Stakeholder and LAP Input**

A third period for submitting electronic or written comments on the Montrose/Castle Point BPOs began February 1, 2007 on the day of the Secretary's study announcement for Stage II, and ended on May 1, 2007, 14 days after the third LAP meeting. Approximately 85 members of the public attended the third LAP meeting held on April 17, 2007. A total of 31 forms of stakeholder input (oral, written, and electronic) were received between February 1 and May 1, 2007. The concerns of stakeholders who submitted general comments are summarized in the following table:

*Table 107: General Stakeholder Concerns for Stakeholder Input Period 3*

<b>Key Concern</b>	<b>Total Times Stakeholders Voiced General Concerns</b>	<b>Percentage of Total General Concerns Voiced</b>
Adequate Facilities	8	15%
Timeliness	2	4%
Availability of Care	14	27%
Use of Facility	7	13%
Campus Environment	0	0%
Other	21	40%

Stakeholders voiced the most concern about issues relating to other general concerns, followed by concerns about availability of care, then adequate facilities and use of the facilities.

Similar to Stage I, during Stage II stakeholders were provided a comment form that described the options being studied in Stage II. This comment form was available electronically on the VA CARES project website ([www.va.gov/CARES](http://www.va.gov/CARES)) as well as in paper form at the third LAP public meeting, and asked stakeholders to indicate if they have any of the concerns defined in the following table for each option:

*Table 108: Comment Form Categories of Stakeholder Concern for each BPO:*

<b>Category of Concern</b>	<b>Definition</b>
<b>Adequate Facilities</b>	Concerns about whether this option would provide a modern facility capable of meeting healthcare demands in the future.
<b>Timeliness</b>	Concerns about the length of time to finish construction called for by this option.
<b>Availability of Care</b>	Concerns that construction will disrupt the healthcare currently provided
<b>Use of Facility</b>	Concerns about whether this option makes good use of existing land and facilities.
<b>Campus Environment</b>	Concerns that this option will disrupt the historic quality or the natural setting of the current campus.

Of the 31 forms of stakeholders input receiving during the input collection period, 8 of those were electronic and paper comment forms specific to the Stage II study options. The feedback received from the 8 comment forms is summarized in the following tables, although since such a limited number of comment forms were received the results should be interpreted with caution:



Table 109: LAP Meeting 3 Stakeholder Comment Form Results - Number of Concerns

Concerns	Number of Concerns by BPO						
	BPO 1: Baseline	BPO 2: Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus)	BPO 4: Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station	BPO 7: Castle Point, Construct All New Facilities West of Existing Buildings	BPO 10: Castle Point, Build New Nursing Home and Renovate Existing Facility	BPO 11a: At Montrose - Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location At Castle Point - Construct All New Facilities	BPO 11b: At Montrose - Relocate Residential Treatment Programs to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location At Castle Point - Renovate Existing Facilities and Build New Nursing Home and Domiciliary Facilities
Adequate Facilities	5	5	5	3	4	6	5
Timeliness	5	5	5	4	5	6	5
Availability of Care	5	5	5	4	5	6	5
Use of Facility	5	5	5	3	5	6	5
Campus Environment	5	4	4	4	5	6	5
<b>Total Concerns:</b>	<b>25</b>	<b>24</b>	<b>24</b>	<b>18</b>	<b>24</b>	<b>30</b>	<b>25</b>

During the input period for the third LAP meeting fewer stakeholders chose the comment form as their method of providing input to the study than during the input period for the second LAP meeting. The 8 stakeholders who used this method expressed the most concerns about BPO 11a which relocates residential treatment programs from Montrose to Castle Point, constructs a new ambulatory care building east of the former fire station at Montrose, and constructs all new facilities at Castle Point. Stakeholders expressed an almost equal amount of concerns about BPOs 1, 2, 4, 10 and 11b. Stakeholders expressed the fewest number of concerns overall about BPO 7, which constructs all new facilities at Castle Point west of existing buildings. For all BPOs, stakeholders expressed a relatively equal amount of concerns across all of the concern categories. The categories of Availability of Care (concerns that construction will disrupt the healthcare currently provided), and Timeliness (concerns about the length of time to finish construction called for by this option) categories received the highest amount of concerns across all BPOs. The comment forms indicate that there is unease about possible changes at the Montrose and Castle point facilities across all BPOs, including the Baseline.

A number of veterans, veteran advocates, elected officials, and other interested parties provided oral and written testimony at the third LAP meeting, and also sent in written input to the VA CARES central mailstop. This testimony along with other written input conveyed the stakeholder view that they greatly value the Montrose and Castle Point facilities and desire to maintain services at both facilities. Most commonly, stakeholders discussed access issues, potential effects on staffing, and disruption of patients as reasons to maintain current facilities. Stakeholders also articulated that the reuse of land and facilities should go to an appropriate use that can most benefit veterans. These notable stakeholder viewpoints are represented by the following excerpts from input received:

"Some of the proposed options offer the potential to move current remaining services from Montrose to Castle Point. This objective most certainly will produce an adverse impact to our workers and veterans who will have to add expenses for the additional 23 mile distance... Veterans throughout the New York region will be deprived of readily available treatment that they now obtain." - Excerpt from written testimony received.

"The VFW has long fought and continues to fight for a full continuum of health care coverage for all veterans.... And we ask that you keep in mind such needs as: Accessibility to VAMC facilities (not having to travel great distances to and from appointments); Timeliness of care (such as not having to wait many months for specialty care); and most importantly the utmost quality of care must be provided to our nations veterans." - Excerpt from written testimony received

"Our position is that all the closed buildings here at the Montrose Campus should be renovated for the purpose of reinstating the structural programs that are needed to address the physical and mental healthcare needs for our veterans."

- Excerpt from written testimony received

"The Secretary should also recognize the increasing housing costs of the Hudson Valley and the need for low-income and subsidized housing for veterans in this region. Thanks to improvements in medical care our veterans are living longer lives, yet often live on a fixed income that does not reflect the rising costs of living in the Hudson Valley. They deserve access to affordable housing, and the Montrose campus provides an opportunity to provide this housing in a pleasant setting."

- Excerpt from testimony of Congressman John Hall

### **Summary of LAP Meeting 4 Stakeholder and LAP Input**

A fourth and final period for submitting electronic or written comments on the Montrose/Castle Point BPOs began July 20, 2007 on the day that the Team PwC Stage II Preliminary Report was posted to the website and released to the public, and ended on August 7, 2007, 14 days after the fourth LAP meeting. Approximately 100 members of the public attended the fourth LAP meeting held on July 24, 2007, and a total of 29 forms of stakeholder input (oral, written, and electronic) were received between July 20 and August 7, 2007. The following table summarizes general stakeholder comments received during this period:

*Table 110: General Stakeholder Comments for Stakeholder Input Period 4*

<b>Comment Topic</b>	<b>Total Times Stakeholders Voiced General Comments</b>	<b>Percentage of Total General Comments Voiced</b>
Adequate Facilities	8	9%
Availability of Care	22	26%
Campus Environment	3	3%
Use of Government Resources	13	15%
Use of Facility	20	23%
Other	20	23%

For the fourth LAP meeting a comment form similar to the one used during earlier input periods was available to stakeholders describing the options being studied in Stage II. This comment form was different from previous comment forms in that it asked stakeholders to comment on option combinations (combination of one Montrose and one Castle Point option). This comment form was available electronically on the VA CARES project website ([www.va.gov/CARES](http://www.va.gov/CARES)) and in paper form at the fourth LAP public meeting. Stakeholders were asked to indicate support for each option and if they agree with the following attributes of each option combination.

*Table 111: LAP Meeting 4 Comment Form Results - Stakeholder Support for BPOs*

<b>Category of Support</b>	<b>Definition</b>
<b>Adequate Facilities</b>	The option will provide a modern facility that will meet future healthcare needs.
<b>Availability of Care</b>	The option will make care received more convenient.
<b>Campus Environment</b>	The option will maintain or enhance the campus setting.
<b>Use of Government Resources</b>	The option makes good use of government resources.
<b>Use of Facility</b>	The option will make good use of land and facilities.
<b>Other</b>	Any other reason to support or not support this option.

Of the 29 forms of stakeholder input received during the input collection period, 9 of those were electronic and paper comment forms. The feedback received from the 9 comment forms is summarized in the following tables, although since such a limited number of comment forms were received the results should be interpreted with caution:

The feedback received from the 9 comment forms is summarized in the following tables:

Table 112: LAP Meeting 4 Comment Form Results - Categories Stakeholder Support for BPOs

Stakeholder Support		Support by BPO						
		BPO 1: Baseline	BPO 2 & 7: Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Construct All New Facilities West of Existing Buildings	BPO 2& 10: Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Build New Nursing Home and Renovate Existing Facility	BPO 4 & 7: Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Construct All New Facilities West of Existing Buildings	BPO 4 & 10: Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Build New Nursing Home and Renovate Existing Facility	BPO 11a: At Montrose - Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location At Castle Point - Construct All New Facilities	BPO 11b: At Montrose - Relocate Residential Treatment Programs to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location At Castle Point - Renovate Existing Facilities and Build New Nursing Home and Domiciliary Facilities
Stakeholders who support the BPO	Number	1	2	0	1	2	2	2
	% of Total Forms (29)	11%	22%	0%	11%	22%	22%	22%
Stakeholders who do not support the BPO	Number	4	3	4	3	3	3	3
	% of Total Forms (29)	44%	33%	44%	33%	33%	33%	33%

Table 113: LAP Meeting 4 Categories Stakeholder Support for BPOs

Categories of Support	Reasons why stakeholders support the BPOs <sup>5</sup>						
	BPO 1: Baseline	BPO 2 & 7: Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Construct All New Facilities West of Existing Buildings	BPO 2& 10: Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Build New Nursing Home and Renovate Existing Facility	BPO 4 & 7: Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Construct All New Facilities West of Existing Buildings	BPO 4 & 10: Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Build New Nursing Home and Renovate Existing Facility	BPO 11a: At Montrose - Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location At Castle Point - Construct All New Facilities	BPO 11b: At Montrose - Relocate Residential Treatment Programs to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location At Castle Point - Renovate Existing Facilities and Build New Nursing Home and Domiciliary Facilities
Adequate Facilities	2	2	2	2	2	2	2
Availability of Care	1	2	2	2	2	2	2
Campus Environment	1	2	2	2	2	2	2
Use of Government Resources	1	2	2	2	2	2	2
Use of Facility	2	2	2	2	2	2	2
Other	0	0	0	0	1	0	0
<b>Total:</b>	<b>7</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>11</b>	<b>10</b>	<b>10</b>

<sup>5</sup> Stakeholders can comment on more than one BPO and can indicate multiple reasons why they support a BPO.

As was previously the case, only a limited number of stakeholders chose the comment form as their method of providing input to the study. The 9 stakeholders who used this method expressed an equal amount of support for BPOs 2 and 7, BPOs 4 and 10, BPO 11A, and BPO 11B. More stakeholders indicated that they did not support any of the BPOs, and expressed the least support for BPO 1 (Baseline) and the combination of BPOs 2 and 10. This lack of support is consistent with the sentiment expressed by stakeholders at the first three LAP meetings.

Thirteen veterans, veteran advocates, and other interested parties provided oral testimony at the fourth LAP meeting. This testimony along with other written input conveyed the stakeholder view that they greatly value the Montrose and Castle Point facilities and desire to maintain services at both facilities. Most commonly, stakeholders discussed access issues, potential effects on staffing, and disruption of patients as reasons to maintain current facilities. Stakeholders also articulated that the reuse of land and facilities should go to an appropriate use that can most benefit veterans. These notable stakeholder viewpoints are represented by the following excerpts from input received:

"We strongly encourage the Veterans Administration to expand the services available at the Montrose campus even further than what is called for in Option 4, as well as consider the adaptive re-use of some of the existing, historic buildings, rather than demolishing them to accommodate newer buildings. Westchester supports a Veteran's Village concept on the campus, accommodating the Option 4 elements, but also incorporating the concepts submitted by the Montrose Elders in terms of the redevelopment of the rest of the campus as a model accessibility community with new housing and retail and service opportunities. The potential development would provide multiple housing opportunities for both older and younger veterans, including a continuing care retirement community, senior housing, and potential expansion of the nursing home, as well as townhouses for veterans and their families." - Westchester County Executive Andy Spano and Board of Legislators Chair William Ryan

"Like many Hudson Valley veterans, I am concerned about the VA's plans for the future of the Montrose and Castle Point campuses. While I am pleased the VA seems intent on continuing certain kinds of health care at Montrose, this facility must be more than simply a primary care clinic. We must ensure that the care veterans receive there is comprehensive and world class" - Excerpt from comment testimony from Congressman John Hall

### **Summary**

Aggregate analysis of the stakeholder and LAP feedback from the input periods surrounding the second, third and fourth LAP meetings input indicates the level of overall support as well as considerations for implementation of each of the BPOs studied in Stage II. During the second, third, and fourth LAP meetings, stakeholders expressed preference for the current division of services between Montrose and Castle Point, and therefore did not support any of the options including Baseline as they require a shift of services from Montrose to Castle Point. Presented below are summaries of stakeholder and LAP support for each option.

Table 114: Stakeholder and LAP Support for BPOs

BPO	LAP MEETING 2	LAP MEETING 3	LAP MEETING 4
<b>BPO 1:</b> Baseline Option	<b>Stakeholder Input:</b>		
	<ul style="list-style-type: none"> <li>▪ Some stakeholders did not convey support for this BPO as it does not provide for new facilities</li> <li>▪ The comment form results indicate that overall stakeholders do not support BPO 1.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Again, some stakeholders did not convey support for this BPO as it does not provide for new facilities</li> <li>▪ The comment form results indicate that stakeholders have the second highest amount of concerns about BPO 1, second to BPO 11a and tied with BPO 11b.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Again, some stakeholders did not convey support for this BPO as it does not provide for new facilities</li> <li>▪ The comment form results indicate that stakeholders least support this BPO along with BPOs 2 and 10.</li> </ul>
	<b>LAP Input:</b>		
	<ul style="list-style-type: none"> <li>▪ The LAP members did not vote on BPO 1 as it is automatically included in the Stage II study.</li> <li>▪ Members of the LAP commented on the advantages of the baseline option such as access to healthcare services for Montrose and Castle Point area veterans.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The LAP did not discuss the specific BPOs at the third LAP meeting.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The LAP did not discuss the specific BPOs at the fourth LAP meeting, but the LAP members agreed that new facilities should be built, and therefore would not support the Baseline BPO.</li> </ul>
<b>BPO 2 &amp; 7:</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Construct All New Facilities West of Existing Buildings	<b>Stakeholder Input:</b>		
	<ul style="list-style-type: none"> <li>▪ Some stakeholders commented on advantages of BPO 2 such as it provides new facilities and maintains access to services for veterans at the Montrose VAMC.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Comment form results indicated that the second least amount of stakeholder expressed concerns regarding BPO 2, along with BPOs 4 and 10.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Comment form results indicated that stakeholders most support this BPO along with BPOs 4 and 10, BPO 11A and BPO 11B.</li> </ul>
	<b>LAP Input:</b>		
	<ul style="list-style-type: none"> <li>▪ The LAP recommended this BPO by a vote of 4 (yes) to 2 (no). The principal factors influencing a favorable vote were the new facilities, and their location in a compact area near the currently used – and familiar to veterans and staff – portions of the campus.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The LAP did not discuss the specific BPOs at the third LAP meeting.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The LAP did not discuss the specific BPOs at the fourth LAP meeting but supported options such as BPOs 2 and 7 that provide new facilities.</li> </ul>
<b>BPO 2&amp; 10:</b> Montrose,	<b>Stakeholder Input:</b>		



Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Build New Nursing Home and Renovate Existing Facility	<ul style="list-style-type: none"> <li>Comment form results show that the majority of stakeholders did not favor this BPO, but more stakeholders voted in favor of this BPO than any other BPO.</li> </ul>	<ul style="list-style-type: none"> <li>Comment form results indicated that the second least amount of stakeholder expressed concerns regarding BPO 4, along with BPOs 2 and 10.</li> </ul>	<ul style="list-style-type: none"> <li>Comment form results indicated that stakeholders least support this BPO along with BPO 1.</li> </ul>
	<p><b>LAP Input:</b></p> <ul style="list-style-type: none"> <li>The LAP recommended this BPO by a vote of 6 (yes) to 0 (no) because it provides new facilities in an area that is close to the currently used and therefore familiar portion of the campus.</li> <li>The LAP did not discuss the specific BPOs at the third LAP meeting.</li> <li>The LAP did not discuss the specific BPOs at the fourth LAP meeting but supported options that provide new facilities. BPOs 2 and 10 provide new facilities at Montrose and Castle Point, but involves some renovations as well at Castle Point.</li> </ul>		
BPO 4 & 7: Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Construct All New Facilities West of Existing Buildings	<p><b>Stakeholder Input:</b></p> <ul style="list-style-type: none"> <li>Comment form results show that the majority of stakeholders did not favor this BPO.</li> <li>Comment form results indicated that stakeholders expressed the least concerns about BPO 7 compared to all other BPOs.</li> <li>Comment form results indicated that only one stakeholder supports this BPO.</li> </ul>		
	<p><b>LAP Input:</b></p> <ul style="list-style-type: none"> <li>The LAP recommended this BPO by a vote of 6 (yes) to 0 (no) because this BPO provides new facilities on a desirable portion of the campus.</li> <li>The LAP did not discuss the specific BPOs at the third LAP meeting.</li> <li>The LAP did not discuss the specific BPOs at the fourth LAP meeting but supported options such as BPOs 4 and 7 that provide new facilities.</li> </ul>		
BPO 4 & 10: Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Build New Nursing Home and Renovate Existing Facility	<p><b>Stakeholder Input:</b></p> <ul style="list-style-type: none"> <li>Comment form results show that the majority of stakeholders did not favor this BPO.</li> <li>Comment form results indicated that the second least amount of stakeholder expressed concerns regarding BPO 10, along with BPOs 2 and 4.</li> <li>Comment form results indicated that stakeholders most support this BPO along with BPOs 2 and 7, BPO 11A and BPO 11B.</li> </ul>		
	<p><b>LAP Input:</b></p> <ul style="list-style-type: none"> <li>The LAP did not recommend this BPO by a vote of 1 (yes) to 5 (no) because this BPO does not result in all-new facilities for veterans, and that given the combination of renovation and new construction, implementation would be more risky.</li> <li>The LAP did not discuss the specific BPOs at the third LAP meeting.</li> <li>The LAP did not discuss the specific BPOs at the fourth LAP meeting but supported options that provide new facilities. BPOs 4 and 10 provide new facilities at Montrose and Castle Point, but involves some renovations as well at Castle Point.</li> </ul>		

<p><b>BPO 11a:</b> At Montrose - Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location At Castle Point - Construct All New Facilities</p>	<p><b>Stakeholder Input:</b></p> <ul style="list-style-type: none"> <li>▪ Because BPO 11 was added at the second LAP meeting, it was not included on the second LAP meeting comment form.</li> <li>▪ The comment form results indicate that stakeholders expressed the most concerns about BPO 11a of all of the BPOs.</li> <li>▪ Comment form results indicated that stakeholders most support this BPO along with BPOs 2 and 7, BPOs 4 and 10, and BPO 11B.</li> </ul>		
	<p><b>LAP Input:</b></p> <ul style="list-style-type: none"> <li>▪ The LAP recommended the general BPO 11 by a vote of 6 (yes) to 0 (no). They felt that by consolidating all inpatient care at Castle Point, operating costs at Montrose would be dramatically improved, and having all inpatient care at Montrose would also enhance continuity.</li> <li>▪ The LAP did not discuss the specific BPOs at the third LAP meeting.</li> <li>▪ The LAP did not discuss the specific BPOs at the fourth LAP meeting but supported options such as BPO 11A that provide new facilities. The LAP Chair commented that from a business perspective domiciliary services should go to Castle Point, but from a veterans perspective they should stay at Montrose.</li> </ul>		
<p><b>BPO 11b:</b> At Montrose - Relocate Residential Treatment Programs to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location At Castle Point - Renovate Existing Facilities and Build New Nursing Home and Domiciliary Facilities</p>	<p><b>Stakeholder Input:</b></p> <ul style="list-style-type: none"> <li>▪ Because BPO 11 was added at the second LAP meeting, it was not included on the second LAP meeting comment form.</li> <li>▪ The comment form results indicate that stakeholders have the second highest amount of concerns about BPO 11b, second to BPO 11a and tied with BPO 1.</li> <li>▪ Comment form results indicated that stakeholders most support this BPO along with BPOs 2 and 7, BPOs 4 and 10, and BPO 11A.</li> </ul>		
	<p><b>LAP Input:</b></p> <ul style="list-style-type: none"> <li>▪ The LAP recommended the general BPO 11 by a vote of 6 (yes) to 0 (no). They felt that by consolidating all inpatient care at Castle Point, operating costs at Montrose would be dramatically improved, and having all inpatient care at Montrose would also enhance continuity.</li> <li>▪ The LAP did not discuss the specific BPOs at the third LAP meeting.</li> <li>▪ Similar to BPO 11A, the LAP did not discuss the specific BPOs at the fourth LAP meeting but supported options such as BPO 11B that provide new facilities. The LAP Chair commented that from a business perspective domiciliary services should go to Castle Point, but from a veterans perspective they should stay at Montrose.</li> </ul>		

**Implementation Considerations for BPOs:**

Stakeholders and the LAP conveyed concerns regarding the BPOs that would need to be addressed for successful implementation of each option. These concerns were concentrated around three specific issues:

**Access and Travel Time:**

Many stakeholders as well as the LAP members expressed concerns regarding access and travel time for all options that potentially consolidate services at Castle Point. If services are discontinued at Montrose, there is concern that travel time will be affected for many veterans making it more difficult for them to access services. This would also affect the ability of patient family members and friends to visit veterans receiving treatment. For successful implementation of these BPOs, stakeholders and the LAP agree that this issue must be considered.

**Reuse of Land and Facilities:**

One issue affecting all options is the topic of possible reuse of the land and facilities on the Montrose campus. The LAP and stakeholders articulated that the land should go to an appropriate use that can most benefit veterans. This should be a consideration for successful implementation of all BPOs.

**Recruitment and Retention of Staff:**

Some stakeholders voiced concern about the effect that the options that potentially consolidate services at Castle Point may have on human resources issues such as staffing and recruiting at the hospitals. Consolidation of services from the Montrose VAMC to Castle Point may cause loss of existing specialty staff and may have a detrimental affect on recruitment and retention. This issue should be considered for successful implementation of these BPOs.

## 8.0 BPO Assessment Summary

The purpose of the Stage II evaluation process was to further compare and contrast the options based upon more detailed analysis of several evaluation criteria. It should be noted that each of the options selected for study in Stage II were previously assessed to be capable of meeting the threshold criteria of: maintaining or improving quality of health care, patient access and cost effectiveness (see Stage I Report).

Working collaboratively with VA management, Team PwC developed five categories of evaluation criteria that were deemed appropriate for Stage II evaluation. The five categories of evaluation criteria are: Capital Planning, Reuse, Use of VA Resources, Ease of Implementation, and Ability to Support VA Programs. The following tables show the results of the comparative assessment of the BPOs against the evaluation criteria using a quantitative scale. The evaluation results were used by Team PwC to conduct a trade-off analysis of the relative strengths and weaknesses of each option and to develop implementation plans (described in a separate report).

### Capital Planning Assessment

The Capital Planning Assessment involves four evaluation criteria with measurement indicators defined as the following:

#### 1. **Timeliness of completion**

- **Indicator:** Total duration (Years to complete)
  - The amount of time to complete construction of new or renovated facilities.

#### 2. **Timeliness of urgent corrections:**

- **Indicator:** Duration (Years to correct code deficiencies, focusing on seismic deficiencies as identified in the CAI)
  - The amount of time to complete safety improvements and render facilities compliant with modern seismic standards. Implements seismic corrections for buildings designated by VA as seismic non-exempt. Where seismic non-exempt buildings are not identified for occupancy in the BPO, these corrections will not be implemented.

#### 3. **Consolidation of underutilized space:**

- **Indicator:** Percentage of underutilized space
  - The extent to which campus space is used for healthcare delivery. Assesses the percentage variance between the projected ideal total campus BGSF and the projected BPO area. The projected BPO BSGF is a function of the facility condition assessment scores and quantity of the existing buildings altered in the BPO.

#### 4. **Consolidation of vacant space:**

- **Indicator:** Percentage of vacant space
  - The extent of vacant space remaining on campus at completion of the proposed construction.

The options were assigned scores for each Capital Planning indicator based on the following evaluation scales:

Table 115: BPO Capital Planning Assessment

Evaluation Criteria	BPO 1: Baseline	BPO 2 & BPO 7	BPO 2 & BPO 10	BPO 4 & BPO 7	BPO 4 & BPO 10	BPO 11A	BPO 11B
		Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Construct All New Facilities West of Existing Buildings	Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Build New Nursing Home and Renovate Existing Facility	Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Construct All New Facilities West of Existing Buildings	Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Build New Nursing Home and Renovate Existing Facility	Montrose, Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point, Construct All New Facilities	Montrose, Relocate Residential Treatment Programs to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point - Renovate Existing Facilities and Build New Nursing Home and Domiciliary Facilities
<b>Timeliness to Completion</b>							
Montrose	-	5	5	5	5	5	5
Castle Point	-	5	5	5	5	5	5
<b>Total Duration</b>							
Montrose	162	84	84	84	84	84	84
Castle Point	216	90	174	90	174	90	174
Scale	1 = Significantly longer duration than the Baseline BPO (>24 months longer) 2 = Longer duration than the Baseline BPO (>6 and ≤ 24 months longer) 3 = Similar duration as the Baseline BPO (+/- 6 months) 4 = Shorter duration than the Baseline BPO (>6 and ≤ 24 months shorter) 5 = Significantly shorter duration than the Baseline BPO (>24 months shorter)						
Narrative	At Montrose all BPOs have a significantly shorter duration than the Baseline BPO (78 months shorter). This is because the construction of the residential treatment and ambulatory care facilities in BPOs 2, 4, 11A and 11B take significantly less time than the phased renovations that occur in the Baseline BPO.  At Castle Point all BPOs have significantly shorter durations than the Baseline BPO. The durations of BPOs 7 and 11A are 126 months shorter than the Baseline BPO, which is due to the construction of all new facilities versus lengthy phased renovations in the Baseline BPO. The durations of BPOs 10 and 11B are also shorter than the Baseline BPO (42 months shorter) due to construction of more new facilities, but significantly longer than BPOs 7 and 11A (84 months longer). This is because the new facilities constructed in BPOs 10 and 11B require phased demolition of existing buildings, whereas the new construction in BPOs 7 and 11A occurs on a separate portion of the Castle Point campus.						
<b>Timeliness of urgent seismic corrections</b>							

Evaluation Criteria	BPO 1: Baseline	BPO 2 & BPO 7	BPO 2 & BPO 10	BPO 4 & BPO 7	BPO 4 & BPO 10	BPO 11A	BPO 11B
		Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Construct All New Facilities West of Existing Buildings	Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Build New Nursing Home and Renovate Existing Facility	Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Construct All New Facilities West of Existing Buildings	Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Build New Nursing Home and Renovate Existing Facility	Montrose, Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point - Renovate Existing Facilities and Build New Nursing Home and Domiciliary Facilities	Montrose, Relocate Residential Treatment Programs to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point - Renovate Existing Facilities and Build New Nursing Home and Domiciliary Facilities
Montrose	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Castle Point	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Duration</b>							
Montrose	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Castle Point	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scale	1 = Significantly longer duration than the Baseline BPO (>24 months longer) 2 = Longer duration than the Baseline BPO (>6 and ≤ 24 months longer) 3 = Similar duration as the Baseline BPO (+/- 6 months) 4 = Shorter duration than the Baseline BPO (>6 and ≤ 24 months shorter) 5 = Significantly shorter duration than the Baseline BPO (>24 months shorter)						
Narrative	There are no seismic non-exempt buildings slated for continued VA use under any option at Montrose or Castle Point.						
<b>Consolidation of underutilized space</b>							
Montrose	-	5	5	5	5	5	5
Castle Point	-	3	3	3	3	3	3
<b>% of Underutilized Space</b>							
Montrose	26%	0%	0%	0%	0%	-2%	-2%
Castle Point	0%	0%	5%	0%	5%	0%	5%
Scale	1 = Significantly less reduction in underutilized space than the Baseline BPO (>20% higher) 2 = Less reduction in underutilized space than the Baseline BPO (>5 and ≤ 20% higher) 3 = Similar reduction in underutilized space as the Baseline BPO (+/- 5%) 4 = Greater reduction in underutilized space than the Baseline BPO (>5 and ≤ 20% lower) 5 = Significantly greater reduction in underutilized space than the Baseline BPO (>20% lower)						

Evaluation Criteria	BPO 1: Baseline	BPO 2 & BPO 7 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Construct All New Facilities West of Existing Buildings	BPO 2 & BPO 10 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Build New Nursing Home and Renovate Existing Facility	BPO 4 & BPO 7 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Construct All New Facilities West of Existing Buildings	BPO 4 & BPO 10 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Build New Nursing Home and Renovate Existing Facility	BPO 11A Montrose, Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point, Construct All New Facilities	BPO 11B Montrose, Relocate Residential Treatment Programs to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point - Renovate Existing Facilities and Build New Nursing Home and Domiciliary Facilities
Narrative	<p>At Montrose BPOs 2, 4, 11A, and 11B have significantly less underutilized space than the Baseline as these campuses are comprised of newly renovated/constructed buildings designed to provide ideal configurations for providing healthcare services.</p> <p>There is very little underutilized space in all BPOs at Castle Point, including the Baseline. At Castle Point, the BPOs 10 and 11B have slightly more underutilized space (5%) than BPOs 1, 7 and 11A which have no underutilized space.</p>						
<b>Consolidation of vacant space</b>							
Montrose	-	3	3	3	3	3	3
Castle Point	-	4	4	4	4	4	4
<b>% Change in Vacant Space</b>							
Montrose	-95%	-100%	-100%	-100%	-100%	-100%	-100%
Castle Point	-86%	-100%	-100%	-100%	-100%	-100%	-100%
Scale	<p>1 = Significantly less reduction in vacant space than the Baseline BPO (&gt;20% higher)</p> <p>2 = Less reduction in vacant space than the Baseline BPO (&gt;5 and ≤ 20% higher)</p> <p>3 = Similar reduction in vacant space as the Baseline BPO (+/- 5%)</p> <p>4 = Greater reduction in vacant space than the Baseline BPO (&gt;5 and ≤ 20% lower)</p> <p>5 = Significantly greater reduction in vacant space than the Baseline BPO (&gt;20% lower)</p>						
Narrative	<p>There is very little vacant space in all BPOs, including the Baseline. At Montrose, the Baseline achieves a 95% reduction in vacant space, which is slightly less than the other BPOs at Montrose which achieve 100% reduction. This is a result of inefficiencies when renovating buildings compared to new facilities. The Baseline at Montrose is able to eliminate almost all vacant space because of the transfer of inpatient psychiatry and nursing home services to new facilities at Castle Point. At Castle Point the Baseline achieves an 86% reduction in vacant space, which is less of a reduction than the other BPOs at Castle Point. As with Montrose this is a result of inefficiencies when renovating buildings compared to new facilities. All other BPOs achieve a 100% reduction in vacant space at Montrose and Castle Point (similar to the Baseline) because the campuses are comprised of newly</p>						

<b>Evaluation Criteria</b>		<b>BPO 2 &amp; BPO 7</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Construct All New Facilities West of Existing Buildings	<b>BPO 2 &amp; BPO 10</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Build New Nursing Home and Renovate Existing Facility	<b>BPO 4 &amp; BPO 7</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Construct All New Facilities West of Existing Buildings	<b>BPO 4 &amp; BPO 10</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Build New Nursing Home and Renovate Existing Facility	<b>BPO 11A</b> Montrose, Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point, Construct All New Facilities	<b>BPO 11B</b> Montrose, Relocate Residential Treatment Programs to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point - Renovate Existing Facilities and Build New Nursing Home and Domiciliary Facilities
	<b>BPO 1: Baseline</b>	constructed buildings designed to provide ideal or improved configurations for providing healthcare services.					



## **Reuse Assessment (Source: OGC)**

The Reuse Assessment involves four evaluation criteria with measurement indicators defined as the following:

### **1. Market potential for reuse:**

- **Indicator:** Market potential for reuse
  - Reflects the strength of the local real estate market. Gauges the market appeal of each BPO as well as the overall market appetite for similar projects.

### **2. Financial feasibility:**

- **Indicator:** Financial feasibility
  - The total cash flows each BPO will yield to VA. The financial feasibility utilizes market data to determine a value for each BPO and to generate projected net reuse cash flows for each BPO. A range of financial factors will be considered including demolition costs, capital market conditions, required VA investments, etc.

### **3. VA mission enhancement:**

- **Indicator:** VA mission enhancement
  - A qualitative assessment of how the overall reuse solution may support VA mission. This can include the degree of compatibility that the reuse option has with the existing Medical Center activities, the existence of synergies that benefit both parties, and other potential complimentary elements of the BPO.

### **4. Execution Risk:**

- **Indicator:** Execution Risk
  - The level of complexity and risk required from a real estate perspective to accomplish the deal and deliver the cash flows presented in the highest and best use and financial feasibility option analysis. It encompasses risk factors associated with both market and financial issues, taking into account the local context.

The options were assigned scores for each Reuse indicator based on the following evaluation scales:

Table 116: BPO Reuse Assessment

Evaluation Criteria	BPO 1: Baseline	BPO 2 & BPO 7 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Construct All New Facilities West of Existing Buildings	BPO 2 & BPO 10 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Build New Nursing Home and Renovate Existing Facility	BPO 4 & BPO 7 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Construct All New Facilities West of Existing Buildings	BPO 4 & BPO 10 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Build New Nursing Home and Renovate Existing Facility	BPO 11A Montrose, Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point, Construct All New Facilities	BPO 11B Montrose, Relocate Residential Treatment Programs to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point - Renovate Existing Facilities and Build New Nursing Home and Domiciliary Facilities
<b>Market Potential for Reuse</b>							
Montrose	N/A	3	3	3	3	3	3
Castle Point	N/A	3	4	3	4	3	4
Scale	1 = Reuse would not be well received by the market 2 = Market is weak for reuse 3 = Market is adequate for reuse 4 = Market exhibits strength 5 = Market is very strong for reuse						
Narrative	<p>At Montrose: The area around the Montrose VAMC has a strong residential market. The residential market is helped by its proximity to New York City as well as White Plains, which is increasing demand in fringe areas such as the Town of Cortland. A demographic analysis indicates that the Montrose market area is growing steadily, with healthy employment, solid job growth and population growth higher than the state average. The population over the age of 55 is expected to see extremely high growth rates over the next 10 to 20 years. With demographic data indicating that senior populations will only increase, demand for senior housing seems almost certain to increase as well. However, the reuse scenario calls for a significant amount of product to be placed on the market and it is unclear to what extent the market will be able to absorb the space.</p> <p>At Castle Point: All indications are the market surrounding Castle Point VAMC is favorable for reuse due to the presence of positive market dynamics and healthy demographics. The area is growing steadily with healthy employment and job and population growth both higher than the state average. In addition, the age 55 and older population is expected to grow rapidly during the next 10 to 20 years. This implies there will be significant demand for residential options across the age continuum. However, market absorption of residential development is a potential area of concern. Also, the existence of significant improvements in BPOs 7 &amp; 11A represent a significant encumbrance to potential reuse of the site. A developer must either find a tenant for the space or demolish the buildings to prepare for new development.</p>						

Evaluation Criteria	BPO 1: Baseline	BPO 2 & BPO 7	BPO 2 & BPO 10	BPO 4 & BPO 7	BPO 4 & BPO 10	BPO 11A	BPO 11B
		Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Construct All New Facilities West of Existing Buildings	Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Build New Nursing Home and Renovate Existing Facility	Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Construct All New Facilities West of Existing Buildings	Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Build New Nursing Home and Renovate Existing Facility	Montrose, Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point - Renovate Existing Facilities and Build New Nursing Home and Domiciliary Facilities	
<b>Financial Feasibility</b>							
Montrose	N/A	4	4	4	4	4	4
Castle Point	N/A	4	4	4	4	4	4
Scale	1 = Transaction expected to result in negative cash flow 2 = Transaction will generate less than satisfactory cash flows 3 = Transaction will generate marginal cash flows 4 = Transaction will generate material cash flows 5 = Transaction will generate significant cash flows						
Narrative	At Montrose: Proceeds resulting from an EUL are expected to generate significant value for VA. Total value to VA, however, would depend on the total assets available for reuse, political and regulatory constraints (such as zoning and entitlements), new construction and adaptive reuse renovation costs, phasing and absorption rates.  At Castle Point: An enhanced-use lease transaction at Castle Point VAMC under either BPO is financially feasible and should generate material cash flows. However, political/regulatory constraints and zoning, phasing and absorption rates could have a significant effect on VA’s ability to receive maximum value for the real estate assets on the campus.						
<b>VA Mission Enhancement</b>							
Montrose	N/A	4	4	4	4	4	4
Castle Point	N/A	3	3	3	3	3	3
Scale	1 = Least compatible with / provides least enhancement of VA mission 2 = Less compatible with / provides less enhancement of VA mission 3 = Similar compatibility / enhancement of VA mission as other BPOs 4 = More compatible with / provides more enhancement of VA mission						

<b>Evaluation Criteria</b>		<b>BPO 2 &amp; BPO 7</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Construct All New Facilities West of Existing Buildings	<b>BPO 2 &amp; BPO 10</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Build New Nursing Home and Renovate Existing Facility	<b>BPO 4 &amp; BPO 7</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Construct All New Facilities West of Existing Buildings	<b>BPO 4 &amp; BPO 10</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Build New Nursing Home and Renovate Existing Facility	<b>BPO 11A</b> Montrose, Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point, Renovate Existing Station Location; Castle Point, Construct All New Facilities	<b>BPO 11B</b> Montrose, Relocate Residential Treatment Programs to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point - Renovate Existing Facilities and Build New Nursing Home and Domiciliary Facilities
	<b>BPO 1: Baseline</b>						
5 = Most compatible with / provides best enhancement of VA mission							
Narrative	At Montrose: All Business Plan Options have the potential to enhance VA’s mission. Any reuse proceeds could be used to provide additional services to veterans. Moreover, the potential residential products such as Assisted Living, Senior Living, and Multi Family Apartments could offer veteran preferences or discounts for veterans.						
	At Castle Point: Since apartments and senior housing are both feasible development options, all BPOs have the potential to enhance the VA mission through the provision of preferences or discounts for veterans. In addition, both are projected to generate reuse proceeds that could be used to provide better quality care for veterans, thereby enhancing the VA mission.						
<b>Execution Risk</b>							
Montrose	N/A	4	4	3	3	4	4
Castle Point	N/A	3	4	3	4	3	4
Scale	1 = Option presents barriers that cannot be resolved 2 = Option presents significant obstacles that may not be resolvable 3 = Option may present obstacles that are resolvable with some difficulty 4 = Option may have some obstacles, but they should be reasonably resolvable 5 = Option presents no significant obstacles or barriers to execution						
Narrative	At Montrose: The primary execution risks are the rate of absorption for new product types, entitlements and historical preservation constraints. Additionally, the current realignment plan indicates many buildings will not be available for several years, which could impact the market appetite for reuse. While each BPO includes demolition of some non-significant buildings that are considered eligible for historic status, the realignment plan for BPO 4 calls for demolition of several more visible eligible historic buildings and accounts for four years of approval process. This could impact reuse by potentially extending the timeline for which the reuse assets would be made available.						

<p><b>Evaluation Criteria</b></p>	<p><b>BPO 1: Baseline</b></p>	<p><b>BPO 2 &amp; BPO 7</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Construct All New Facilities West of Existing Buildings</p>	<p><b>BPO 2 &amp; BPO 10</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Build New Nursing Home and Renovate Existing Facility</p>	<p><b>BPO 4 &amp; BPO 7</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Construct All New Facilities West of Existing Buildings</p>	<p><b>BPO 4 &amp; BPO 10</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Build New Nursing Home and Renovate Existing Facility</p>	<p><b>BPO 11A</b> Montrose, Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point, Construct All New Facilities</p>	<p><b>BPO 11B</b> Montrose, Relocate Residential Treatment Programs to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point - Renovate Existing Facilities and Build New Nursing Home and Domiciliary Facilities</p>
<p>At Castle Point: Execution risk is lower on BPOs 10 &amp; 11B because both less encumbered with improvements, making more land available sooner for immediate reuse. The BPOs are also less at risk to the appropriation of funds for the building of a new facility in BPOs 7 &amp; 11A. Under these scenarios, improved parcels will not be available for reuse until veterans vacate existing buildings.</p>							

## **Use of VA Resources Assessment:**

The Use of VA Resources Assessment involves three evaluation criteria with measurement indicators defined as the following:

### **1. Total operating costs:**

- **Indicator:** Total operating costs (\$)
  - Total operating costs in \$ including direct variable, fixed direct, and fixed indirect costs associated with a BPO. Operating costs are aggregated for the 30-year study period.

### **2. Total capital investment costs:**

- **Indicator:** Total capital investment costs (\$)
  - Total capital investment costs in \$ for each BPO over the 30-year study period.

### **3. Net present cost:**

- **Indicator:** Net present cost (\$)
  - Annual cash outflow discounted using the overall discount rate so that a particular BPO's cash outflows can be valued on a relative basis as compared to other BPOs.

The options were assigned scores for each Use of VA Resources indicator based on the following evaluation scales:

Table 117: BPO Use of VA Resources

Evaluation Criteria	BPO 1: Baseline	BPO 2 & BPO 7 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Construct All New Facilities West of Existing Buildings	BPO 2 & BPO 10 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Build New Nursing Home and Renovate Existing Facility	BPO 4 & BPO 7 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Construct All New Facilities West of Existing Buildings	BPO 4 & BPO 10 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Build New Nursing Home and Renovate Existing Facility	BPO 11A Montrose, Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point, Construct All New Facilities	BPO 11B Montrose, Relocate Residential Treatment Programs to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point - Renovate Existing Facilities and Build New Nursing Home and Domiciliary Facilities
<b>Total operating costs</b>							
Score	-	3	3	3	3	3	3
Actual Value	\$3,064M	\$3,014M	\$2,950M	\$3,014M	\$2,950M	\$3,061M	\$2,965M
Scale	1 = Financial analysis metric for the BPO is greater than 114% of the Baseline BPO 2 = Financial analysis metric for the BPO is 105 - 114% of the Baseline BPO 3 = Financial analysis metric for the BPO is 95 - 104% of the Baseline BPO 4 = Financial analysis metric for the BPO is 85 - 94% of the Baseline BPO 5 = Financial analysis metric for the BPO is less than 85% of the Baseline BPO						
Narrative	<p>All BPOs have similar operating costs that are within 95% and 104% of the Baseline. Both BGSF and workload are relatively similar in each option and are major drivers of total operating costs. BPOs 10 and 11B have slightly lower operating cost because for a period of 7 and 8 years respectively inpatient psychiatry and nursing home services are assumed to be contracted out. A sensitivity analysis was conducted for an alternate scenario in which these services would be maintained at Montrose while the new Castle Point facilities were constructed. This factor has the effect of increasing the operating costs of BPOs 10-2, 10-4 and 11B. Options 7-2, 7-4 and 11B then become the least expensive BPOs to operate.</p> <p>Operating costs for BPO 11A are higher than BPO 2&amp;7 for the following reason: BPO 11A includes the transfer of domiciliary (dom) from Montrose to CP. BPO 7-2 does not include the transfer of dom from Montrose to CP. Fixed indirect costs associated with dom are adjusted by different percentages for the two different BPOs. In BPO 7-2 dom stays at Montrose, where overall fixed indirect costs decrease (due to the reduction in building footprint and workload). In BPO 11A, dom is transferred to CP where overall fixed indirect costs increase (due to increase in building footprint and workload). This results in fixed indirect costs for dom being higher for BPO 11A than BPO 7-2.</p>						

Evaluation Criteria							
	BPO 1: Baseline	BPO 2 & BPO 7 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Construct All New Facilities West of Existing Buildings	BPO 2 & BPO 10 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Build New Nursing Home and Renovate Existing Facility	BPO 4 & BPO 7 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Construct All New Facilities West of Existing Buildings	BPO 4 & BPO 10 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Build New Nursing Home and Renovate Existing Facility	BPO 11A Montrose, Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point, Construct All New Facilities	BPO 11B Montrose, Relocate Residential Treatment Programs to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point - Renovate Existing Facilities and Build New Nursing Home and Domiciliary Facilities
<b>Total capital investment costs</b>							
Score	-	5	5	5	5	5	5
Actual Value	\$499M	\$408M	\$392M	\$414M	\$398M	\$400M	\$396M
Scale	1 = Financial analysis metric for the BPO is greater than 114% of the Baseline BPO 2 = Financial analysis metric for the BPO is 105 - 114% of the Baseline BPO 3 = Financial analysis metric for the BPO is 95 - 104% of the Baseline BPO 4 = Financial analysis metric for the BPO is 85 - 94% of the Baseline BPO 5 = Financial analysis metric for the BPO is less than 85% of the Baseline BPO						
Narrative	BPO 1 (the Baseline) has significantly higher capital investment costs than all other BPOs because the option is not offset by reuse proceeds. Additionally the Baseline option requires a significantly higher square footage to be renovated, especially at Montrose. These buildings have relatively higher costs of renovation.						
<b>Net present cost</b>							
Score	-	3	4	3	4	3	4
Actual Value	\$3,576M	\$3,439M	\$3,354M	\$3,445M	\$3,360M	\$3,478M	\$3,373M
Scale	1 = Financial analysis metric for the BPO is greater than 114% of the Baseline BPO 2 = Financial analysis metric for the BPO is 105 - 114% of the Baseline BPO 3 = Financial analysis metric for the BPO is 95 - 104% of the Baseline BPO 4 = Financial analysis metric for the BPO is 85 - 94% of the Baseline BPO 5 = Financial analysis metric for the BPO is less than 85% of the Baseline BPO						



<p><b>Evaluation Criteria</b></p>	<p><b>BPO 1: Baseline</b></p>	<p><b>BPO 2 &amp; BPO 7</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Construct All New Facilities West of Existing Buildings</p>	<p><b>BPO 2 &amp; BPO 10</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Build New Nursing Home and Renovate Existing Facility</p>	<p><b>BPO 4 &amp; BPO 7</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Construct All New Facilities West of Existing Buildings</p>	<p><b>BPO 4 &amp; BPO 10</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Build New Nursing Home and Renovate Existing Facility</p>	<p><b>BPO 11A</b> Montrose, Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point, Construct All New Facilities</p>	<p><b>BPO 11B</b> Montrose, Relocate Residential Treatment Programs to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point - Renovate Existing Facilities and Build New Nursing Home and Domiciliary Facilities</p>
<p>Narrative</p>	<p>Options involving BPO 7 and 11B have net present costs that are relatively similar to the Baseline BPO. Options involving BPOs 10 and 11B have net present costs that are slightly lower than the Baseline BPO. The net present costs are driven largely by the 30-year operating costs of each option. The net present costs for BPOs 10 and 11B are slightly lower than the other BPOs due to the lower operating costs associated with contracting out for inpatient psychiatry services for a period of 7 and 8 years respectively. As noted above in the discussion of operating costs, a sensitivity analysis was conducted for an alternate scenario in which these services would be maintained at Montrose while the new Castle Point facilities were constructed. This factor has the effect of increasing the operating costs of BPOs 10-2, 10-4 and 11B. Options 7-2, 7-4 and 11B then become the least expensive BPOs in terms of net present cost, by between \$51 and \$86M.</p>						

## **Ease of Implementation**

The Montrose/Castle Point Ease of Implementation Assessment involves two evaluation criteria with measurement indicators defined as the following:

### **1. Reuse considerations:**

#### **o Indicators:**

##### **a) Community Support:**

- A qualitative assessment reflecting the degree of community support for the option. This includes the potential use of the option and how that fits with what the community perceives as its needs. Community support also reflects political support or opposition to each option.

##### **b) Legal / regulatory**

- This captures all legal and regulatory issues faced by each option, including zoning, environmental, historic considerations, title encumbrances and any other site restrictions that may impact the option.

### **2. Capital planning considerations:**

#### **o Indicators:**

##### **a) Size and complexity of capital plan**

- This captures four indicators of the extent to which campus facilities will be impacted by the capital plans for a given BPO: The number of capital projects associated with the BPO; the percentage campus area change as projected by the BPO; the total duration of the capital projects; and the overall capital investment cost for the BPO.

##### **b) Number and frequency of patient moves (quantity of clinical buildings altered)**

- The extent to which clinical buildings will be impacted by the capital plans for a given BPO. Provides an assessment of the total quantity of buildings altered in the BPO where patients (clinical space) are impacted. It is assumed that any construction activities in existing buildings will disrupt typical patient care activities and that these activities will require relocation to maintain acceptable levels of patient satisfaction.

##### **c) Number of historic buildings altered (total historic buildings altered)**

- The extent to which there are historical considerations in implementing the capital plans for a given BPO. Assesses the total quantity of historic buildings altered in the BPO.

The options were assigned scores for each Ease of Implementation indicator based on the following evaluation scales. Each indicator was given a score for "Negative Impact" as well as "Likelihood of Negative Impact":

Table 118: BPO Ease of Implementation Assessment

Evaluation Criteria	BPO 1: Baseline	BPO 2 & BPO 7 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Construct All New Facilities West of Existing Buildings	BPO 2 & BPO 10 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Build New Nursing Home and Renovate Existing Facility	BPO 4 & BPO 7 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Construct All New Facilities West of Existing Buildings	BPO 4 & BPO 10 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Build New Nursing Home and Renovate Existing Facility	BPO 11A Montrose, Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point, Construct All New Facilities	BPO 11B Montrose, Relocate Residential Treatment Programs to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point - Renovate Existing Facilities and Build New Nursing Home and Domiciliary Facilities
<b>Reuse Consideration: Community support (Source: OGC)</b>							
<b>Score for Negative Impact</b>							
Montrose	N/A	3	3	3	3	3	3
Castle Point	N/A	4	4	4	4	4	4
Scale for Negative Impact	For Community Support: 1 = Option has strong community resistance with at most limited support 2 = Option has greater community resistance than support 3 = Option has a balance of community support and resistance 4 = Option has greater community support than resistance 5 = Option has strong community support with at most limited resistance						
<b>Score for Likelihood of Negative Impact</b>							
Montrose	N/A	2	2	2	2	2	2
Castle Point	N/A	4	4	4	4	4	4
Scale for Likelihood of Negative Impact	1 = Option has high likelihood of community resistance 2 = Option has higher likelihood of community resistance 3 = Option has moderate likelihood of community resistance 4 = Option has low likelihood of community resistance 5 = Option has low likelihood of community resistance						
Narrative	At Montrose: Veteran opposition has mostly come as a result of a larger opposition to consolidation of services with Castle Point, but this could lead to a						

Evaluation Criteria								<b>BPO 11B</b> Montrose, Relocate Residential Treatment Programs to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point - Renovate Existing Facilities and Build New Nursing Home and Domiciliary Facilities
	<b>BPO 1:</b> Baseline	<b>BPO 2 &amp; BPO 7</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Construct All New Facilities West of Existing Buildings	<b>BPO 2 &amp; BPO 10</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Build New Nursing Home and Renovate Existing Facility	<b>BPO 4 &amp; BPO 7</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Construct All New Facilities West of Existing Buildings	<b>BPO 4 &amp; BPO 10</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Build New Nursing Home and Renovate Existing Facility	<b>BPO 4 &amp; BPO 10</b> Montrose, Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point, Construct All New Facilities	<b>BPO 11A</b> Montrose, Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point, Construct All New Facilities	
	<p>general resistance to reuse as well. The surrounding community has traditionally shown resistance to new development, and VA could expect to receive opposition to any new development that increases density on the site. However, it is not anticipated that resistance will be significant enough to impact reuse of the site.</p> <p>At Castle Point: Local and county officials voiced their support of plans to make portions of the campus available for reuse, contingent upon uses that are aligned with community needs. Immediate needs cited by these officials—workforce and senior housing, in particular—are consistent with uses deemed compatible for the site in Phase 3: General Reuse/Redevelopment Option(s).</p>							
<b>Reuse Consideration: Legal / regulatory (Source: OGC)</b>								
<b>Score for Negative Impact</b>								
Montrose	N/A	4	4	4	4	4	4	
Castle Point	N/A	4	4	4	4	4	4	
Scale for Negative Impact	<p>1 = Option has obstacles that cannot be resolved                  2 = Option has significant obstacles that may not be resolvable                  3 = Option may have obstacles that are resolvable with some difficulty                  4 = Option may have some obstacles, but they should be reasonably resolvable                  5 = Option has no significant legal/regulatory obstacles</p>							
<b>Score for Likelihood of Negative Impact</b>								
Montrose	N/A	2	2	2	2	2	2	
Castle Point	N/A	3	3	3	3	3	3	
Scale for	For Legal and Regulatory:							

Evaluation Criteria	BPO 1: Baseline	BPO 2 & BPO 7 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Construct All New Facilities West of Existing Buildings	BPO 2 & BPO 10 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Build New Nursing Home and Renovate Existing Facility	BPO 4 & BPO 7 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Construct All New Facilities West of Existing Buildings	BPO 4 & BPO 10 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Build New Nursing Home and Renovate Existing Facility	BPO 11A Montrose, Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point, Construct All New Facilities	BPO 11B Montrose, Relocate Residential Treatment Programs to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point - Renovate Existing Facilities and Build New Nursing Home and Domiciliary Facilities
Likelihood of Negative Impact	1 = Option has high likelihood of encountering legal or regulatory obstacles 2 = Option has higher likelihood of encountering legal or regulatory obstacles 3 = Option has moderate likelihood of encountering legal or regulatory obstacles 4 = Option has lower likelihood of encountering legal or regulatory obstacles 5 = Option has a low likelihood of encountering legal or regulatory obstacles						
Narrative	<p>Montrose: The Town of Cortlandt recently re-zoned the property to R-160, effectively trying to limit the density of any development on the site. Additionally, some state and federal politicians have voiced concern with realignment of services, and any opposition to realignment could impact reuse. While VA may encounter some obstacles to any potential development on the site, it is likely that VA or any selected developer will be able to negotiate a solution to overcome any resistance to reuse plans.</p> <p>Castle Point: The entitlement process is primary legal/regulatory obstacle to be faced during the redevelopment of Castle Point VAMC, with the siting of a parcel in two towns—Fishkill and Wappinger—posing the greatest challenge. This obstacle should be reasonably resolvable, however, given both Towns’ stated willingness to work cooperatively with the VA to redevelop the site in a manner that provides benefits to veterans and the municipality.</p>						
<b>Capital Planning Considerations: Size and complexity of capital plan</b>							
<b>Score for Negative Impact</b>							
Montrose	3	5	5	5	5	5	5
Castle Point	3	5	1	5	1	5	1
Scale for Negative Impact	1 = High potential negative impact 3 = Medium potential negative impact 5 = Low potential negative impact						

Evaluation Criteria	BPO 1: Baseline							BPO 11B Montrose, Relocate Residential Treatment Programs to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point - Renovate Existing Facilities and Build New Nursing Home and Domiciliary Facilities
	BPO 2 & BPO 7 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Construct All New Facilities West of Existing Buildings	BPO 2 & BPO 10 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Build New Nursing Home and Renovate Existing Facility	BPO 4 & BPO 7 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Construct All New Facilities West of Existing Buildings	BPO 4 & BPO 10 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Build New Nursing Home and Renovate Existing Facility	BPO 4 & BPO 10 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Build New Nursing Home and Renovate Existing Facility	BPO 11A Montrose, Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point, Construct All New Facilities		
<b>Score for Likelihood of Negative Impact</b>								
Montrose	1	5	5	5	5	5	5	
Castle Point	1	5	1	5	1	5	1	
Scale for Likelihood of Negative Impact	1 = High likelihood of occurrence of negative impact 3 = Medium likelihood of occurrence of negative impact 5 = Low likelihood of occurrence of negative impact							
Narrative	The Baseline BPO at Montrose and Castle Point have a medium potential for negative impact and a high likelihood of occurrence of negative impact because of its long duration and complex phasing of construction and renovation. All other BPOs at Montrose have low potential for negative impact and low likelihood of negative impact because they have shorter durations and involve all new construction versus lengthy phased renovations. BPOs 7 and 11A at Montrose also have low potential for negative impact and low likelihood of negative impact for similar reasons as well as that the construction of new facilities does not depend on demolition of existing facilities. BPOs 10 and 11B for Castle Point have high potential for negative impact and high likelihood of negative impact because they involve the most complex phasing and significantly longer duration than BPOs 7 and 11A at Castle Point.							
<b>Capital Planning Considerations: Number of historic buildings altered</b>								
<b>Score for Negative Impact</b>								
Montrose	3	5	5	3	3	5	5	
Castle Point	3	5	3	5	3	5	3	
Scale for Negative Impact	1 = High potential negative impact 3 = Medium potential negative impact 5 = Low potential negative impact							
<b>Score for Likelihood of Negative Impact</b>								

Evaluation Criteria	<p><b>BPO 1:</b> Baseline</p> <p><b>BPO 2 &amp; BPO 7</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Construct All New Facilities West of Existing Buildings</p> <p><b>BPO 2 &amp; BPO 10</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Build New Nursing Home and Renovate Existing Facility</p> <p><b>BPO 4 &amp; BPO 7</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Construct All New Facilities West of Existing Buildings</p> <p><b>BPO 4 &amp; BPO 10</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Build New Nursing Home and Renovate Existing Facility</p> <p><b>BPO 11A</b> Montrose, Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point, Construct All New Facilities</p> <p><b>BPO 11B</b> Montrose, Relocate Residential Treatment Programs to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point - Renovate Existing Facilities and Build New Nursing Home and Domiciliary Facilities</p>						
	Montrose	3	3	3	3	3	3
Castle Point	5	5	5	5	5	5	5
Scale for Likelihood of Negative Impact	<p>1 = High likelihood of occurrence of negative impact                      3 = Medium likelihood of occurrence of negative impact                      5 = Low likelihood of occurrence of negative impact</p>						
Narrative	<p>The same number (43 at Montrose and 26 at Castle Point) of historic or historically eligible buildings are renovated, demolished or made available for reuse under each option. At Montrose BPOs 1 and 4 have a medium potential for negative impact because they demolish historic or historically eligible buildings that are part of building set that contributes to the aesthetics of the campus setting at Montrose. The rest of the BPOs for Montrose (BPOs 2 and 11A) have a low potential for negative impact because most of the historic or historically eligible buildings are available for reuse. All BPOs at Montrose have a medium likelihood of negative impact because the buildings at Montrose may be thought to have more historic significance, and more historic or historically eligible buildings are altered in each of the BPOs. At Castle Point BPOs 1, 10 and 11B have a medium potential for negative impact. Historic or historically eligible buildings must be renovated or demolished in these options whereas in BPOs 7 and 11A all of the historic or historically eligible buildings altered are available for reuse.</p>						
<b>Capital Planning Considerations: Number and frequency of patient moves</b>							
<b>Score for Negative Impact</b>							
Montrose	1	5	5	5	5	5	5
Castle Point	3	5	1	5	1	5	1
Scale for Negative Impact	<p>1 = High potential negative impact                      3 = Medium potential negative impact                      5 = Low potential negative impact</p>						

Evaluation Criteria							
	BPO 1: Baseline	BPO 2 & BPO 7 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Construct All New Facilities West of Existing Buildings	BPO 2 & BPO 10 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Build New Nursing Home and Renovate Existing Facility	BPO 4 & BPO 7 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Construct All New Facilities West of Existing Buildings	BPO 4 & BPO 10 Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Build New Nursing Home and Renovate Existing Facility	BPO 11A Montrose, Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point, Construct All New Facilities	BPO 11B Montrose, Relocate Residential Treatment Programs to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point - Renovate Existing Facilities and Build New Nursing Home and Domiciliary Facilities
<b>Score for Likelihood of Negative Impact</b>							
Montrose	3	3	3	3	3	3	3
Castle Point	3	3	3	3	3	3	3
Scale for Likelihood of Negative Impact	1 = High likelihood of occurrence of negative impact 3 = Medium likelihood of occurrence of negative impact 5 = Low likelihood of occurrence of negative impact						
Narrative	The Baseline at Montrose has a high potential for negative impact because it involves multiple phased inpatient moves. The Baseline at Castle Point has a medium potential for negative occurrence because it involves a smaller amount of inpatient moves. BPOs 10 and 11B at Castle Point have a high potential for negative occurrence because they involve phased nursing home moves over a 10-year period as well as multiple clinical and inpatient moves. BPOs 2, 4, 7, 11A and 11B (Montrose only) have low potential for negative impact because they involve one patient move into new facilities. All BPOs have a medium likelihood for negative impact because they all require significant planning and coordination of extra staff during patient moves.						



## **Ability to Support VA Programs**

The Use of Ability to Support VA Programs Assessment involves four evaluation criteria with measurement indicators defined as the following:

- 1. DoD sharing:**
  - **Indicator:** MOUs impacted by BPO
    - The extent to which Memoranda of Understanding with DoD partners (for sharing agreements) are enhanced by the BPO.
- 2. One VA integration:**
  - **Indicator:** VBA and NCA impacted by BPO
    - The extent to which each BPO will enhance existing One-VA co-locations or facilitate the establishment of new co-locations.
- 3. Specialized VA programs:**
  - **Indicator:** Specialized Care/COE impacted by BPO
    - The extent to which the BPOs enhance specialized care (e.g., chronic spinal cord injury treatment, Alzheimer's treatment, etc.) or Centers of Excellence (e.g., GRECC, GEM, etc.) as defined by VA.
- 4. Enhancement of services to veterans:**
  - **Indicator:** Services in kind
    - Extent to which each BPO directly and indirectly provides enhancement to VA services. This may often be achieved through providing in-kind services. In addition, this may be achieved through upgrading of general services on campus. It may also involve uses that by proximity enhance the overall ability of the Center to offer its veterans convenient complementary services.

The options were assigned scores for each Ability to Support VA Programs indicator based on the following evaluation scales:

Table 119: BPO Ability to Support VA Programs Assessment

Evaluation Criteria	BPO 1: Baseline	BPO 2 & BPO 7	BPO 2 & BPO 10	BPO 4 & BPO 7	BPO 4 & BPO 10	BPO 11A	BPO 11B
		Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Construct All New Facilities West of Existing Buildings	Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Build New Nursing Home and Renovate Existing Facility	Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Construct All New Facilities West of Existing Buildings	Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Build New Nursing Home and Renovate Existing Facility	Montrose, Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point, Construct All New Facilities	Montrose, Relocate Residential Treatment Programs to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point - Renovate Existing Facilities and Build New Nursing Home and Domiciliary Facilities
<b>One VA integration</b>							
Montrose	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Castle Point	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scale	1 = The BPO has the potential to provide the least enhancement relative to the Baseline BPO for the specific criterion 2 = The BPO has the potential to provide less enhancement relative to the Baseline BPO for the specific criterion 3 = The BPO has the potential to provide enhancement equivalent to the Baseline BPO for the specific criterion 4 = The BPO has the potential to provide more enhancement relative to the Baseline BPO for the specific criterion 5 = The BPO has the potential to provide the most enhancement relative to the Baseline BPO for the specific criterion						
Narrative	There is neither a VBA nor a NCA office on the Montrose or Castle Point VAMC campuses. There is no impact on One-VA Integration.						
<b>Enhancement of Services to Veterans</b>							
Montrose	-	4	4	4	4	4	4
Castle Point	-	4	4	4	4	4	4
Scale	1 = The BPO has the potential to provide the least enhancement relative to the Baseline BPO for the specific criterion 2 = The BPO has the potential to provide less enhancement relative to the Baseline BPO for the specific criterion 3 = The BPO has the potential to provide enhancement equivalent to the Baseline BPO for the specific criterion 4 = The BPO has the potential to provide more enhancement relative to the Baseline BPO for the specific criterion 5 = The BPO has the potential to provide the most enhancement relative to the Baseline BPO for the specific criterion						
Narrative	All BPOs have the potential to provide more enhancement to services for veterans relative to the Baseline through the delivery of reuse proceeds that						

<b>Evaluation Criteria</b>	<b>BPO 1:</b> Baseline	<b>BPO 2 &amp; BPO 7</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Construct All New Facilities West of Existing Buildings	<b>BPO 2 &amp; BPO 10</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Build New Nursing Home and Renovate Existing Facility	<b>BPO 4 &amp; BPO 7</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Construct All New Facilities West of Existing Buildings	<b>BPO 4 &amp; BPO 10</b> Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Build New Nursing Home and Renovate Existing Facility	<b>BPO 11A</b> Montrose, Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point - Renovate Existing Facilities and Build New Nursing Home and Domiciliary Facilities	<b>BPO 11B</b> Montrose, Relocate Residential Treatment Programs to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point - Renovate Existing Facilities and Build New Nursing Home and Domiciliary Facilities
	<p>would provide better quality care. In addition, the site has significant potential for transit-oriented development given its proximity to rail access. While highly speculative, this type of development would benefit the community and VA. Veterans will have easy access to both Montrose and Castle Point VAMC, further reducing logistics and transportation costs.</p>						

## 9.0 BPO Tradeoff Analysis

The purpose of the Trade-off Analysis is to provide VA decision makers with a balanced discussion of the strengths and weaknesses to be considered in deciding upon an option to implement. Team PwC compared and contrasted the evaluation criteria for each option (presented in Chapter 8) together with the results of stakeholder and LAP input. Note that each of the options selected for study in Stage II were previously assessed to be capable of meeting the threshold criteria of: maintaining or improving quality of health care, patient access and cost effectiveness (see Stage I Report).

The following section displays each option's relative strengths and weaknesses in the evaluation categories of: Capital Planning, Reuse, Use of VA Resources, Ease of Implementation, Support for Other VA Programs, and Stakeholder and LAP Input.

### **BPO 1 - Baseline**

*Table 120: Tradeoff Analysis*

<b>Capital Planning</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• There are no strengths in the Baseline compared to the other BPOs.</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• Longest duration at Montrose and Castle Point</li> <li>• Results in most underutilized and vacant space at Montrose and Castle Point</li> </ul>
<b>Reuse</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• There are no strengths in the Baseline compared to the other BPOs.</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• There is no reuse revenue in the Baseline.</li> </ul>
<b>Use of VA Resources</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• There are no strengths in the Baseline relative to the other options.</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• Highest capital investment cost</li> </ul>
<b>Ease of Implementation</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• There are no strengths in the Baseline compared to the other BPOs.</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• Higher degree of complexity at Montrose and Castle Point due to renovation and construction phases and relocation of services and patients</li> </ul>
<b>Stakeholder &amp; LAP Input</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• There are no strengths compared to the other BPOs</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• There are no weaknesses compared to the other BPOs.</li> </ul>

## **BPO 2 & BPO 7**

*Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Construct All New Facilities West of Existing Buildings*

Table 121: Tradeoff Analysis

<b>Capital Planning</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Shortest duration at Montrose (comparable to BPOs 4, 11A and 11B) and shortest duration at Castle Point (comparable to BPO 11A)</li> <li>• Lowest underutilized space at Montrose (comparable to BPOs 4, 11A, and 11B) and at Castle Point (comparable to BPOs 1 and 11A)</li> <li>• Eliminates vacant space at Montrose and Castle Point (comparable to BPOs 4, 10, 11A and 11B)</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• There are no weaknesses relative to the other options.</li> </ul>
<b>Reuse</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Makes more land available for reuse than the Baseline.</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• Makes less land available for reuse at Castle Point than BPOs 10 and 11B and involves a significant encumbrance to potential reuse at Castle Point.</li> </ul>
<b>Use of VA Resources</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Lowest net present cost, assuming that inpatient and nursing home facilities remain at Montrose while new Castle Point facilities are constructed</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• Capital cost net of reuse proceeds are slightly higher (as with BPOs 4 with 7 and 11A) than options involving BPOs 10 and 11B</li> </ul>
<b>Ease of Implementation</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Lowest degree of complexity at Montrose and Castle Point based on construction phasing and patient moves (comparable to BPOs 4 and 11A)</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• There are no weaknesses relative to the other options.</li> </ul>
<b>Stakeholder &amp; LAP Input</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Stakeholders expressed preference for the current division of services between Montrose and Castle Point, and therefore were more likely to support BPO 7-2 as it maintains the domiciliary at Montrose</li> <li>• Stakeholders supported options which provide new clinical facilities</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• There are no weaknesses relative to the other options.</li> </ul>

**BPO 2 & BPO 10**

*Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility East of Fire Station (North Campus); Castle Point, Build New Nursing Home and Renovate Existing Facility*

Table 122: Tradeoff Analysis

<b>Capital Planning</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Shortest duration at Montrose (along with BPOs 4, 11A and 11B)</li> <li>• Lowest underutilized space at Montrose (along with BPOs 4, 11A, and 11B)</li> <li>• Eliminates vacant space at Montrose and Castle Point (along with BPOs 4, 7, 11A and 11B)</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• Longer duration at Castle Point than BPOs 7 and 11A</li> </ul>
<b>Reuse</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Makes more land available for reuse than BPOs, 1, 7 and 11A.</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• No weaknesses compared to the other BPOs.</li> </ul>
<b>Use of VA Resources</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Lowest capital investment cost</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• About \$51M higher net present cost than BPO 7-2, assuming that inpatient and nursing home facilities remain at Montrose while new Castle Point facilities are constructed.</li> </ul>
<b>Ease of Implementation</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Lowest degree of complexity at Montrose based on renovation construction phasing and patient moves (along with BPOs 4 and 11A)</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• Highest degree of complexity at Castle Point due to renovation and construction phases and relocation of services and patients (along with BPO 11B)</li> <li>• Management challenges and risks associated with contracting out for inpatient psychiatry and nursing home care over an extended period of time</li> </ul>
<b>Stakeholder &amp; LAP Input</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• No strengths compared to the other BPOs.</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• Stakeholders were less likely to support this option compared to other BPOs which provide all new clinical facilities at Castle Point</li> </ul>

## **BPO 4 & BPO 7**

*Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Construct All New Facilities West of Existing Buildings*

Table 123: Tradeoff Analysis

<b>Capital Planning</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Shortest duration at Montrose (along with BPOs 2, 11A and 11B) and shortest duration at Castle Point (along with BPO 11A)</li> <li>• Lowest underutilized space at Montrose (along with BPOs 2, 11A, and 11B) and at Castle Point (comparable to BPOs 1, and 11A)</li> <li>• Eliminates vacant space at Montrose and Castle Point (along with BPOs 2, 10, 11A and 11B)</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• No weaknesses compared to the other BPOs.</li> </ul>
<b>Reuse</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Makes more land available for reuse than the Baseline.</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• Makes less land available for reuse at Castle Point than BPOs 10 and 11B and involves a significant encumbrance to potential reuse at Castle Point.</li> </ul>
<b>Use of VA Resources</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Among the lowest BPOs in terms of net present cost, assuming that inpatient and nursing home facilities remain at Montrose while new Castle Point facilities are constructed</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• Capital cost net of reuse proceeds are slightly higher (as with BPOs 2 with 7 and 11A) than options involving BPOs 10 and 11B</li> </ul>
<b>Ease of Implementation</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Lowest degree of complexity at Montrose and Castle Point based on construction phasing and patient moves (along with BPOs 2 and 11A)</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• No weaknesses compared to the other BPOs.</li> </ul>
<b>Stakeholder &amp; LAP Input</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Stakeholders expressed preference for the current division of services between Montrose and Castle Point, and therefore were more likely to support BPO 7-4 as it maintains the domiciliary at Montrose</li> <li>• Stakeholders supported options which provide new clinical facilities</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• No weaknesses compared to the other BPOs.</li> </ul>

## **BPO 4 & BPO 10**

*Montrose, Construct New Residential Treatment Programs and Ambulatory Care Facility South of Fire Station; Castle Point, Build New Nursing Home and Renovate Existing Facility*

Table 124: Tradeoff Analysis

<b>Capital Planning</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Shortest duration at Montrose (along with BPOs 2, 11A and 11B)</li> <li>• Lowest underutilized space at Montrose (along with BPOs 2, 11A, and 11B)</li> <li>• Eliminates vacant space at Montrose and Castle Point (along with BPOs 2, 7, 11A and 11B)</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• Longer duration at Castle Point than BPOs 7 and 11A</li> </ul>
<b>Reuse</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Makes more land available for reuse than BPOs, 1, 7 and 11A.</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• No weaknesses compared to the other BPOs.</li> </ul>
<b>Use of VA Resources</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• No strengths compared to the other BPOs</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• About \$56M higher net present cost than BPO 7-2, assuming that inpatient and nursing home facilities remain at Montrose while new Castle Point facilities are constructed.</li> </ul>
<b>Ease of Implementation</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Lowest degree of complexity at Montrose based on renovation construction phasing and patient moves (along with BPOs 2 and 11A)</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• Highest degree of complexity at Castle Point due to renovation and construction phases and relocation of services and patients (along with BPO 11B)</li> <li>• Management challenges and risks associated with contracting out for inpatient psychiatry and nursing home care over an extended period of time</li> </ul>
<b>Stakeholder &amp; LAP Input</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• No strengths compared to the other BPOs.</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• Stakeholders were less likely to support this option compared to other BPOs which provide all new clinical facilities at Castle Point</li> </ul>



**BPO 11A**

*Montrose, Relocate Residential Treatment Program to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point, Construct All New Facilities*

Table 125: Tradeoff Analysis

<b>Capital Planning</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Shortest duration at Montrose (along with BPOs 2, 4 and 11B) and shortest duration at Castle Point (along with BPO 2)</li> <li>• Lowest underutilized space at Montrose (along with BPOs 2, 4, and 11B) and at Castle Point (comparable to BPOs 1 and 7)</li> <li>• Eliminates vacant space at Montrose and Castle Point (along with BPOs 2, 4, 10, and 11B)</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• No weaknesses compared to the other BPOs.</li> </ul>
<b>Reuse</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Makes more land available for reuse than the Baseline.</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• Makes less land available for reuse at Castle Point than BPOs 10 and 11B and involves a significant encumbrance to potential reuse at Castle Point.</li> </ul>
<b>Use of VA Resources</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Among the lowest BPOs in terms of net present cost, assuming that inpatient and nursing home facilities remain at Montrose while new Castle Point facilities are constructed.</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• Capital cost net of reuse proceeds are slightly higher (as with BPOs 4 with 7 and 11A) than options involving BPOs 10 and 11B</li> </ul>
<b>Ease of Implementation</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Lowest degree of complexity at Montrose and Castle Point based on construction phasing and patient moves (along with BPOs 2, 4 and 7)</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• No weaknesses compared to the other BPOs.</li> </ul>
<b>Stakeholder &amp; LAP Input</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Stakeholders supported options which provide new clinical facilities</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• Stakeholders expressed preference for the current division of services between Montrose and Castle Point, and therefore were less likely to support BPO 11A as it moves the domiciliary to Castle Point</li> </ul>

## **BPO 11B**

***Montrose - Relocate Residential Treatment Programs to Castle Point and Construct New Ambulatory Care Building East of Former Fire Station Location; Castle Point - Renovate Existing Facilities and Build New Nursing Home and Domiciliary Facilities***

Table 126: Tradeoff Analysis

<b>Capital Planning</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Shortest duration at Montrose (along with BPOs 2, 4, 11A)</li> <li>• Lowest underutilized space at Montrose (along with BPOs 2, 4, and 11B)</li> <li>• Eliminates vacant space at Montrose and Castle Point (along with BPOs 2, 4, 7 and 11B)</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• Longer duration at Castle Point than BPOs 7 and 11A</li> </ul>
<b>Reuse</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Makes more land available for reuse than BPOs, 1, 7 and 11A.</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• No weaknesses compared to the other BPOs.</li> </ul>
<b>Use of VA Resources</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• No strengths compared to the other BPOs.</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• About \$86M higher net present cost than BPO 7-2, assuming that inpatient and nursing home facilities remain at Montrose while new Castle Point facilities are constructed..</li> </ul>
<b>Ease of Implementation</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Lowest degree of complexity at Montrose based on renovation construction phasing and patient moves (along with BPOs 2 and 4)</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• Highest degree of complexity at Castle Point due to renovation and construction phases and relocation of services and patients (along with BPO 10)</li> <li>• Management challenges and risks associated with contracting out for inpatient psychiatry and nursing home care over an extended period of time</li> </ul>
<b>Stakeholder &amp; LAP Input</b>	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• No strengths compared to the other BPOs.</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• Stakeholders expressed preference for the current division of services between Montrose and Castle Point, and therefore were less likely to support BPO 11B as it moves the domiciliary to Castle Point</li> <li>• Stakeholders were less likely to support this option compared to other BPOs which provide all new clinical facilities at Castle Point</li> </ul>

## **Summary**

Each of these option combinations has relative strengths and weaknesses across the evaluation criteria. The Baseline option (BPO 1) accommodates the projected healthcare demand by renovating existing buildings to meet modern, safe and secure standards, where conditions allow.

The renovations in the Baseline achieve a more modern, safe and secure healthcare environment than is currently provided. However, this option does not take advantage of the numerous benefits to patients and staff of new, state-of-the-art clinical facilities. Additionally, it requires the highest capital investment cost, has the longest duration at both Montrose and Castle Point, results in the most underutilized and vacant space, and has a high degree of complexity at Montrose and Castle Point due to renovation and construction phases and relocation of services and patients.

BPO 2-7 is very similar to BPO 11A with the only difference being that in BPO 11A, residential treatment programs are moved from Montrose to Castle Point. These options have several advantages over the other BPOs. They are the shortest BPOs to implement, result in the lowest underutilized and vacant space at Montrose and Castle Point, and are the least complex BPOs based on construction phasing and patient moves. In financial terms, BPO 2-7 has the lowest net present cost, assuming that inpatient and nursing home facilities remain at Montrose while new Castle Point facilities are constructed. However, the capital costs net of reuse proceeds are slightly higher than options involving BPOs 10 and 11B. In terms of stakeholder reaction, veterans expressed a strong preference for the current division of services between Montrose and Castle Point, and therefore were more likely to support BPO 7-2 as it maintains the domiciliary at Montrose. The LAP favored options which provide new clinical facilities.

BPOs 2-10 and 4-10 are very similar to BPO 11B with the only difference being that in BPO 11B, residential treatment programs are moved from Montrose to Castle Point. These options have several advantages over the other BPOs. They are the shortest BPOs to implement at Montrose, result in the lowest underutilized space at Montrose, eliminate vacant space at both campus, and have the lowest operating, capital investment and net present costs. These BPOs have the lowest degree of complexity at Montrose based on renovation and construction phasing and patient moves. However, these options have several disadvantages over the other BPOs. These options have a longer duration at Castle Point than BPOs 7 and 11A. They have significant management challenges and risks associated with contracting out for inpatient psychiatry and nursing home care over an extended period of time. If an alternative implementation strategy is followed and inpatient and nursing home facilities remain at Montrose while new Castle Point facilities are constructed, BPOs 2-10 and 4-10 are \$51-56M higher in net present cost than BPO 7-2. In terms of stakeholder reaction, veterans expressed a strong preference for the current division of services between Montrose and Castle Point, and therefore were more likely to support BPO 2-10 and 4-10 as they maintain the domiciliary at Montrose. .

The combination of BPOs 4 and 7 has several advantages over the other BPOs. It is the shortest duration at Montrose and Castle Point, results in the lowest underutilized and vacant space at both campuses and is the least complex option combination based on construction phasing and patient moves. The only relative disadvantage of this option combination is that capital costs net of reuse proceeds are slightly higher than options involving BPOs 10 and 11B. In terms of stakeholder reaction, veterans expressed a strong preference for the current division of services between Montrose and Castle Point, and therefore were more likely to support BPO 7-4 as it

maintains the domiciliary at Montrose. The LAP favored options which provide new clinical facilities.

## Appendices

### **Appendix A - Other Relevant Documents**

Other relevant documents include the following:

- The reports entitled, *Phase 2 & 3 Combined Report: General Reuse/Redevelopment Option(s) Castle Point Campus of the VA Hudson Valley Health Care System* and *Phase 3 Report General Reuse/Redevelopment Options Franklin Delano Roosevelt Campus of the VA Hudson Valley Healthcare System*, developed by S&S/ACG Joint Venture. These reports are available on the VA's Office of Asset Enterprise Management website.
- The document entitled, *Stage II Assumption, Inputs and Outputs* written by Team PwC.
- BPO Implementation Plan and Risk Mitigation Strategies

## **Appendix B - Detailed Stage II Methodology**

### **Overview**

This section provides an overview of the methodology employed in Stage II of the CARES study. In Stage I, Team PwC in collaboration with Other Government Contractors (OGCs) for Reuse studies<sup>6</sup>, developed and assessed a broad range of potentially viable business plan options (BPOs) that met the forecast healthcare needs for the study sites. Based upon an initial assessment of these BPOs, Team PwC recommended up to six BPOs to be taken forward for further development and assessment in Stage II, and VA selected the specific BPOs to be studied further. In Stage II, Team PwC and OGCs will conduct a more detailed assessment of the short-listed BPOs in order to provide VA decision makers with an evaluation of each BPO and its relative merits.

In Stage II, Team PwC and OGCs will collect additional data on a set of evaluation criteria and conduct additional capital planning, reuse, and financial analysis for each BPO. The results will be used to compare BPOs and to evaluate the relative strengths and weaknesses of each BPO. Finally, an implementation plan featuring risk mitigation strategies will be developed for each BPO.

The Stage II study will be organized around the following evaluation categories:

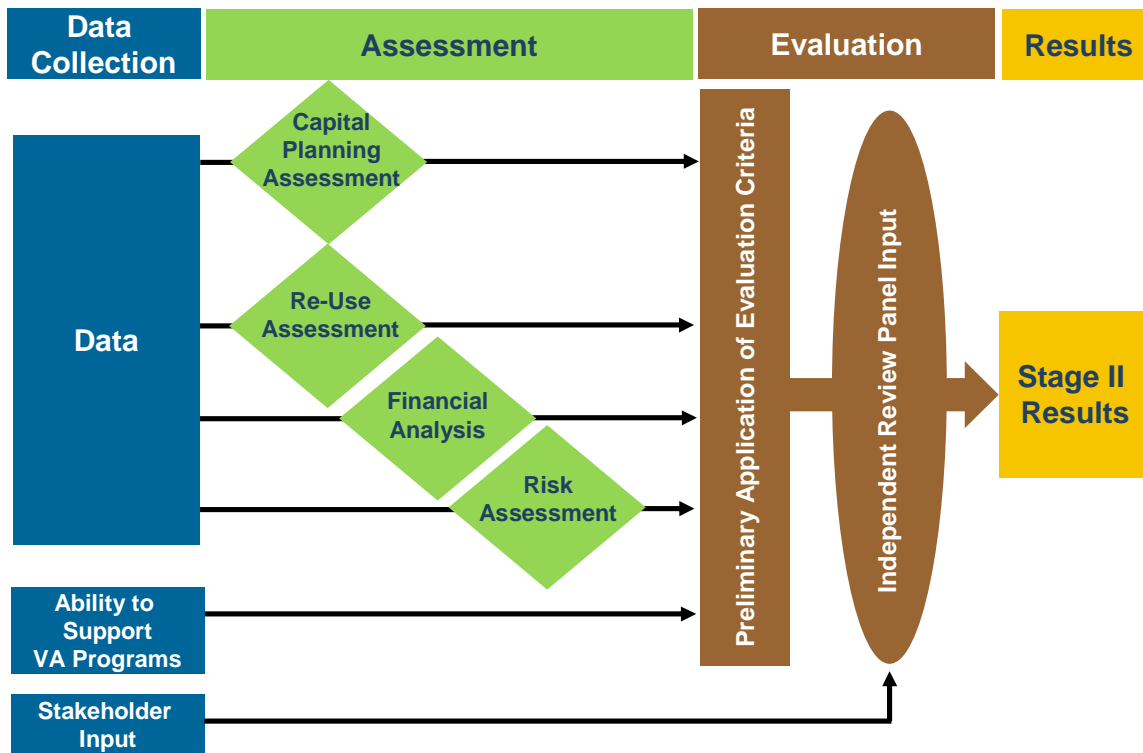
- Capital Planning
- Use of VA Resources
- Ability to Support Other VA Programs
- Reuse
- Ease of Implementation
- Stakeholder Input

The Stage II study process will consist of four primary steps, Data Collection, Assessment, Evaluation, and Stage II Results, as depicted in the figure below.

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<sup>6</sup> In both Stage I and II, OGCs complete the Reuse studies for comprehensive capital planning sites. Team PwC completes the Reuse studies for healthcare planning sites.

Figure 18: A Diagram of the Overview of Stage II Methodology



The Data Collection process will be used to augment study data gathered in Stage I. This data will provide the inputs to the BPO assessment. During the data collection step, Team PwC will confirm existing Stage I data and collect new data in order to refine the BPOs and complete the assessments for each evaluation category. The Capital Planning team will obtain such information as updated building scores, healthcare utilization, and space projection factors, while the Reuse team will obtain additional information regarding the real estate market, such as rents and sales prices. The Use of VA Resources team will validate and update VA costs of care and collaborate with the Capital Planning and Reuse team to understand the capital investment needs and potential reuse revenues associated with each BPO. The Ease of Implementation team will obtain data and information to validate the impacts on academic affiliations and education programs, in addition to potential staffing complements under each BPO. The Ease of Implementation team will work with the Capital Planning and Reuse teams to understand the implementation considerations for each BPO and develop strategies to mitigate implementation risks. Site teams will review information about Ability to Support Other VA Programs and potential services in kind to determine how they might be impacted by the implementation of the BPOs.

Parallel to the data gathering activities, Team PwC will solicit input from stakeholders on their comments and concerns for each BPO. Stakeholder input will include written correspondence received through a central mail stop, oral testimony received through Local Advisory Panel (LAP) public meetings, results of LAP deliberations, and electronic feedback received through the study website.

The Assessment step will involve conducting more detailed analyses of the short-listed BPOs across each evaluation category. The data collected in this initial step will drive the completion of the assessments. The Capital Planning team will use projected utilization and facility information to calculate and allocate space needs for a conceptual site plan, determine the capital investment required, and schedule construction projects. The Reuse team will refine the market assessment as well as the environmental and

regulatory assessments for the property. The Use of VA Resources team will complete a financial analysis to determine the costs, revenues, and savings associated with each BPO, while the Ease of Implementation team will determine risk ratings for each option. The outputs of the Assessment step will be a set of data and findings for each BPO.

The Evaluation step will compare the BPOs against the Baseline option using a set of agreed-upon evaluation criteria, which are described in the following section. The Team PwC and OGC site teams will conduct a preliminary evaluation of each BPO. The independent review panel will provide a sounding board for the preliminary assessment findings and evaluation of each BPO, together with stakeholder input. The BPOs will be evaluated against the evaluation criteria using a quantitative scale in order to discriminate between the BPOs. The evaluation results will be used by site teams and the expert panel to discuss the relative strengths and weaknesses of each BPO and to develop implementation plans. The outputs of the Evaluation step will be the evaluation results for each BPO, a discussion of the merits of each BPO, and an implementation plan and risk mitigation strategies for each BPO. The Stage II Results will be used by VA in its decision making.

## **Evaluation Criteria**

In Stage I, a broad range of BPOs were screened and evaluated according to a set of primary and discriminating criteria. Primary criteria consisted of access, quality of care, and cost effectiveness. Discriminating criteria consisted of healthcare quality, healthcare access, impact on VA and local community, use of VA resources, ease of implementation, and ability to support VA programs.

The Stage I evaluation process resulted in BPOs recommended for further study in Stage II. Each of the BPOs recommended for further study in Stage II met the three primary criteria of access, quality of care, and cost effectiveness. In terms of access and quality of care, each of the BPOs was assessed to meet minimum standards and thresholds. These criteria will not be further studied in Stage II.

The discriminating criteria used in Stage I provided a level of analysis which was sufficient to arrive at recommended BPOs. The purpose of the Stage II evaluation process is to further compare and contrast the BPOs based upon more detailed analysis of several evaluation criteria.

Working collaboratively with VA management, Team PwC developed five categories of evaluation criteria that were deemed appropriate for Stage II evaluation. These five categories of evaluation criteria are: Capital Planning, Reuse, Use of VA Resources, Ease of Implementation, and Ability to Support Other VA Programs. In arriving at these criteria, consideration was given to Stage I criteria and results, discriminating factors of BPOs moving forward for study in Stage II, and the relevance of criteria across sites. The following table lists the indicators used to measure each of the evaluation criteria, together with the definition. It should be noted that some criteria, specifically academic affiliations / education and HR / staffing, used to evaluate the impact on local community in Stage I, will be used more appropriately in Stage II to evaluate the ease of implementation.



Table 120: Stage II Evaluation Criteria and Indicators

<b>Evaluation Criteria</b>	<b>Indicator</b>	<b>Definition</b>
<b>Capital Planning</b>		
<b>Timeliness of completion</b>	Total duration (Years to complete)	The amount of time to complete construction of new or renovated facilities.
<b>Timeliness of urgent corrections</b>	Duration (Years to correct code deficiencies, focusing on seismic deficiencies as identified in the CAI)	The amount of time to complete safety improvements and render facilities compliant with modern seismic standards. Implements seismic corrections for buildings designated by VA as seismic non-exempt. Where seismic non-exempt buildings are not identified for occupancy in the BPO, these corrections will not be implemented.
<b>Consolidation of underutilized space</b>	% Underutilized space	The extent to which campus space is used for healthcare delivery. Assesses the percentage variance between the projected ideal total campus BGSF and the projected BPO projected area. The projected BPO BSGF is a function of the facility condition assessment scores and quantity of the existing buildings altered in the BPO.
<b>Consolidation of vacant space</b>	% Vacant space	The extent of vacant space remaining on campus at completion of the proposed construction.
<b>Reuse</b>		
<b>Market potential for reuse</b>	Market potential for reuse	Reflects the strength of the local real estate market. Gauges the market appeal of each BPO as well as the overall market appetite for similar projects.
<b>Financial feasibility</b>	Financial feasibility	The total cash flows each BPO will yield to VA. The financial feasibility utilizes market data to determine a value for each BPO and to generate projected net reuse cash flows for each BPO. A range of financial factors will be considered including demolition costs, capital market conditions, required VA investments, etc.
<b>VA mission enhancement</b>	VA mission enhancement	A qualitative assessment of how the overall reuse solution may support VA mission. This can include the degree of compatibility that the reuse option has with the existing Medical Center activities, the existence of synergies that benefit both parties, and other potential complimentary elements of the BPO.
<b>Execution risk</b>	Execution risk	The level of complexity and risk required from a real estate perspective to accomplish the deal and deliver the cash flows presented in the highest and best use and financial feasibility option analysis. It encompasses risk factors associated with both market and financial issues, taking into account the local context.
<b>Use of VA Resources</b>		
<b>Total operating costs</b>	Total operating costs (\$)	Total operating costs in \$ including direct variable, fixed direct, and fixed indirect costs associated with a BPO. Operating costs are aggregated for the 30-year study period.
<b>Total capital investment costs</b>	Total capital investment costs (\$)	Total capital investment costs in \$ for each BPO over the 30-year study period.
<b>Net present cost</b>	Net present cost (\$)	Annual cash outflow discounted using the overall discount rate so that a particular BPO's cash outflows can be valued on a relative basis as compared to other BPOs.
<b>Total considerations</b>	Total considerations (reuse revenues, in-kind, etc.) (\$)	Total considerations (reuse proceeds/costs, in-kind considerations, etc.) in \$ for each BPO aggregated for the 30-year study period.
<b>Total annual savings</b>	Total annual savings (\$)	Annual savings in \$ for each BPO over the 30-year study period.

Evaluation Criteria	Indicator	Definition
<b><i>Ease of Implementation</i></b>		
<b>Academic affiliations / education*</b>	Number of research programs impacted	The number of research programs (as defined either by disease focus or patient population, as data allows) expected to be negatively impacted due to the change in services provided, facilities, or location.
	% annual research budget impacted	The % of total research budget (as defined by research expenditures for a given fiscal year) expected to be negatively impacted due to the change in services provided, facilities, or location.
	Number of residency programs and residents impacted	The number of residency programs (as defined by medical specialty) and total number of resident positions expected to be negatively impacted due to the change in services provided, facilities, or location.
	Number of faculty with dual appointments impacted	The number of faculty with appointments at both the VAMC and affiliate organizations that would be negatively impacted due to the change in services provided, facilities, or location.
<b>HR / Staffing*</b>	Change in staff (FTEEs)	The net change in the number of staff expected for the BPO.
	Number of staff required to change job site (FTEEs)	The total number of staff that will be required to change working locations and thus commutes.
<b>Reuse considerations</b>	Community support	A qualitative assessment reflecting the degree of community support for the option. This includes the potential use of the option and how that fits with what the community perceives as its needs. Community support also reflects political support or opposition to each option.
	Legal / regulatory	This captures all legal and regulatory issues faced by each option, including zoning, environmental, historic considerations, title encumbrances and any other site restrictions that may impact the option.
<b>Capital planning considerations</b>	Size and complexity of capital plan	This captures four indicators of the extent to which campus facilities will be impacted by the capital plans for a given BPO: The number of capital projects associated with the BPO; the percentage campus area change as projected by the BPO; the total duration of the capital projects; and the overall capital investment cost for the BPO.
	Number and frequency of patient moves (quantity of clinical buildings altered)	The extent to which clinical buildings will be impacted by the capital plans for a given BPO. Provides an assessment of the total quantity of buildings altered in the BPO where patients (clinical space) are impacted. It is assumed that any construction activities in existing buildings will disrupt typical patient care activities and these activities will require relocation to maintain acceptable levels of patient satisfaction.
	Number of historic buildings altered (total historic buildings altered)	The extent to which there are historical considerations in implementing the capital plans for a given BPO. Assesses the total quantity of historic buildings altered in the BPO.
<b><i>Ability to Support Other VA Programs</i></b>		
<b>DoD sharing</b>	MOUs impacted by BPO	The extent to which Memoranda of Understanding with DoD partners (for sharing agreements) are enhanced by the BPO.
<b>One VA integration</b>	VBA and NCA impacted by BPO	The extent to which each BPO will enhance existing One-VA co-locations or facilitate the establishment of new co-locations.

Evaluation Criteria	Indicator	Definition
Specialized VA programs	Specialized Care/COE impacted by BPO	The extent to which the BPOs enhance specialized care (e.g., chronic spinal cord injury treatment, Alzheimer’s treatment, etc.) or Centers of Excellence (e.g., GRECC, GEM, etc.) as defined by VA.
Enhancement of services to veterans	Services in kind	Extent to which each BPO directly and indirectly provides enhancement to VA services. This may often be achieved through providing in-kind services. In addition, this may be achieved through upgrading of general services on campus. It may also involve uses that by proximity enhance the overall ability of the Center to offer its veterans convenient complementary services.

\* Academic affiliations/education and HR/staffing criteria not assessed at comprehensive capital planning sites, where no healthcare decision is required.

## Stage II BPO Assessment and Evaluation Process

In Stage II, Team PwC and OGCs will further study and assess the BPOs using the following evaluation criteria: capital planning, reuse, use of VA resources, ease of implementation, and ability to support VA programs. The following sections describe the inputs and assumptions that will be used to conduct the refined studies as well as the resulting outputs. Finally, the process for evaluating the outputs per the evaluation criteria is provided to illustrate how BPOs will be evaluated relative to each other.

### Capital Planning

The Capital Planning study determines projected future site and facility development for the optimum physical configuration for delivery of healthcare services to veterans. In Stage I, the Capital Planning studies determined the placement of facilities within a campus to meet the capital needs for a given BPO. In Stage II, the study will be refined to consider the extent of renovations and new construction needed to optimize proposed locations on the campus.

In order to conduct the analysis, Team PwC will utilize a database to project space needs and allocate square footage according to departmental groups<sup>7</sup> in order to develop a conceptual plan for the campus and determine investment costs. The capital investment requirements will be calculated for the capital plan and appropriate timing and sequencing of construction determined to assist with implementation. The inputs and assumptions to be used in conducting the Capital Planning study, as well as the outputs from the study, are further described below.

### *Inputs and Assumptions*

The basic capital planning inputs for determining physical space need on the campus are identified below:

- **BPOs selected for further study:** The Secretary’s Decision dictated the BPOs to be studied further in Stage II. The BPOs include those recommended by Team PwC at the conclusion of Stage I or BPOs introduced by the Secretary to be studied in Stage II. This input will be imperative for all assessments.

<sup>7</sup> Departmental groups identify one or more distinct buildings of similar construction type and functional activities.

- **Departmental utilization data:** Departmental utilization data is based upon projected CARES Implementation Categories (CIC) utilization data approved by VA using FY03 as the Baseline year.
- **Campus site and building plans:** GFI drawings of current site and buildings were provided by VA.
- **Detailed building data:** Building data such as building condition scores, square footages, etc. were provided via the capital asset inventory (CAI) database administered by VA.

A detailed set of assumptions were established in order to conduct the Stage II Capital Planning assessments. These assumptions pertain to such factors as space projection, building scores, historical designation, departmental groupings, etc. Key assumptions are provided below; however, a more detailed listing of assumptions are compiled in the appended assumptions document:

- Minimum space requirements are developed per *AIA Guidelines for Hospitals and Healthcare Facilities 2001 edition*, VA standards, and Team PwC experience.
- Area calculations, condition assessment ratings, major building systems life cycle costing projections, and functional use descriptions associated with existing buildings are based on the VA provided CAI database.
- Where the existing quality of care environment does not address current fire and life safety codes or VA standards of care (such as in the case of multi-bed patient wards), renovation and or new construction is required to provide a modern, safe, and secure environment.
- A period of ten years is required to demolish historical buildings. Submission of all buildings designated as historic will occur for all project sites in 2007. Therefore, the earliest date for demolition of historic buildings will be 2017. The earliest date for renovations to historic buildings will be 2009.
- Buildings with an average facility assessment score from the CAI less than 4.0 are not suitable for clinical occupancy. Buildings with an average score of 3.0 are not suitable for occupancy, and buildings with an average score of 3.0 or less will be vacated or demolished, unless deemed suitable by the consultant.
- The first funding cycle for any new project would occur in the first quarter of 2009.
- Buildings (existing or proposed) that have been identified as being vacated and mothballed will become inoperative.
- Easements for utilities must be maintained for all reuse development activities in options where VA facilities remain and require access to these utilities.
- The maximum number of floors possible for new nursing home facilities will be two.

### ***Outputs***

The Capital Planning study will yield the following outputs:

- **Existing current state site plan:** A site plan of the current physical configuration and building distribution of the campus, with narrative description and table of buildings, will be included as a reference for comparing facility changes defined by each of the BPOs.
- **Proposed site plan:** A site plan of the campus, with narrative description, will be generated for each BPO, illustrating the physical configuration and building distribution of the campus in the projection year 2023.

- **Concept plan:** Concept plan of typical floor or stack diagram will only be provided for complex/multi-function buildings with narrative description.
- **Supporting Narrative:** A narrative explaining significant projected area DGSF implications on site, key proposed activities (i.e., parking, site work, historic buildings, phasing issues, rationale for renovations and/or new construction, and reuse parcel distribution ), and key implementation milestones.
- **Construction Schedule:** Schedules for construction activities are intended to identify the relative duration of renovation and construction in order to calculate the occupancy date for utilization of space and escalation costs. These schedules provide a base on which the implementation plans will be incorporated. A narrative includes a brief description of the individual building construction projects and indicates the construction sequence and duration for each BPO.
- **Projected BPO cost estimate:** The capital investment required (including both investment expense and periodic maintenance costs) to implement the capital plan will be generated based upon the unit price per square foot. These costs serve as inputs to the financial analysis discussed later in the report.

**Evaluation Scale**

The evaluation scales for the Capital Planning criteria are described in the table below. Criteria will be assessed on a 5-point scale using the outputs of the Capital Planning analysis.

*Table 121: Evaluation Scale for Capital Planning Evaluation Criteria*

Evaluation Criteria/ Indicators	Evaluation Scale	Explanation of Scale
<b>Timeliness of completion:</b> Total Duration (Years to complete)	1 = Significantly longer duration than the Baseline BPO (>24 months longer) 2 = Longer duration than the Baseline BPO (>6 and ≤ 24 months longer) 3 = Similar duration as the Baseline BPO (+/- 6 months) 4 = Shorter duration than the Baseline BPO (>6 and ≤ 24 months shorter) 5 = Significantly shorter duration than the Baseline BPO (>24 months shorter)	An assessment of “1” represents the longest duration to implement the plan, which is least preferred since improvements to healthcare delivery may take a significant amount of time to realize. An assessment of “5” represents the shortest duration to implement the plan, which is most preferred since improvements to healthcare delivery may be realized sooner.
<b>Timeliness of urgent corrections:</b> Duration (Years to correct code deficiencies, focusing on seismic deficiencies as identified in the CAI)	1 = Significantly longer duration than the Baseline BPO (>24 months longer) 2 = Longer duration than the Baseline BPO (>6 and ≤ 24 months longer) 3 = Similar duration as the Baseline BPO (+/- 6 months) 4 = Shorter duration than the Baseline BPO (>6 and ≤ 24 months shorter) 5 = Significantly shorter duration than the Baseline BPO (>24 months shorter)	An assessment of “1” represents the longest duration to make seismic corrections, which is least preferred since safety improvements may take a significant amount of time to realize. An assessment of “5” represents the shortest duration to make seismic corrections, which is most preferred since safety improvements may be realized sooner.

Evaluation Criteria/ Indicators	Evaluation Scale	Explanation of Scale
<p><b>Consolidation of underutilized space:</b> % Underutilized Space</p>	<p>1 = Significantly less reduction in underutilized space than the Baseline BPO (&gt;20% higher)                      2 = Less reduction in underutilized space than the Baseline BPO (&gt;5 and ≤ 20% higher)                      3 = Similar reduction in underutilized space as the Baseline BPO (+/- 5%)                      4 = Greater reduction in underutilized space than the Baseline BPO (&gt;5 and ≤ 20% lower)                      5 = Significantly greater reduction in underutilized space than the Baseline BPO (&gt;20% lower)</p>	<p>An assessment of “1” represents the least amount of reduction in underutilized space, which is least preferred since less reduction of underutilized space indicates a less optimal use of space for providing healthcare and administrative functions throughout the campus. An assessment of “5” represents the greatest amount of reduction in underutilized space, which is most preferred since greater reduction of underutilized space indicates a more optimal use of space for providing healthcare and administrative functions throughout the campus.</p>
<p><b>Consolidation of vacant space:</b> % Vacant Space</p>	<p>1 = Significantly less reduction in vacant space than the Baseline BPO (&gt;20% higher)                      2 = Less reduction in vacant space than the Baseline BPO (&gt;5 and ≤ 20% higher)                      3 = Similar reduction in vacant space as the Baseline BPO (+/- 5%)                      4 = Greater reduction in vacant space than the Baseline BPO (&gt;5 and ≤ 20% lower)                      5 = Significantly greater reduction in vacant space than the Baseline BPO (&gt;20% lower)</p>	<p>An assessment of “1” represents the least amount of reduction in vacant space, which is least preferred since less reduction of vacant space indicates a less optimal use of space for providing healthcare and administrative functions throughout the campus. An assessment of “5” represents the greatest amount of reduction in vacant space, which is most preferred since greater reduction of vacant space indicates a more optimal use of space for providing healthcare and administrative functions throughout the campus.</p>

**Reuse**

The purpose of the Reuse studies in Stage II is to determine the highest and best use of property for each of the BPOs. The Reuse team (Team PwC or OGC) will conduct refined market assessments and regulatory assessments in Stage II that build upon the previous market analysis completed for Stage I, with supplemental information from the local marketplace. The assessment will include such elements as rents, sales prices, absorption, changes to supply, and forecasted changes in demand drivers, such as projected employment growth and increase in households. Using the revised information from the market assessment, the Reuse team will engage in a collaborative process with the Capital Planning team to identify the optimal site configuration for each BPO that balances the desirability for reuse with the goals of the Capital Planning team. They will also provide information to the financial analysis team regarding projected reuse proceeds resulting from the BPO.

***Inputs and Assumptions***

The following will be the key inputs to the Reuse study for Stage II:

- **Market interviews:** Conversations will be conducted with local real estate brokers, developers, homebuilders, other real estate professionals, as well as local planning and economic development officials as appropriate.

- **Non-market users:** Non-market users will be identified through the LAP and stakeholder input. Telephone conversations will also be conducted with major veterans organizations to identify potential "in-kind" services as appropriate.

Key assumptions driving the Reuse study will include the following:

- Industry standards are to be utilized for estimating demolition or clean-up requirements as applicable.
- “Non-significant” historic buildings will be assumed eligible for demolition as opposed to reuse.
- Engagement in an Enhanced Use Lease will be assumed unless disposition would result in significantly higher net proceeds.

Several assumptions will also serve as the foundation for projecting revenues associated with Reuse plans:

- Revenue assumptions will be based on current market sale and lease rates as identified through a refined market assessment.
- All financing assumptions, including interest rates, capitalization rates, and discount rates, among others, are to be based on current market conditions.
- Non-market users will be considered to be revenue-neutral.
- Land acquisition costs are to be based on average current market rates for commercial and institutional property.
- A private developer or end-user will pay for demolition costs as necessary.

### *Outputs*

The Reuse team will engage in a collaborative process with the Capital Planning team to identify the optimal site configuration for each BPO that balances the desirability for reuse with the goals of the Capital Planning functional area resulting in a refined BPO. Additional key outputs from the Reuse study will be the following:

- **Refined Market Assessment:** A market assessment write-up will be developed containing the following elements: market assessment of area, real estate market trends, range of market values and returns, and development risks given market trends.
- **Reuse Revenues:** The profiles of revenues generated from real property will be incorporated into the financial analysis to offset investment costs and yield an overall net present cost.
- **Political and Regulatory Assessment:** An assessment of the political, regulatory, and environmental conditions will be developed that assesses the political climate as well as existing and proposed zoning and other development regulations that could impact the reuse opportunities on the site.
- **Non-market users:** Non-market users identified through stakeholder and LAP meetings will be noted and addressed in narrative form.
- **Public and Private Funding Sources:** A discussion of sources of funding as identified through the LAP and discussions with local economic development officials.

**Evaluation Scale**

The evaluation scales for the Reuse criteria are described in the following table. Criteria will be assessed on a 5-point scale using the outputs of the Reuse analysis.

*Table 122: Evaluation Scale for Reuse Evaluation Criteria*

Evaluation Criteria / Indicators	Evaluation Scale	Explanation of Scale
<b>Market potential for reuse</b>	1 = Reuse would not be well received by the market 2 = Market is weak for reuse 3 = Market is adequate for reuse 4 = Market exhibits strength 5 = Market is very strong for reuse	An assessment of “1” represents the least market support for the reuse plan, which is least preferred since this would indicate a plan that is not the highest and best use of land. An assessment of “5” represents strong market support of the reuse plan, which is most preferred since this suggests the highest and best use of the land.
<b>Financial feasibility</b>	1 = Transaction expected to result in negative cash flow 2 = Transaction will generate less than satisfactory cash flows 3 = Transaction will generate marginal cash flows 4 = Transaction will generate material cash flows 5 = Transaction will generate significant cash flows	An assessment of “1” represents a reuse expense to VA which is least preferred since this would not result in proceeds for offsetting capital investment. An assessment of “5” represents significant positive cash flows, which is most preferred since they would allow VA to realize reuse proceeds to offset the capital investment required.
<b>VA mission enhancement</b>	1 = Least compatible with / provides least enhancement of VA mission 2 = Less compatible with / provides less enhancement of VA mission 3 = Similar compatibility / enhancement of VA mission as other BPOs 4 = More compatible with / provides more enhancement of VA mission 5 = Most compatible with / provides best enhancement of VA mission	An assessment of “1” represents a reuse plan that is not compatible with VA’s mission, which is least preferred since this would not enhance and could possibly hinder the goals of VA. An assessment of “5” represents a reuse plan that is most compatible with VA’s mission, which is most preferred since this would enhance the ability of VA to meet its goals.
<b>Execution risk</b>	1 = Option presents barriers that cannot be resolved 2 = Option presents significant obstacles that may not be resolvable 3 = Option may present obstacles that are resolvable with some difficulty 4 = Option may have some obstacles, but they should be reasonably resolvable 5 = Option presents no significant obstacles or barriers to execution	An assessment of “1” represents significant obstacles to the successful implementation of the reuse plan, which is least preferred since this could indicate inability to realize reuse proceeds in a timely manner. An assessment of “5” represents no obstacles to a successful implementation plan, which is most preferred since this would indicate that VA would realize expected reuse proceeds in a timely manner.

**Use of VA Resources**

The purpose of the financial analysis is to develop a detailed Cost Effectiveness Analysis for each BPO studied in Stage II. The analysis will utilize a financial model that considers the VAMC operating costs for providing care and capital investments, as well as proceeds from reuse plans in order to determine



overall cost effectiveness. Additionally, sensitivity analyses will be conducted to test the importance of the key assumptions. Additional iterations of the financial analysis will be run for each BPO to determine the impact different assumptions may have on the results.

Special attention will be given to providing more specific department/service level cost analysis that builds upon earlier CARES analysis and provides clearly described cost and business decision options as part of the Stage II results. The major differences between Stage I and Stage II financial analyses will be the level of detail and refinement that is included in the inputs to the financial analysis as well as improvement in the completeness of the analysis.

### *Inputs and Assumptions*

These key inputs will include the following:

- **Current and forecasted services:** These are defined by the healthcare component of each BPO.
- **Current and forecasted utilization:** Departmental utilization data is based upon projected CIC utilization data approved by VA.
- **VA current and future unit cost of care:** Current costs are provided per CIC by VACO from the DSS system which serves as its cost accounting system. Team PwC calculates the future cost of care using an inflation factor.
- **Capital investment requirements and timing:** This will be provided by the Capital Planning team based upon square footage projections.
- **Reuse revenues:** These are revenues generated from real property and sharing agreements, and will be provided by the Reuse team.

The financial analysis to be conducted in Stage II will be based on several assumptions. A more detailed set of assumptions are included in the appendix; however, key assumptions are highlighted below:

- The financial analysis has a 30-year planning horizon from 2003 to 2033.
- Escalation rates are constant for each year for each individual site.
- The net present cost of each BPO is calculated using a Treasury nominal discount rate (5.2%).
- Medicare payment rates will use average rates per county. Adjustments for graduate medical education, average wage rates, disproportionate share, or capital requirements will be assumed to have been averaged across all providers.

### *Outputs*

The outputs from the financial analysis are as follows:

- **Total operating costs:** This is the comparison of the total operating costs among the BPOs. Total operating costs include direct variable, fixed direct, and fixed indirect costs associated with a BPO. Operating costs are aggregated for the 30-year study period. This output is useful for evaluating the operating cost effectiveness of a BPO.

- **Total capital investment costs:** This is the comparison of the total capital investment costs among the BPOs over the 30-year study period.
- **Net present cost:** This is the comparison of the 30-year NPC among the BPOs. NPC is the annual outflow discounted using the overall discount rate so that a particular BPO’s cash outflows can be valued on a relative basis as compared to other BPOs.
- **Total considerations (reuse revenues, in-kind, etc.):** This is the comparison of the total considerations (reuse proceeds/costs, in-kind considerations, etc) aggregated for the 30-year study period.
- **Total annual savings:** This is the comparison of the annual savings among the BPOs over the 30-year study period.
- **Cost Effectiveness Analysis:** The outputs from the Cost Effectiveness Analysis will also be provided which include such metrics as Return on Investment, Internal Rate of Return, Payback in terms of years, and Average Annual VA Investment.

Finally, sensitivity analyses will also be performed for each BPO to understand the effects of key data elements (e.g., contract prices, utilization volumes, etc.) on the outcomes.

### ***Evaluation Scale***

The evaluation scales for the Use of VA Resources criteria are described in the following table. Criteria will be assessed on a 5-point scale using the outputs of the Use of VA Resources analysis.

*Table 123: Evaluation Scale for Use of VA Resources Evaluation Criteria*

Evaluation Criteria/ Indicators	Evaluation Scale	Explanation of Scale
<b>Total operating costs</b>	1 = Financial analysis metric for the BPO is greater than 114% of the Baseline BPO	An assessment of “1” represents a financial metric that is greater than the Baseline BPO, which is least preferred since this indicates higher costs to VA. An assessment of “5” represents a financial metric that is less than the Baseline BPO, which is preferred since this indicates lower costs to VA.
	2 = Financial analysis metric for the BPO is 105 - 114% of the Baseline BPO	
<b>Total capital investment costs</b>	3 = Financial analysis metric for the BPO is 95 - 104% of the Baseline BPO	
	4 = Financial analysis metric for the BPO is 85 - 94% of the Baseline BPO	
<b>Net present cost</b>	5 = Financial analysis metric for the BPO is less than 85% of the Baseline BPO	

Both the indicators of Total Considerations and Total Annual Savings will be presented and considered in the recommendation of a final BPO; however, they will not be evaluated using the scale as applied to the other outputs of the financial analysis.

### **Ease of Implementation**

The purpose of the Ease of Implementation assessment is to determine the likelihood and potential severity of various risks that could impede the successful and timely implementation of the BPO. This also allows for the development of mitigation strategies that can be considered during implementation planning. Data for the indicators of the evaluation criteria (i.e., capital considerations, reuse considerations, academic affiliation / education, and HR / staffing) will be compiled. The risk factors will

be assessed according to impact and likelihood of occurrence. The impact of a risk factor refers to the degree to which the factor will disrupt successful implementation of the BPO. The likelihood of occurrence refers to the probability that the risk factor will arise. An online risk assessment tool will be used to calculate the risk metric based on these parameters as well as capture corroborative data, justification for the risk metric, and mitigation factors. Mitigation strategies will be developed for major risks identified through this assessment and included in the implementation plan for each BPO.

**Inputs and Assumptions**

The key inputs for the Ease of Implementation study will mirror the evaluation criteria as discussed earlier for this function. The risks assessments will be conducted using the indicator data gathered for the evaluation criteria of academic affiliations / education, HR / staffing, reuse considerations, and capital considerations.

Key assumptions for conducting the Ease of Implementation study will include the following:

- Academic affiliations/education and HR/staffing criteria are not assessed at comprehensive capital planning sites, where no healthcare decision is required.
- There will be no overall risk score for a given BPO (i.e., risk criteria will be assessed independently and will not be summed or weighted).
- Each risk criterion will be rated across two factors – impact and likelihood of occurrence.
- The expert panel will review and validate the risk assessment proposed by the site study team.

**Outputs**

The following will be the key outputs from the risk assessment:

- **Risk metric and narrative:** Quantitative risk assessment of each criterion with supporting narrative. The risk metric and assessment information will assist in the development of risk mitigation factors to be developed in the final business plan.
- **Risk mitigation plans:** Plans for mitigating the identified risks will be developed and incorporated into the implementation plan for the BPO.

**Evaluation Scale**

The evaluation scales for the Ease of Implementation criteria are described in the table below. Criteria will be assessed on a 5-point scale using the outputs of the Ease of Implementation analysis.

Table 124: Evaluation Scale for Ease of Implementation Evaluation Criteria

Evaluation Criteria/ Indicators	Evaluation Scale	Explanation of Scale
<b>Academic affiliations/education*</b> (All indicators)	The ease of implementation criteria will be assessed as the average of two dimensions: 1) negative impact of identified risk and 2) likelihood of negative impact of identified risk.  <u>Negative Impact of Identified Risk</u>  For Academic affiliations/education, HR/staffing, and all Capital planning considerations for	The overall assessments represent the ease of implementation according to the two noted dimensions. Thus, assessments with lower scores will be more difficult to implement and will require more mitigation planning, while assessments with higher scores will be easier to implement and require less mitigation planning.

Evaluation Criteria/ Indicators	Evaluation Scale	Explanation of Scale
<p><b>HR/staffing*</b> (All indicators)</p>	<p>implementation, <b>impact</b> will be measured as follows:</p> <p>1-5 scale for negative impact of identified risk</p> <p>1 = High potential negative impact 3 = Medium potential negative impact 5 = Low potential negative impact</p>	<p>An assessment of “1” represents a risk area that is likely to occur and would have a high negative impact. This assessment is least preferred since this indicates a BPO that is not easily implemented and requires development of substantial mitigation strategies for identified risks.</p>
<p><b>Reuse considerations</b> (All indicators)</p>	<p>For Community Support (a Reuse consideration), impact will be measured as follows:</p> <p>1 = Option has strong community resistance with at most limited support 2 = Option has greater community resistance than support 3 = Option has a balance of community support and resistance 4 = Option has greater community support than resistance 5 = Option has strong community support with at most limited resistance</p>	<p>An assessment of “3” represents a risk area with one of the following scenarios:</p> <ul style="list-style-type: none"> <li>• The risk is likely to occur, but will have low negative impact</li> <li>• The is not likely to occur, but would have high negative impact</li> <li>• The risk has medium likelihood of occurring and would have medium negative impact if occurred</li> </ul>
<p><b>Capital planning considerations</b> (All indicators)</p>	<p>For Legal and Regulatory (a Reuse consideration), impact will be measured as follows:</p> <p>1 = Option has obstacles that cannot be resolved 2 = Option has significant obstacles that may not be resolvable 3 = Option may have obstacles that are resolvable with some difficulty 4 = Option may have some obstacles, but they should be reasonably resolvable 5 = Option has no significant legal/regulatory obstacles</p> <p><u>Likelihood of Negative Impact</u></p> <p>For Academic affiliations/education, HR/staffing, and all Capital planning considerations for implementation, <b>likelihood</b> will be measured as follows:</p> <p>1-5 scale for likelihood of negative impact for identified risk</p> <p>1 = High likelihood of occurrence of negative impact 3 = Medium likelihood of occurrence of negative impact 5 = Low likelihood of occurrence of negative impact</p> <p>For Community Support, likelihood will be measured as follows:</p> <p>1 = Option has high likelihood of community resistance 3 = Option has moderate likelihood of community resistance 5 = Option has low likelihood of community</p>	<p>The BPO with an assessment of “3” would require a moderate amount of mitigation planning for the identified risks for successful implementation.</p> <p>An assessment of “5” represents a risk area that is not likely to occur and would have a low negative impact, which is preferred since this indicates a BPO that is easily implemented and does not require substantial mitigation planning.</p>

Evaluation Criteria/ Indicators	Evaluation Scale	Explanation of Scale
	<p>resistance</p> <p>For Legal and Regulatory, likelihood will be measured as follows:</p> <p>1 = Option has high likelihood of encountering legal or regulatory obstacles                      3 = Option has moderate likelihood of encountering legal or regulatory obstacles                      5 = Option has a low likelihood of encountering legal or regulatory obstacles</p> <p>The ease of implementation metric will be calculated using the following: <math>\text{Ease of Implementation} = (\text{Impact} + \text{Likelihood}) / 2</math>. An ease of implementation score will then be calculated for each criterion using the following scale:</p> <p>1 = The BPO has significantly greater implementation challenges than the Baseline BPO (<math>\geq 2</math> points higher than the Baseline BPO )                      2 = The BPO has greater implementation challenges than the Baseline BPO (<math>\geq 1</math> points higher and <math>&lt;2</math> points higher than the Baseline BPO)                      3 = The BPO has similar ease of implementation to the Baseline BPO (<math>&lt;1</math> point difference with the Baseline BPO)                      4 = The BPO has greater ease of implementation than the Baseline BPO (<math>\geq 1</math> points lower and <math>&lt;2</math> points lower than the Baseline BPO)                      5 = The BPO has significantly greater ease of implementation than the Baseline BPO (<math>\geq 2</math> points lower than the Baseline BPO )</p>	

\* Academic affiliations/education and HR/staffing criteria not assessed at comprehensive capital planning sites, where no healthcare decision is required.

### **Ability to Support Other VA Programs**

The purpose of this study is to determine how BPOs may support or jeopardize specific programs that have been identified as primary initiatives. These initiatives include enhanced DoD sharing, One-VA integration, promotion of specialized programs, and enhancement of services to veterans. This assessment will leverage information from Stage I to determine how the refined BPOs in Stage II would positively or negatively impact these VA objectives. Site teams will consider these impacts in evaluating the BPOs against the Baseline option.

### ***Inputs and Assumptions***

The primary inputs for this study will be the information gathered in Stage I regarding the following:

- **DoD sharing arrangements:** These include arrangements made between VA and DoD institutions to share facilities or services in order to provide care to veterans.

- **Specialized VA programs:** Specialized VA programs are defined as spinal cord injury, blind rehabilitation, seriously mentally ill, polytrauma, and Centers of Excellence.
- **Proposed enhancement of services:** Service enhancements or ancillary support services that would improve quality, cost effectiveness and continuity of care.
- **Integration with VBA and NCA facilities:** Co-location of VBA or NCA facilities with VA facilities to allow for easier access to VA services on the campus.

**Outputs**

A discussion will be provided of how each BPO impacts the VA programs, specifically, DoD sharing, One-VA integration, specialized VA programs, and enhancement of services to veterans. The resulting impacts will be quantitatively evaluated similar to other assessment areas.

**Evaluation Scale**

The evaluation scales for the Ability to Support VA Programs criteria are described in the following table. Criteria will be assessed on a 5-point scale using the outputs of the Ability to Support VA Programs analysis.

*Table 125: Evaluation Scale for Ability to Support Other VA Programs Evaluation Criteria*

Evaluation Criteria/ Indicators	Evaluation Scale	Explanation of Scale
<b>DoD sharing</b> (Memoranda Of Understandings impacted by BPO)	1 = The BPO has the potential to provide the least enhancement relative to the Baseline BPO for the specific criterion	An assessment of “1” represents the least potential for the BPO to enhance one of the special VA programs, which is least preferred since this does not assist VA in meeting programmatic objectives. An assessment of “5” represents the most potential for the BPO to enhance one of the select VA programs, which is preferred since this assists VA in meeting programmatic objectives.
<b>One VA integration</b> (VBA and NCA impacted by BPO)	2 = The BPO has the potential to provide less enhancement relative to the Baseline BPO for the specific criterion	
<b>Specialized VA programs</b> (Specialized Care/COE impacted by BPO)	3 = The BPO has the potential to provide enhancement equivalent to the Baseline BPO for the specific criterion	
<b>Enhancement of services to veterans</b> (Services in kind)	4 = The BPO has the potential to provide more enhancement relative to the Baseline BPO for the specific criterion 5 = The BPO has the potential to provide the most enhancement relative to the Baseline BPO for the specific criterion	

## **Stakeholder Input**

The purpose of the Stakeholder Input element in Stage II is to encourage a meaningful dialogue with veterans, veterans advocacy groups, staff, elected officials, and other interested parties, about the options being considered for a given study site. The Stakeholder Input element seeks to provide stakeholders with a series of convenient communication channels to express their interests, concerns, and priorities for the study. Through the CARES project website ([www.va.gov/cares](http://www.va.gov/cares)), Team PwC will also provide stakeholders with information about the study background and objectives, the options being considered, and the findings and recommendations for each study site.

Feedback from stakeholders will be considered by Team PwC in developing implementation plans and risk mitigation strategies for each BPO. This feedback will also be used by VA decision makers in weighing the advantages and disadvantages of each BPO and their associated implementation plans.

### ***Inputs and Assumptions***

Similar to the manner in which stakeholder inputs were gathered during Stage I, the inputs will include the following:

- Testimony and presentations made at public meetings, including public comments and questions
- A questionnaire soliciting stakeholder opinions which will be available for completion by persons who access the website
- A paper version of the questionnaire which will be available during public meetings
- A mail stop where the public can mail written comments and information about a particular study site

In addition, presentations and approved reports, along with meeting information and any other announcements concerning the study, will be promptly posted on the CARES Project website, the address of which will be prominently publicized.

In Stage II, stakeholders will be asked to comment on the BPOs selected for further study. However, stakeholders will not be limited as to the type of input which they can provide, and some stakeholders may choose to provide very personal information about the care they or a relative received, or about the anticipated need to provide future veterans with healthcare.

Key assumptions include:

- Stakeholder input will be limited to the study period
- Stakeholders will have 14 calendar days following the LAP meeting to submit additional written feedback via the website or mail stop
- Although the volume of stakeholder input received will not necessarily represent all stakeholder viewpoints, and may not be statistically significant, the feedback will still provide a useful indication of the likely interests, concerns, and priorities of stakeholders that must be considered if a BPO is to be implemented successfully
- Despite the absence of an assigned weight or evaluation scale to stakeholder input, Team PwC's site teams, the expert panel, and VA decision makers will nevertheless have access to the types of concerns expressed by stakeholders, including insights that may not be available through more objective data-gathering methods

For healthcare study sites, the questionnaire will specifically solicit views from stakeholders in the following five categories:

*Table 126: Healthcare Category of Concern Definitions*

<b>Category of Concern</b>	<b>Definition</b>
<b>Access</b>	Concerns about the travel time to the healthcare facility if this option is selected.
<b>Healthcare Services &amp; Providers</b>	Concerns about a possible change in what services are available or who provides them.
<b>Adequate Facilities</b>	Concerns about whether the option would provide a modern facility capable of meeting healthcare demands in the future.
<b>Use of Facilities</b>	Concerns about whether this option makes good use of existing land and buildings.
<b>Research &amp; Education</b>	Concerns about changes to research or education programs at the facility.

For capital planning study sites, the questionnaire will specifically solicit views from stakeholders in the following five categories:

*Table 127: Capital Planning Category of Concern Definitions*

<b>Category of Concern</b>	<b>Definition</b>
<b>Adequate Facilities</b>	Concerns about whether this option would provide a modern facility capable of meeting healthcare demands in the future.
<b>Timeliness</b>	Concerns about the length of time to finish construction called for by this option.
<b>Availability of Care</b>	Concerns that construction will disrupt the healthcare currently provided
<b>Use of Facility</b>	Concerns about whether this option makes good use of existing land and facilities.
<b>Campus Environment</b>	Concerns that this option will disrupt the historic quality or the natural setting of the current campus.

### ***Outputs***

Three types of stakeholder input (electronic comment forms, written comment forms and correspondence, and testimony) will be analyzed, categorized and summarized to provide information on:

- The number and percentage of stakeholders expressing a particular concern for a given BPO
- General themes expressed in oral testimony at the public LAP meetings and written input submitted at the LAP meetings, to the mail stop, or via the website
- When appropriate, selected comments which amplify or clarify stakeholder interests and concerns
- Implications of stakeholder feedback for successful implementation of the BPO

The tabulation and summary description of stakeholder input will be provided to Team PwC site teams and the expert panel for consideration in their discussion of the relative merits of each of the short-listed BPOs. The trade-off discussion will consider the five evaluation categories and stakeholder input. The evaluation findings of Team PwC will address the likelihood of stakeholder support for a given BPO, together with stakeholder interests, concerns and priorities to be addressed in implementation of the BPO.



## **Presentation of Results**

The purpose of the results step is to provide VA decision makers with a balanced discussion of the trade-offs to be considered in making a final decision. The Stage II results will consist of a discussion of the relative merits of each BPO, comparing and contrasting the strengths and weaknesses of each BPO, and a plan to implement each BPO.

### **Independent Review Panel**

To obtain greater input into the development of the final business plan reports, PricewaterhouseCoopers will convene an independent review panel (IRP) to provide an in-process review of the Stage II analysis, including a balanced review of the tradeoffs that were considered in developing the evaluation of each business plan option. This panel will:

- Provide input from multiple perspectives, to include academia and private sector management and clinical viewpoints.
- Discuss analysis and evaluations.
- Discuss the reasoning behind the evaluations, including the trade-offs between criteria.
- Discuss the relative merits of each option without providing definitive recommendations.
- Capture feedback for incorporation into the final site report.

The composition of the IRP will include VA representatives from Office of Strategic Initiatives (OSI) and Office of Asset Enterprise Management (OAEM), and Team PwC representatives (Partner facilitators, physicians with expertise on clinical quality, expert capital planners, real estate market experts or advisors, and site leaders). The IRP members will also include independent experts from academia and healthcare management.

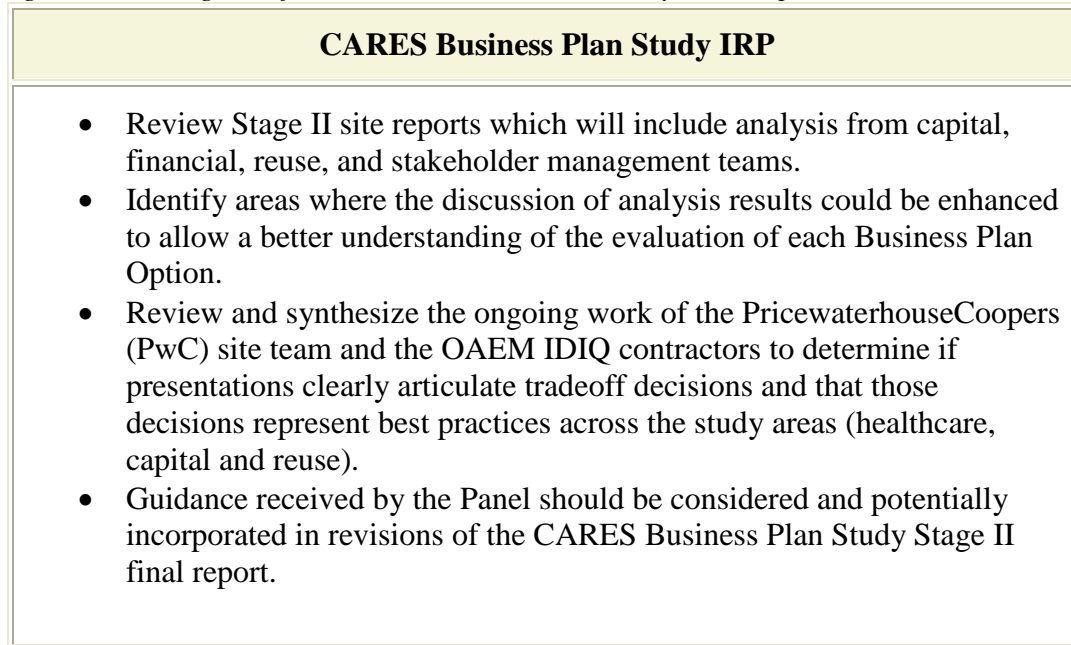
### **Panel Results**

Stage II will employ the IRP at the conclusion of the analysis phase and prior to the development of final business plan reports.

The purpose of the results step of the process is to provide an in-process review of the Stage II analysis, including a balanced review of the tradeoffs that were considered in developing the Stage II Report. The panel process will provide the basis for discussion on the analysis of each BPO's relative merits, comparing and contrasting the strengths and weaknesses of each BPO, and a plan to implement each BPO.

## Purpose

*Figure 19: A Diagram of the CARES Business Plan Study IRP Purpose*



## **Operating Principles**

The IRP will be guided by the following principles:

- All meetings of the Panel were held at PricewaterhouseCoopers offices at McLean, attendance will be limited to panel members and PwC Project Management, OAEM, and study site staff except where alternate arrangements were made in advance.
- The Panel will be chaired by a PwC partner The chairs will provide oversight to the preparation of all panel documents, including meeting agendas and meeting minutes.
- Panel members represented their expertise area and not their respective organizations or corporations.
- The panel members provided comments and recommendations verbally during the meeting.
- There was no attempt to reach consensus or to develop group recommendations within the committee. They did not make decisions or develop group positions.
- It was the responsibility of Team PwC in concert with the IDIQ to revise the Stage II final report as appropriate.
- No new data collection or analysis was conducted as a result of the recommendations of the committee members, unless directed by the VA contract officer.
- Detailed minutes of each committee meeting were documented.
- Panel documents were not made available to entities outside the offices of the Assistant Deputy Under Secretary for Health and Office of Asset Enterprise Management.
- Composition of the panel was subject to change, as needed, for the different sites identified in the CARES study.

## **Panel Process Outputs**

The IRP members were provided with preparation material which will include an initial high level presentation of the VA CARES study, methodology, assumptions, site overview, and key site issues. During the panel meeting, the site study team will provide an overview presentation of site description, options, particular issues, option evaluation, supporting rationale, and conclusions.

The IRP discussed the conclusions of the study team and provide commentary on the analysis results and evaluation of each option. The IRP also weighed the breadth and depth of stakeholder concern about various alternatives and ensure that the evaluation of each option takes into account any information that was not captured in any of the other objective measures in forming the Panel's judgment.

The IRP provided feedback at the sessions that was used, as appropriate, by Team PwC and the IDIQ in finalizing the Stage II business plan report.

## **Implementation Plans**

Following the IRP's discussion of preliminary results, implementation plans will be developed for all Stage II BPOs. The purpose of each plan will be to provide a roadmap for the local site teams for implementing the BPO, noting critical transition and implementation activities. The plan will highlight key milestones associated with implementation functions such as budgeting and funding, procurement, contracting for care, construction, human resource transition, as well as building activation and occupancy. The plan will help to appropriately sequence the implementation activities accounting for dependencies among the various functions.

An implementation schedule will be created using Microsoft Office's project management program (MS Project) in six-month intervals listing the critical implementation tasks. The plans will be based upon the capital planning construction schedules with overlays of additional functions. A supporting narrative will also be developed to more fully explain the implementation roadmap, explaining key milestones and dependencies, as well as risk mitigation strategies for all risks identified in the ease of implementation analysis. Ultimately the implementation plan will be used to guide the execution of the BPO, but may also provide VA additional insight to the risks and complexity of the BPO, as the results of the various BPOs studied in Stage II are considered.

## **Appendix C - Financial Definitions**

- **Net Present Cost (“NPC”)**: The sum of the annual cash-flows, discounted using the overall discount rate, so that a particular BPOs cash-flow can be valued on a relative basis to the other BPOs within a given study site. This is calculated as operating costs + capital costs (capital investments and periodic maintenance/replacement costs) + considerations.
- **Return on Investment (“ROI”)**: The percentage return generated by each additional dollar invested. The ROI is always compared to BPO 1 and generally will be negative because the compared BPO has costs less than the BPO 1. The Financial Analysis for CARES Business Plan Studies uses the CEA, the term “benefits” means cost savings and cash-inflows estimated.
  - ROI calculation =  $[\text{Positive savings minus (Option NPC minus BPO 1 NPC)}] / (\text{Option NPC minus BPO 1 NPC})$
  - Positive savings: favorable difference in cost types (operational costs, capital investment costs, capital life cycle costs and reuse revenue), where Option X cost is less than BPO 1 cost. Negative savings, where Option X cost is greater than BPO 1 for any of the cost types, are not factored into the savings.
- **Internal Rate of Return (“IRR”)**: A particular project’s IRR is the discount rate that causes its future-value cashflows to result in a zero NPC.
- **Annual VA Investment Levels**: Annual investment levels required by the VA for a particular BPO are calculated by taking total capital investments divided by 30 years.
- **Return on Capital Investment**: Positive savings divided by Total Capital Cost (Capital Investments + Capital Periodic Maintenance/Replacement).
- **Total Operating Costs**: Annual operating cash-flows are discounted using the overall discount rate so that a particular BPOs operating cash-flow can be valued on a relative basis to the other BPOs operating cash-flow.
- **Total Capital Investment Costs**: Annual capital investment cash flows are discounted using the overall discount rate so that a particular BPOs capital investment cash-flow can be valued on a relative basis to the other BPOs.
- **Total Considerations**: Annual consideration cash flows are discounted using the overall discount rate so that a particular BPOs consideration cash-flow can be valued on a relative basis to the other BPOs.
- **Total Calculated Savings**: Favorable difference in cost types (operational costs, capital investment costs, capital periodic maintenance/replacement costs and reuse revenue) as

compared to other BPOs. Negative savings in cost types are not factored into the savings.

- **Direct Variable Costs:** 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
- **Fixed Indirect Costs:** The costs not directly related to patient care, and therefore not specifically identified with an individual patient or group of patients. These costs are allocated to direct departments through the indirect cost allocation process. Examples include utilities, maintenance, and administration costs.
- **Fixed Direct Costs:** 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.

## **Appendix D - 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. ( <i>See Workload</i> )
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. ( <i>See Sector</i> )
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. ( <i>See Secondary Care and Tertiary Care</i> )
Reuse	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. ( <i>See Primary Care and Tertiary Care</i> )
Sector	Within each Market Area are a number of sectors. A sector is one or more contiguous counties. ( <i>See Market Area</i> )
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. ( <i>See Primary Care and Secondary Care</i> )
Workload	The amount of CIC units by category determined for each market and facility by the Demand Forecast.