VA Recommendations to the

ASSET AND INFRASTRUCTURE REVIEW COMMISSION

March 2022

Appendix H

Cost Benefit Analysis – VISN 19

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VISN 19 Grand Junction

The recommendations for modernization and realignment of VHA infrastructure submitted by the Secretary of the Department of Veterans Affairs to the Asset and Infrastructure Review (AIR) Commission are focused on allowing VA to provide accessible, timely, and high-quality health care for Veterans now and in the future. To inform the recommendations, VA conducted a Cost Benefit Analysis (CBA) that examines the cost-efficiency and benefits to Veterans of various courses of action (COAs) within each market. The CBA compares the costs and benefits associated with maintaining the current facilities, modernizing the current facilities, or strategically realigning and modernizing facilities in each market to inform the identification of a preferred COA.

The CBA aligns with requirements outlined in Section 1703C of Title 38, United States Code (U.S.C.), as added by Section 203 of the VA MISSION Act of 2018.

> *VA MISSION Act, Section 203(2)(F)*
>
> *"In making recommendations under this subsection, the Secretary shall consider…the extent and timing of potential costs and savings, including the number of years such costs or savings will be incurred, beginning with the date of completion of the proposed recommendation."*

This CBA summary document defines the COAs, provides a brief overview of the methodology, and outlines the results of the CBA and the associated sensitivity analysis.

Overview of COAs and Methodology

The Cost Benefit Analysis (CBA) reviews, analyzes, and compares the costs and benefits of three distinct courses of action (COA):

- maintaining VA's current facilities assuming no changes or additional modernization to current facilities, programs, and infrastructure (COA Name: Status Quo)
- modernizing the current facilities without strategically realigning facilities (COA Name: Modernization)
- strategically realigning and modernizing facilities (COA Name: VA Recommendation to the AIR Commission)

To evaluate these courses of action, VA examined the combined cost and benefits of each COA for each market. The CBA was conducted at the market level, rather than at the facility level, to allow for a holistic assessment of a COA's impact that considers optimization of the market across all health care facilities. The financial costs were assessed using a Present Value (PV) analysis while the non-financial benefits were assessed using a Benefits Analysis Scoring process. Ultimately, the CBA results in a Cost-Benefit Index – a simple metric by which to compare the combined cost and non-financial benefits associated with each COA. The CBI equals the total life-cycle cost (PV) of each COA in PV dollars, divided by the Benefits Analysis score for that COA's non-financial benefits normalized to the billions place. The COA with the lowest CBI score is the preferred COA.

Summary of Results

The VA Recommendation COA is the leading COA analyzed in the VISN 19 Grand Junction Market due to its leading Cost Benefit Index (CBI) score. The CBI score for the VA Recommendation COA (0.34) is 47.8% lower than the Status Quo COA (0.65) and 31.5% lower than the Modernization COA (0.50).

The VA Recommendation COA is $202.2 M (4.4%) more expensive than the Status Quo COA and $204.0 M (4.1%) less expensive than the Modernization COA. While the VA Recommendation COA increases cost compared to the Status Quo COA and decreases costs compared to the Modernization COA, it also increases benefits as seen by a 14-point benefits score compared to 7 for the Status Quo COA and 10 for the Modernization COA.

The tables below detail the present values, benefit scores, and CBIs for each COA.

Table 1 – CBI Scores by COA

	Status Quo	Modernization	VA Recommendation
COA PV ($)	($4,584,062,101)	($4,990,288,322)	($4,786,262,581)
Benefit Analysis Score	7	10	14
CBI (Normalized in $Billions)	0.65	0.50	0.34
CBI % Change vs. Status Quo	N/A	-23.8%	-47.8%
CBI % Change vs. Modernization	N/A	N/A	-31.5%

Table 2 – Cost Analysis Cost Variance by COA

Cost Variance	Status Quo	Modernization	VA Recommendation
Capital Cost Variance vs. Status Quo	N/A	($406,226,221)	($441,371,653)
Operational Cost Variance vs. Status Quo	N/A	$0	$239,171,173
Estimated Total Cost Variance vs. Status Quo	N/A	($406,226,221)	($202,200,480)
Estimated Total Cost Variance vs. Modernization	N/A	N/A	$204,025,741

Note: Operational unit costs were provided at the parent facility level not at the facility level. Therefore, the analysis does not estimate the changes in operational costs stemming from new, expanded, or removed points of care (POC). The analysis only shows changes to operational costs when a service line is shifted, at the parent facility level, from VA care to non-VA care.

Table 3 – Benefit Analysis Scores by COA

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	3
Access	2	2	3
Quality	1	2	2
Facilities and Sustainability	1	2	3
Mission	2	2	3
Total Benefit Score	**7**	**10**	**14**

VA Recommendation

The VA Recommendation for the VISN 19 Grand Junction Market COA is detailed below.

- Modernize and realign the Grand Junction VAMC by:
  - Establishing a strategic collaboration for relocating inpatient medical and surgical services and discontinuing these services at the Grand Junction VAMC
  - Converting the emergency department at the Grand Junction VAMC to an urgent care center
  - Establishing an RRTP at the Grand Junction VAMC
  - Modernizing the CLC at the Grand Junction VAMC
- Modernize and realign outpatient facilities in the market by relocating the Montrose OOS site to a new site in the vicinity of Montrose, Colorado, and closing the Montrose OOS site

Cost Analysis

The Cost Analysis highlighted the estimated Present Value (PV) of each COA for the VISN 19 Grand Junction Market across a 30-year horizon. The cost of the VA Recommendation COA ($4.8 B) was higher than the Status Quo COA ($4.6 B) and lower than the Modernization COA ($5.0 B).

For the VISN 19 Grand Junction Market, the VA Recommendation COA is $202.2 M (4.4%) more expensive than the Status Quo COA and $204.0 M (4.1%) less expensive than the Modernization COA. The cost difference between the VA Recommendation COA and Status Quo COA can be attributed to new facilities, closing or modernizing existing facilities, and scaling capacity of existing facilities up or down to meet future Veteran in-house demand to accommodate changes in demand.

The table below outlines the costs associated with each of the COAs. For more detail refer to Appendix A – VISN 19 Grand Junction: Capital and Operational Costs Detail.

Table 4 – Total Cost Summary by COA

	Status Quo	Modernization	VA Recommendation
Total Costs (PV)	($4,584,062,101)	($4,990,288,322)	($4,786,262,581)
Capital Cost Variance vs. Status Quo	N/A	($406,226,221)	($441,371,653)
Operational Cost Variance vs. Status Quo	N/A	$0	$239,171,173
Non-VA Care Operational Cost Variance	N/A	$0	($336,640,924)
VA Care Operational Cost Variance	N/A	$0	$575,812,097
Estimated Total Cost Variance vs. Status Quo	N/A	($406,226,221)	($202,200,480)
Estimated Total Cost Variance vs. Modernization	N/A	N/A	$204,025,741

Benefit Analysis

This section describes the non-financial benefit analysis results for the VISN 19 Grand Junction Market across five domains: Demand and Supply, Access, Quality, Facilities and Sustainability, and Mission. The results indicate that the VA Recommendation COA provides the most benefit (greatest Total Benefit Score) in comparison to the Status Quo and Modernization COAs.

Table 5 – Benefit Analysis Scores by COA

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	3
Access	2	2	3
Quality	1	2	2
Facilities and Sustainability	1	2	3

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Mission	2	2	3
Total Benefit Score	**7**	**10**	**14**

The scoring and rationale within each domain are described in the following sections. The data underlying the analysis is provided in Appendix B – VISN 19 Grand Junction: Benefits Analysis Key Data. Additional information regarding the scoring methodology is provided in the CBA Methodology.

Demand and Supply

Within the Demand and Supply domain, the CBA considers how each COA impacts VA's ability to meet Veteran demand in the future. Each COA is assessed on two benefit components: (1) the ability to balance demand and supply; (2) the changes to facility placement or service offerings that improve VA's ability to meet future demand.

The table below shows the scores for VISN 19 Grand Junction for this domain.

Table 6 – Demand and Supply Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	3

Status Quo: The COA received a score of 1 because at least one inpatient service line was over/under supplied, or more than 50% of specialties were inadequately supplied when compared to future Veteran in-house demand. Additionally, no changes to facilities or services were introduced that improve VA's ability to meet future Veteran enrollee population (e.g., relocation or establishment of facilities in areas with greater Veteran demand, expansion of services).

Modernization: The COA received a score of 2 because, while Modernization right-sizes services to meet future Veteran in-house demand, the COA does not include changes to facilities or services that improve VA's ability to meet future Veteran enrollee population (e.g., relocation or establishment of facilities in areas with greater Veteran demand, addition of new services).

VA Recommendation: The COA received a score of 3 because it right-sizes services to meet future Veteran enrollee demand and includes changes to facilities or services that improve VA's ability to meet future Veteran enrollee demand based on guidelines established in the CBA methodology. These changes include the following:

- Establishes the new Grand Junction inpatient medicine and surgery partnership

Access

Within the Access domain, the CBA considers how each COA impacts Veteran access to care in the future. Each COA is assessed on the change in enrollee proximity to VA-provided primary care, specialty care, and outpatient mental health care.

The table below shows the CBA access scores for VISN 19 Grand Junction for this domain.

Table 7 – Access Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Access	2	2	3

Note: the CBA Access domain score is based on enrollee proximity to VA-provided care only rather than the full high-performing integrated delivery network (inclusive of VA, Community Care Network providers, and non-Community Care Network providers meeting quality criteria). While a COA may have a reduced access score within the CBA, the Section 203 Criteria analysis shows that the VA Recommendation COA maintains or improves access to all service lines in the future high-performing integrated delivery network (HPIDN).

Status Quo: The COA received a score of 2 because access is maintained within 1% for VA-provided primary care, specialty care, and outpatient mental health care.

Modernization: The COA received a score of 2 because access is maintained within 1% for VA-provided primary care, specialty care, and outpatient mental health care.

VA Recommendation: The COA received a score of 3 because access to VA-provided primary care was maintained within 1%, specialty care was maintained within 1%, and outpatient mental health care increased 1% or more.

Quality

Within the Quality domain, the CBA considers how each COA impacts the quality of Veteran care in the future. Each COA is assessed based on two benefit components: (1) the ability of the main patient care facilities to support modern healthcare; (2) the ability of demand to support clinical competency.

The table below shows the scores for VISN 19 Grand Junction for this domain.

Table 8 – Quality Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Quality	1	2	2

Status Quo: The COA received a score of 1 for two reasons. First, the COA includes main patient care facilities that were built prior to the emergence of modern healthcare design principles and specific standards to support modern medicine (e.g., floor-to-floor heights, corridor widths, columns spacing, and utility infrastructure requirements). Second, the COA includes facilities with projected future demand below VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

Modernization: The COA received a score of 2 for two reasons. First, the COA replaces aged infrastructure with modern facilities that meet modern health care design standards. Modern facilities support current standards of care (e.g., PACT-enabled environment in the outpatient setting, single patient rooms in the inpatient setting) and utilization of technologies. They can also improve the experience for both Veterans and staff. Second, the COA includes facilities with projected future demand below VA planning guidelines for maintaining programs. VA's planning guidelines reflect that

sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

VA Recommendation: The COA received a score of 2 for two reasons. First, the COA replaces aged infrastructure with modern facilities that meet modern health care design standards. Modern facilities support current standards of care (e.g., PACT-enabled environment in the outpatient setting, single patient rooms in the inpatient setting) and utilization of technologies. They can also improve the experience for both Veterans and staff. Second, the COA includes facilities with projected future demand below VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

Facilities and Sustainability

Within the Facilities and Sustainability domain, the CBA considers how each COA impacts the sustainability of Veteran care in the future. Each COA is assessed based on two benefit components: (1) the useful life of the main patient care facilities; (2) changes that strengthen VA's ability to recruit and retain providers.

The table below shows the scores for VISN 19 Grand Junction for this domain.

Table 9 – Facilities and Sustainability Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Facilities and Sustainability	1	2	3

Note: The American Hospital Association estimates that a hospital's useful life, a measure which predicts the productive period of a typical capital asset before it becomes obsolete or needs replacement, is currently 40 years.

Status Quo: The COA received a score of 1 for two reasons. First, the COA includes at least one main patient care facility that exceeds its useful life as defined by the American Hospital Association, indicating it may be obsolete or need replacement. Second, the COA does not include changes that strengthen VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

Modernization: The COA received a score of 2 for two reasons. First, the COA replaces all main patient care facilities that have exceeded their useful life with modern facilities that can be sustained over the coming years. Second, while the COA includes modernized infrastructure, which may attract providers, it does not include additional changes to support VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

VA Recommendation: The COA received a score of 3 for two reasons. First, the COA replaces all main patient care facilities that have exceeded their useful life with modern facilities that can be sustained over the coming years. Second, in addition to modernized infrastructure which may attract providers, it also includes additional changes to support VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded

partnerships between VA and academic affiliates, other Federal facilities, or community facilities). The COA includes the following actions to support VA's ability to recruit or retain providers:

- Establishes the Grand Junction inpatient medicine and surgery partnership

Mission

Within the Mission domain, the CBA considers how each COA impacts VA's ability to support its statutory missions of Education, Research, and Emergency Preparedness in the future. Each COA is assessed on three benefit components: (1) the impact on training programs; (2) the impact on research programs; (3) the impact on emergency preparedness.

A COA's overall score in the Mission domain is determined by the rounded average (unweighted) of its component (e.g., Education, Research, Emergency Preparedness) scores. The table below shows the scores for VISN 19 Grand Junction for this domain.

Table 10 – Mission Scoring Summary

Subdomain	Status Quo	Modernization	VA Recommendation
Education	2	2	3
Research	2	2	3
Emergency Preparedness	2	2	2
Overall Mission Score (Rounded Average)	**2**	**2**	**3**

Status Quo: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because it does not impact inpatient acute service lines and thus maintains existing training programs.
- **Research:** The COA received a score of 2 because all existing facilities with research programs are maintained.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

Modernization: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because it does not impact inpatient acute service lines and thus maintains existing training programs.
- **Research:** The COA received a score of 2 because all existing facilities with research programs are maintained.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

VA Recommendation: The COA received a score of 3 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 3 because inpatient acute services remain VA-delivered and thus the COA maintains existing training programs. Additionally, the COA includes new (not replacement) infrastructure that creates new opportunities for training within the market.
- **Research:** The COA received a score of 3 because it maintains all research programs and builds new (not replacement) infrastructure to support additional research space.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

Sensitivity Analysis

A sensitivity analyses study shows how various sources of uncertainty in a mathematical model contribute to the model's overall uncertainty. The market is considered sensitive to a scenario when the VA Recommendation is no longer the leading COA due to changes in benefit scores, VA capital costs, VA operational costs, or non-VA operational costs.

The table below outlines the sensitivity analysis scenarios completed.

Table 11 – Sensitivity Analysis Scenarios

Sensitivity Analysis Scenarios
Increase Benefit Scores for Status Quo and Modernization in increments of one from 1 to 3 points
Increase VA Capital Costs in 50% increments from 0% to 300%
Increase VA Operational Costs in 50% increments from 0% to 300%
Increase Non-VA Operational Costs in 50% increments from 0% to 300%

Sensitivity Analysis Results Summary

In the VISN 19 Grand Junction Market, no scenarios changed the outcome of the CBA.

Sensitivity Analysis Full Results

The below tables show the results across all sensitivity analysis scenarios.

Table 12 – Sensitivity Analyses – Benefit Score Increase

Status Quo and Modernization Benefit Score Change	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
+0	0.65	0.50	0.34	VA Recommendation
+1	0.57	0.45	0.34	VA Recommendation

Status Quo and Modernization Benefit Score Change	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
+2	0.51	0.42	0.34	VA Recommendation
+3	0.46	0.38	0.34	VA Recommendation

Table 13 – Sensitivity Analyses – VA Capital Cost Increase

VA Capital Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	0.65	0.50	0.34	VA Recommendation
50%	0.67	0.53	0.36	VA Recommendation
100%	0.68	0.55	0.38	VA Recommendation
150%	0.69	0.58	0.40	VA Recommendation
200%	0.70	0.61	0.43	VA Recommendation
250%	0.71	0.64	0.45	VA Recommendation
300%	0.72	0.67	0.47	VA Recommendation

Table 14 – Sensitivity Analyses – VA Operational Cost Increase

VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	0.65	0.50	0.34	VA Recommendation

VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
50%	0.84	0.63	0.41	VA Recommendation
100%	1.02	0.76	0.48	VA Recommendation
150%	1.20	0.88	0.55	VA Recommendation
200%	1.39	1.01	0.63	VA Recommendation
250%	1.57	1.14	0.70	VA Recommendation
300%	1.75	1.27	0.77	VA Recommendation

Table 15 – Sensitivity Analyses – Non-VA Operational Cost Increase

Non-VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	0.65	0.50	0.34	VA Recommendation
50%	0.79	0.59	0.42	VA Recommendation
100%	0.92	0.69	0.50	VA Recommendation
150%	1.06	0.78	0.58	VA Recommendation
200%	1.19	0.87	0.66	VA Recommendation
250%	1.32	0.97	0.74	VA Recommendation
300%	1.46	1.06	0.82	VA Recommendation

Appendix A – VISN 19 Grand Junction: Capital and Operational Costs Detail

Table 16 – Capital Costs by COA

	Status Quo	Modernization	VA Recommendation
VAMC Ideal Square Footage	-	408,971	433,877
Build New GSF	-	262,028	280,477
Renovate In Place GSF	-	16,080	16,080
Matched Convert To GSF	-	39,153	39,153
Demolition GSF	-	308,397	308,397
Total Build New Cost	$0	($236,782,544)	($251,359,850)
Total Renovate In Place Cost	$0	($900,134)	($900,134)
Total Matched Convert To Cost	$0	($15,099,743)	($15,151,536)
Total Demolition Cost	$0	($10,898,481)	($10,898,481)
Total Lease Build-Out Cost	$0	($20,150,368)	($23,537,481)
Total New Lease Cost	$0	($61,938,843)	($72,317,659)
Total Existing Lease Cost	($4,134,419)	($4,134,393)	($2,758,253)
NRM Costs for Owned Facilities	($82,194,317)	($47,744,319)	($50,651,928)
FCA Correction Cost	($51,248,164)	N/A	N/A
Estimated Base Modernization Cost	($137,576,900)	($397,648,827)	($427,575,323)
Additional Common/Lobby Space Needed (GSF)	-	91,710	98,167
Cost of Additional Common/Lobby Space	$0	($71,444,642)	($76,474,953)
Additional Parking Cost	$0	($9,100,496)	($10,069,665)

	Status Quo	Modernization	VA Recommendation
Potential Land Acquisition Cost	$0	($2,508,176)	($2,769,940)
Seismic Correction Cost	($310,154)	($69,361)	($69,362)
Non-Building FCA Correction Cost	($9,591,206)	($9,591,205)	($9,591,206)
Activation Costs	$0	($63,341,776)	($62,299,464)
Estimated Additional Costs for Modernization	($9,901,360)	($156,055,656)	($161,274,590)
Cost Adjustment: In-Progress Construction	N/A	N/A	$0
Cost Adjustment: In-Progress Lease	N/A	N/A	$0
Estimated Facilities Costs (PV)	($147,478,260)	($553,704,481)	($588,849,913)

Table 17 – Operational Costs by COA

Course of Action (COA)	Status Quo	Modernization	VA Recommendation
VA Direct	($1,313,563,875)	($1,313,563,875)	($981,796,424)
Fixed Direct	($261,313,146)	($261,313,146)	($230,710,416)
VA Specific Direct	($52,707,652)	($52,707,652)	($50,065,588)
Indirect	($713,651,604)	($713,651,604)	($553,971,919)
VA Specific Indirect	($76,403,863)	($76,403,863)	($58,497,409)
Research and Education	($3,671,328)	($3,671,328)	($821,735)
VA Overhead	($141,805,050)	($141,805,050)	($111,440,929)
VA Care Operational Cost Total (PV)	($2,563,116,517)	($2,563,116,517)	($1,987,304,420)
CC Direct	($1,277,188,035)	($1,277,188,035)	($1,579,705,832)
Delivery and Operations	($58,009,103)	($58,009,103)	($68,079,051)

Course of Action (COA)	Status Quo	Modernization	VA Recommendation
Care Coordination	($63,767,116)	($63,767,116)	($74,364,373)
CC Overhead	($76,749,268)	($76,749,268)	($90,205,190)
Admin PMPM	($397,753,802)	($397,753,802)	($397,753,802)
Non-VA Care Operational Cost Total (PV)	($1,873,467,323)	($1,873,467,323)	($2,210,108,248)
Estimated Operational Costs (PV)	($4,436,583,840)	($4,436,583,840)	($4,197,412,668)

Appendix B – VISN 19 Grand Junction: Benefits Analysis Key Data

Below are key data points used in the benefit analysis, summarized in the above Benefit Analysis section.

Demand and Supply

Inpatient

Table 18 – Demand and Supply Key Data Points for Scoring – Inpatient (IP)

Service Line	100% of FY29 In-house Bed Need	120% of FY29 In-house Bed Need	Operating Beds	Supply Adequacy (within 100-120% of in-house demand)
IP CLC	24	29	35	Over Supplied
IP Med/Surg	11	13	17	Over Supplied
IP MH	4	5	8	Over Supplied

Note: Community Living Center (CLC); Medicine (Med); Surgery (Surg); Mental Health (MH)

Source: Enrollee Healthcare Projection Model Base Year 2019

Outpatient

Table 19 – Demand and Supply Key Data Points for Scoring – Outpatient (OP)

Physician Supply Adequacy	Count of Specialties	Percentage
Adequately Supplied	5	19%
Under Supplied	22	81%

Note: VA supply in the Status Quo COA is quantitatively evaluated based on the data above. It is assumed the Modernization COA scales the capacity of existing facilities up or down to meet future Veteran in-house demand. Similar to the Modernization COA, it is assumed the VA Recommendation COA scales the capacity of existing and proposed facilities up or down to meet future Veteran in-house demand. However, the VA Recommendation COA may account for factors that demand projections do not consider that may shift the future balance of in-house and community workload, such as:

- Areas with unmet Veteran demand that may warrant a net new point of care
- Low-census inpatient acute programs that may pose risks to quality and training programs, potentially warranting a shift to community providers
- Community capacity factors that may warrant changes to VA capacity

Source: Office of Productivity, Efficiency and Staffing 2019 Capacity Report

Table 20 – New Facility Demand Guidelines

Facility or Service	Guideline
Inpatient Acute VAMCs	Greater than or equal to 35,000 overlapping enrollees
Inpatient CLC	Greater than or equal to 21,000 overlapping enrollees
Health Care Center	Greater than or equal to 34,000 overlapping enrollees
MS CBOC	Greater than or equal to 4,300 non-overlapping enrollees
CBOC	Greater than or equal to 2,500 non-overlapping enrollees

Note: The above guidelines are used to determine whether a new (not replacement) point of care or service proposed in the VA recommendation had adequate demand.

Access

Table 21 – Access Key Data Points for Scoring

COA	Measure	Current	Future	Result
Status Quo	% of enrollees within 30 minutes of VA-provided OP Mental Health	55.6%	55.6%	Maintained within 1%
Status Quo	% of enrollees within 30 minutes of VA-provided OP Primary Care	75.0%	75.0%	Maintained within 1%

COA	Measure	Current	Future	Result
Status Quo	% of enrollees within 60 minutes of VA-provided OP Specialty Care	60.3%	60.3%	Maintained within 1%
Status Quo	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	94.7%	94.7%	Maintained within 1%
Status Quo	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	95.0%	95.0%	Maintained within 1%
Status Quo	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	98.9%	98.9%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of VA-provided OP Mental Health	55.6%	55.6%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of VA-provided OP Primary Care	75.0%	75.0%	Maintained within 1%
Modernization	% of enrollees within 60 minutes of VA-provided OP Specialty Care	60.3%	60.3%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	94.7%	94.7%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	95.0%	95.0%	Maintained within 1%
Modernization	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	98.9%	98.9%	Maintained within 1%

COA	Measure	Current	Future	Result
VA Recommendation	% of enrollees within 30 minutes of VA-provided OP Mental Health	55.6%	70.2%	Increased 1% or more
VA Recommendation	% of enrollees within 30 minutes of VA-provided OP Primary Care	75.0%	75.0%	Maintained within 1%
VA Recommendation	% of enrollees within 60 minutes of VA-provided OP Specialty Care	60.3%	60.3%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	94.7%	94.7%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	95.0%	96.5%	Increased 1% or more
VA Recommendation	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	98.9%	98.9%	Maintained within 1%

Note: the CBA Access domain score is based on enrollee proximity to VA-provided care only rather than the full high-performing integrated delivery network (HPIDN) (inclusive of VA, Community Care Network, and non-Community Care Network providers meeting quality criteria). While a COA may have a reduced access score within the CBA, the Section 203 Criteria analysis shows that the VA Recommendation COA maintains or improves access to all service lines in the future HPIDN. The table above shows the results for enrollee proximity to the full HPIDN as well as to VA-provided care in the market.

Source: Enrollee data from the FY19 Geocoded Enrollee File. Existing VA facility location data from VAST. Commercial provider location data from Definitive Healthcare.

Quality

Main Patient Care Facility Construction Date

Table 22 – Quality Key Data Points for Scoring – Age

Facility	Main Patient Care Facility Construction Date	Built Pre-1970?
(V19) (575) Grand Junction-Colorado	1948	Yes

Source: Main patient care facility construction and renovation dates from CAI Buildings and FCA Condition Gaps Reports 9-14-2020

Inpatient Acute Demand

Table 23 – Quality Key Data Points for Scoring – Inpatient Acute Demand

Facility	Service	Demand Guideline	Meets or Exceeds Guideline?	VA Recommendation
(V19) (575) Grand Junction	IP Med	20 ADC	No	Partner (VA Delivered)
(V19) (575) Grand Junction	IP Surg	1,600 Cases	No	Partner (VA Delivered)
(V19) (575) Grand Junction	IP MH	8 ADC	No	Maintain

Note: The Status Quo and Modernization COAs are assumed to maintain all current facilities and services. The VA Recommendation COA proposes maintaining, partnering, and divesting of services at each facility, shown in the last column titled “VA Recommendation”. To score a 3, the VA recommendation must partner or divest of all low-demand services.

Source: FY 2029 average daily census for inpatient services is based on Enrollee Healthcare Projection Model Base Year 2019. 2019 Total Surgical Cases is from the VA National Surgery Office.

Facilities and Sustainability

Table 24 – Facilities and Sustainability Key Data Points for Scoring

Facility	Main Patient Care Facility Construction Date	Most Recent Main Patient Care Facility Renovation Date	Exceeds Useful Life?
(V19) (575) Grand Junction-Colorado	1948	1988	Yes

Note: Exceeding useful life is defined as 1) When a main patient care facility was built before 1970 it has exceeded its useful life, even if it has undergone major renovation in the last 40 years. 2) When a main patient care facility

was built after 1970 but is still more than 40 years old (built on or after 1971 and before 1989), it must have undergone major renovation within the last 40 years to not exceed its useful life. 3) When a main patient care facility was built in or after 1989, it has not exceeded its useful life.

Source: From CAI Buildings and FCA Condition Gaps Reports 9-14-2020

Table 25 – Key Data Points for Scoring - Recruitment and Retention

Facility	Expands VA's Ability to Recruit/Retain?
(V19) Grand Junction IP Partnership	Yes

Mission

Table 26 – Mission Key Data Points for Scoring

The Status Quo and Modernization COAs are assumed to have no impact on VA's statutory missions. The impact of the VA Recommendation on VA's statutory missions is shown in the table below:

Facility	Training Impact	Research Impact	4th Mission Impact	Market Plan Includes New Facilities/Services To Increase Training/Research Opportunities
(V19) (575) Grand Junction	No impact on training	No Research Program	No PRC Designation	Increases Research Opportunities, Increases Training Opportunities

VISN 19 Salt Lake City

The recommendations for modernization and realignment of VHA infrastructure submitted by the Secretary of the Department of Veterans Affairs to the Asset and Infrastructure Review (AIR) Commission are focused on allowing VA to provide accessible, timely, and high-quality health care for Veterans now and in the future. To inform the recommendations, VA conducted a Cost Benefit Analysis (CBA) that examines the cost-efficiency and benefits to Veterans of various courses of action (COAs) within each market. The CBA compares the costs and benefits associated with maintaining the current facilities, modernizing the current facilities, or strategically realigning and modernizing facilities in each market to inform the identification of a preferred COA.

The CBA aligns with requirements outlined in Section 1703C of Title 38, United States Code (U.S.C.), as added by Section 203 of the VA MISSION Act of 2018.

> *VA MISSION Act, Section 203(2)(F)*
>
> *"In making recommendations under this subsection, the Secretary shall consider…the extent and timing of potential costs and savings, including the number of years such costs or savings will be incurred, beginning with the date of completion of the proposed recommendation."*

This CBA summary document defines the COAs, provides a brief overview of the methodology, and outlines the results of the CBA and the associated sensitivity analysis.

Overview of COAs and Methodology

The Cost Benefit Analysis (CBA) reviews, analyzes, and compares the costs and benefits of three distinct courses of action (COA):

- maintaining VA's current facilities assuming no changes or additional modernization to current facilities, programs, and infrastructure (COA Name: Status Quo)
- modernizing the current facilities without strategically realigning facilities (COA Name: Modernization)
- strategically realigning and modernizing facilities (COA Name: VA Recommendation to the AIR Commission)

To evaluate these courses of action, VA examined the combined cost and benefits of each COA for each market. The CBA was conducted at the market level, rather than at the facility level, to allow for a holistic assessment of a COA's impact that considers optimization of the market across all health care facilities. The financial costs were assessed using a Present Value (PV) analysis while the non-financial benefits were assessed using a Benefits Analysis Scoring process. Ultimately, the CBA results in a Cost-Benefit Index – a simple metric by which to compare the combined cost and non-financial benefits associated with each COA. The CBI equals the total life-cycle cost (PV) of each COA in PV dollars, divided by the Benefits Analysis score for that COA's non-financial benefits normalized to the billions place. The COA with the lowest CBI score is the preferred COA.

Summary of Results

The VA Recommendation COA is the leading COA analyzed in the VISN 19 Salt Lake City Market due to its leading Cost Benefit Index (CBI) score. The CBI score for the VA Recommendation COA (1.65) is 30.1% lower than the Status Quo COA (2.36) and 7.6% lower than the Modernization COA (1.78).

The VA Recommendation COA is $901.7 M (4.8%) more expensive than the Status Quo COA and $161.0 M (0.8%) more expensive than the Modernization COA. While the VA Recommendation COA increases cost compared to the Status Quo and Modernization COAs, it also increases benefits as seen by a 12-point benefits score compared to 8 for the Status Quo COA and 11 for the Modernization COA.

The tables below detail the present values, benefit scores, and CBIs for each COA.

Table 27 – CBI Scores by COA

	Status Quo	Modernization	VA Recommendation
COA PV ($)	($18,842,245,625)	($19,583,031,855)	($19,743,983,103)
Benefit Analysis Score	8	11	12
CBI (Normalized in $Billions)	2.36	1.78	1.65
CBI % Change vs. Status Quo	N/A	-24.4%	-30.1%
CBI % Change vs. Modernization	N/A	N/A	-7.6%

Table 28 – Cost Analysis Cost Variance by COA

Cost Variance	Status Quo	Modernization	VA Recommendation
Capital Cost Variance vs. Status Quo	N/A	($740,786,230)	($901,737,478)
Operational Cost Variance vs. Status Quo	N/A	$0	$0
Estimated Total Cost Variance vs. Status Quo	N/A	($740,786,230)	($901,737,478)
Estimated Total Cost Variance vs. Modernization	N/A	N/A	($160,951,248)

Note: Operational unit costs were provided at the parent facility level not at the facility level. Therefore, the analysis does not estimate the changes in operational costs stemming from new, expanded, or removed points of care (POC). The analysis only shows changes to operational costs when a service line is shifted, at the parent facility level, from VA care to non-VA care.

Table 29 – Benefit Analysis Scores by COA

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	3
Access	2	2	1
Quality	2	3	3
Facilities and Sustainability	1	2	2
Mission	2	2	3
Total Benefit Score	**8**	**11**	**12**

VA Recommendation

The VA Recommendation for the VISN 19 Salt Lake City Market COA is detailed below.

- Modernize and realign the Salt Lake City VAMC by:
  - Constructing a new bed tower at the Salt Lake City VAMC
  - Modernizing the RRTP at the Salt Lake City VAMC
- Modernize by establishing a new stand-alone CLC in the vicinity of Salt Lake City, Utah
- Modernize and realign outpatient facilities in the market by:
  - Establishing a new CBOC in the vicinity of Salt Lake City, Utah
  - Relocating the St. George CBOC to a new site in the vicinity of St. George, Utah, and closing the St. George CBOC
  - Relocating all services at the Roosevelt OOS and closing the Roosevelt OOS
  - Relocating all services at the Price OOS and closing the Price OOS

Cost Analysis

The Cost Analysis highlighted the estimated Present Value (PV) of each COA for the VISN 19 Salt Lake City Market across a 30-year horizon. The cost of the VA Recommendation COA ($19.7 B) was higher than the Status Quo COA ($18.8 B) and the Modernization COA ($19.6 B).

For the VISN 19 Salt Lake City Market, the VA Recommendation COA is $901.7 M (4.8%) more expensive than the Status Quo COA and $161.0 M (0.8%) more expensive than the Modernization COA. The cost difference between the VA Recommendation COA and Status Quo COA can be attributed to new facilities, closing or modernizing existing facilities, and scaling capacity of existing facilities up or down to meet future Veteran in-house demand to accommodate changes in demand.

The table below outlines the costs associated with each of the COAs. For more detail refer to Appendix A – VISN 19 Salt Lake City: Capital and Operational Costs Detail.

Table 30 – Total Cost Summary by COA

	Status Quo	Modernization	VA Recommendation
Total Costs (PV)	($18,842,245,625)	($19,583,031,855)	($19,743,983,103)
Capital Cost Variance vs. Status Quo	N/A	($740,786,230)	($901,737,478)
Operational Cost Variance vs. Status Quo	N/A	$0	$0
Non-VA Care Operational Cost Variance	N/A	$0	$0
VA Care Operational Cost Variance	N/A	$0	$0
Estimated Total Cost Variance vs. Status Quo	$0	($740,786,230)	($901,737,478)
Estimated Total Cost Variance vs. Modernization	N/A	N/A	($160,951,248)

Benefit Analysis

This section describes the non-financial benefit analysis results for the VISN 19 Salt Lake City Market across five domains: Demand and Supply, Access, Quality, Facilities and Sustainability, and Mission. The results indicate that the VA Recommendation COA provides the most benefit (greatest Total Benefit Score) in comparison to the Status Quo and Modernization COAs.

Table 31 – Benefit Analysis Scores by COA

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	3
Access	2	2	1
Quality	2	3	3
Facilities and Sustainability	1	2	2
Mission	2	2	3

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Total Benefit Score	**8**	**11**	**12**

The scoring and rationale within each domain are described in the following sections. The data underlying the analysis is provided in Appendix B – VISN 19 Salt Lake City: Benefits Analysis Key Data. Additional information regarding the scoring methodology is provided in the CBA Methodology.

Demand and Supply

Within the Demand and Supply domain, the CBA considers how each COA impacts VA's ability to meet Veteran demand in the future. Each COA is assessed on two benefit components: (1) the ability to balance demand and supply; (2) the changes to facility placement or service offerings that improve VA's ability to meet future demand.

The table below shows the scores for VISN 19 Salt Lake City for this domain.

Table 32 – Demand and Supply Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	3

Status Quo: The COA received a score of 1 because at least one inpatient service line was over/under supplied, or more than 50% of specialties were inadequately supplied when compared to future Veteran in-house demand. Additionally, no changes to facilities or services were introduced that improve VA's ability to meet the future Veteran enrollee population (e.g., relocation or establishment of facilities in areas with greater Veteran demand, expansion of services).

Modernization: The COA received a score of 2 because, while Modernization right-sizes services to meet future Veteran in-house demand, the COA does not include changes to facilities or services that improve VA's ability to meet future Veteran enrollee population (e.g., relocation or establishment of facilities in areas with greater Veteran demand, addition of new services).

VA Recommendation: The COA received a score of 3 because it right-sizes services to meet future Veteran enrollee demand and includes changes to facilities or services that improve VA's ability to meet future Veteran enrollee demand based on guidelines established in the CBA methodology. These changes include the following:

- Establishes a new Salt Lake City CLC to provide inpatient community living center services; 43,915 enrollees live within 60 minutes of the proposed facility
- Establishes a new Salt Lake City CBOC to provide primary care and outpatient mental health services; there are 5,118 enrollees for which the proposed facility is the closest VA point of care within 30 minutes

Access

Within the Access domain, the CBA considers how each COA impacts Veteran access to care in the future. Each COA is assessed on the change in enrollee proximity to VA-provided primary care, specialty care, and outpatient mental health care.

The table below shows the CBA access scores for VISN 19 Salt Lake City for this domain.

Table 33 – Access Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Access	2	2	1

Note: the CBA Access domain score is based on enrollee proximity to VA-provided care only rather than the full high-performing integrated delivery network (inclusive of VA, Community Care Network providers, and non-Community Care Network providers meeting quality criteria). While a COA may have a reduced access score within the CBA, the Section 203 Criteria analysis shows that the VA Recommendation COA maintains or improves access to all service lines in the future high-performing integrated delivery network (HPIDN).

Status Quo: The COA received a score of 2 because access is maintained within 1% for VA-provided primary care, specialty care, and outpatient mental health care.

Modernization: The COA received a score of 2 because access is maintained within 1% for VA-provided primary care, specialty care, and outpatient mental health care.

VA Recommendation: The COA received a score of 1 because access to VA-provided primary care decreased 1% or more, specialty care increased 1% or more, and outpatient mental health care was maintained within 1%.

Quality

Within the Quality domain, the CBA considers how each COA impacts the quality of Veteran care in the future. Each COA is assessed based on two benefit components: (1) the ability of the main patient care facilities to support modern healthcare; (2) the ability of demand to support clinical competency.

The table below shows the scores for VISN 19 Salt Lake City for this domain.

Table 34 – Quality Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Quality	2	3	3

Status Quo: The COA received a score of 2 for two reasons. First, the COA includes main patient care facilities that were built prior to the emergence of modern healthcare design principles and specific standards to support modern medicine (e.g., floor-to-floor heights, corridor widths, columns spacing, and utility infrastructure requirements). Second, the COA includes facilities with projected future demand at or above VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

Modernization: The COA received a score of 3 for two reasons. First, the COA contains only modern facilities that meet modern health care design standards. Modern facilities support current standards of care (e.g., PACT-enabled environment in the outpatient setting, single patient rooms in the inpatient setting) and utilization of technologies. They can also improve the experience for both Veterans and staff. Second, the COA includes facilities with projected future demand at or above VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

VA Recommendation: The COA received a score of 3 for two reasons. First, the COA contains only modern facilities that meet modern health care design standards. Modern facilities support current standards of care (e.g., PACT-enabled environment in the outpatient setting, single patient rooms in the inpatient setting) and utilization of technologies. They can also improve the experience for both Veterans and staff. Second, the COA includes facilities with projected future demand at or above VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

Facilities and Sustainability

Within the Facilities and Sustainability domain, the CBA considers how each COA impacts the sustainability of Veteran care in the future. Each COA is assessed based on two benefit components: (1) the useful life of the main patient care facilities; (2) changes that strengthen VA's ability to recruit and retain providers.

The table below shows the scores for VISN 19 Salt Lake City for this domain.

Table 35 – Facilities and Sustainability Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Facilities and Sustainability	1	2	2

Note: The American Hospital Association estimates that a hospital's useful life, a measure which predicts the productive period of a typical capital asset before it becomes obsolete or needs replacement, is currently 40 years.

Status Quo: The COA received a score of 1 for two reasons. First, the COA includes at least one main patient care facility that exceeds its useful life as defined by the American Hospital Association, indicating it may be obsolete or need replacement. Second, the COA does not include changes that strengthen VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

Modernization: The COA received a score of 2 for two reasons. First, the COA replaces all main patient care facilities that have exceeded their useful life with modern facilities that can be sustained over the coming years. Second, while the COA includes modernized infrastructure, which may attract providers, it does not include additional changes to support VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

VA Recommendation: The COA received a score of 2 for two reasons. First, the COA replaces all main patient care facilities that have exceeded their useful life with modern facilities that can be sustained over the coming years. Second, while the COA includes modernized infrastructure, which may attract providers, it does not include additional changes to support VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

Mission

Within the Mission domain, the CBA considers how each COA impacts VA's ability to support its statutory missions of Education, Research, and Emergency Preparedness in the future. Each COA is assessed on three benefit components: (1) the impact on training programs; (2) the impact on research programs; (3) the impact on emergency preparedness.

A COA's overall score in the Mission domain is determined by the rounded average (unweighted) of its component (e.g., Education, Research, Emergency Preparedness) scores. The table below shows the scores for VISN 19 Salt Lake City for this domain.

Table 36 – Mission Scoring Summary

Subdomain	Status Quo	Modernization	VA Recommendation
Education	2	2	3
Research	2	2	3
Emergency Preparedness	2	2	2
Overall Mission Score (Rounded Average)	**2**	**2**	**3**

Status Quo: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because it does not impact inpatient acute service lines and thus maintains existing training programs.
- **Research:** The COA received a score of 2 because all existing facilities with research programs are maintained.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

Modernization: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because it does not impact inpatient acute service lines and thus maintains existing training programs.
- **Research:** The COA received a score of 2 because all existing facilities with research programs are maintained.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

VA Recommendation: The COA received a score of 3 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 3 because inpatient acute services remain VA-delivered and thus the COA maintains existing training programs. Additionally, the COA includes new (not replacement) infrastructure that creates new opportunities for training within the market.
- **Research:** The COA received a score of 3 because it maintains all research programs and builds new (not replacement) infrastructure to support additional research space.

- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

Sensitivity Analysis

A sensitivity analyses study shows how various sources of uncertainty in a mathematical model contribute to the model's overall uncertainty. The market is considered sensitive to a scenario when the VA Recommendation is no longer the leading COA due to changes in benefit scores, VA capital costs, VA operational costs, or non-VA operational costs.

The table below outlines the sensitivity analysis scenarios completed.

Table 37 – Sensitivity Analysis Scenarios

Sensitivity Analysis Scenarios
Increase Benefit Scores for Status Quo and Modernization in increments of one from 1 to 3 points
Increase VA Capital Costs in 50% increments from 0% to 300%
Increase VA Operational Costs in 50% increments from 0% to 300%
Increase Non-VA Operational Costs in 50% increments from 0% to 300%

Sensitivity Analysis Results Summary

In the VISN 19 Salt Lake City Market, three scenarios changed the outcome of the CBA:

- Increasing the Modernization benefits score by one point
- Increasing the Modernization benefits score by two points
- Increasing the Modernization benefits score by three points

Sensitivity Analysis Full Results

The below tables show the results across all sensitivity analysis scenarios.

Table 38 – Sensitivity Analyses – Benefit Score Increase

Status Quo and Modernization Benefit Score Change	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
+0	2.36	1.78	1.65	VA Recommendation
+1	2.09	1.63	1.65	Modernization
+2	1.88	1.51	1.65	Modernization
+3	1.71	1.40	1.65	Modernization

Table 39 – Sensitivity Analyses – VA Capital Cost Increase

VA Capital Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	2.36	1.78	1.65	VA Recommendation
50%	2.43	1.86	1.73	VA Recommendation
100%	2.49	1.95	1.81	VA Recommendation
150%	2.56	2.03	1.90	VA Recommendation
200%	2.63	2.12	1.98	VA Recommendation
250%	2.70	2.20	2.07	VA Recommendation
300%	2.77	2.29	2.15	VA Recommendation

Table 40 – Sensitivity Analyses – VA Operational Cost Increase

VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	2.36	1.78	1.65	VA Recommendation
50%	3.14	2.35	2.17	VA Recommendation
100%	3.93	2.93	2.70	VA Recommendation
150%	4.72	3.50	3.22	VA Recommendation
200%	5.51	4.08	3.75	VA Recommendation
250%	6.30	4.65	4.28	VA Recommendation
300%	7.09	5.22	4.80	VA Recommendation

Table 41 – Sensitivity Analyses – Non-VA Operational Cost Increase

Non-VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	2.36	1.78	1.65	VA Recommendation
50%	2.67	2.01	1.86	VA Recommendation
100%	2.99	2.24	2.07	VA Recommendation
150%	3.31	2.48	2.28	VA Recommendation
200%	3.63	2.71	2.50	VA Recommendation
250%	3.95	2.94	2.71	VA Recommendation

Non-VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
300%	4.27	3.17	2.92	VA Recommendation

Appendix A – VISN 19 Salt Lake City: Capital and Operational Costs Detail

Table 42 – Capital Costs by COA

	Status Quo	Modernization	VA Recommendation
VAMC Ideal Square Footage	-	1,335,408	1,360,564
Build New GSF	-	731,595	750,229
Renovate In Place GSF	-	156,770	154,864
Matched Convert To GSF	-	190,985	192,891
Demolition GSF	-	765,594	765,594
Total Build New Cost	$0	($658,799,959)	($674,362,789)
Total Renovate In Place Cost	$0	($39,169,454)	($39,169,454)
Total Matched Convert To Cost	$0	($83,078,861)	($83,819,781)
Total Demolition Cost	$0	($27,055,429)	($27,055,429)
Total Lease Build-Out Cost	$0	($42,763,846)	($69,036,444)
Total New Lease Cost	$0	($175,581,355)	($283,585,978)
Total Existing Lease Cost	($43,630,152)	($43,630,006)	($38,141,103)
NRM Costs for Owned Facilities	($797,989,301)	($155,899,047)	($158,835,812)
FCA Correction Cost	($160,668,026)	N/A	N/A
Estimated Base Modernization Cost	($1,002,287,478)	($1,225,977,957)	($1,374,006,791)
Additional Common/Lobby Space Needed (GSF)	-	256,058	262,580
Cost of Additional Common/Lobby Space	$0	($199,476,938)	($204,557,691)
Additional Parking Cost	$0	($151,103,074)	($157,211,243)

	Status Quo	Modernization	VA Recommendation
Potential Land Acquisition Cost	$0	($51,023)	($52,203)
Seismic Correction Cost	($48,527,550)	($13,403,950)	($13,403,950)
Non-Building FCA Correction Cost	($64,801,351)	($64,801,350)	($64,801,351)
Activation Costs	$0	($201,588,317)	($203,320,627)
Estimated Additional Costs for Modernization	($113,328,901)	($630,424,652)	($643,347,065)
Cost Adjustment: In-Progress Construction	N/A	N/A	$0
Cost Adjustment: In-Progress Lease	N/A	N/A	$0
Estimated Facilities Costs (PV)	($1,115,616,379)	($1,856,402,609)	($2,017,353,856)

Table 43 – Operational Costs by COA

	Status Quo	Modernization	VA Recommendation
VA Direct	($6,654,807,434)	($6,654,807,434)	($6,654,807,434)
Fixed Direct	($794,333,414)	($794,333,414)	($794,333,414)
VA Specific Direct	($522,980,026)	($522,980,026)	($522,980,026)
Indirect	($3,482,105,500)	($3,482,105,500)	($3,482,105,500)
VA Specific Indirect	($502,371,438)	($502,371,438)	($502,371,438)
Research and Education	($73,790,895)	($73,790,895)	($73,790,895)
VA Overhead	($592,269,492)	($592,269,492)	($592,269,492)
VA Care Operational Cost Total (PV)	($12,622,658,199)	($12,622,658,199)	($12,622,658,199)
CC Direct	($2,835,440,494)	($2,835,440,494)	($2,835,440,494)
Delivery and Operations	($119,810,492)	($119,810,492)	($119,810,492)

	Status Quo	Modernization	VA Recommendation
Care Coordination	($123,698,689)	($123,698,689)	($123,698,689)
CC Overhead	($156,839,527)	($156,839,527)	($156,839,527)
Admin PMPM	($1,868,181,846)	($1,868,181,846)	($1,868,181,846)
Non-VA Care Operational Cost Total (PV)	($5,103,971,047)	($5,103,971,047)	($5,103,971,047)
Estimated Operational Costs (PV)	($17,726,629,246)	($17,726,629,246)	($17,726,629,246)

Appendix B – VISN 19 Salt Lake City: Benefits Analysis Key Data

Below are key data points used in the benefit analysis, summarized in the above Benefit Analysis section.

Demand and Supply

Inpatient

Table 44 – Demand and Supply Key Data Points for Scoring – Inpatient (IP)

Service Line	100% of FY29 In-house Bed Need	120% of FY29 In-house Bed Need	Operating Beds	Supply Adequacy (within 100-120% of in-house demand)
IP CLC	2	3	0	Under Supplied
IP Med/Surg	42	51	77	Over Supplied
IP MH	26	32	30	Adequately Supplied

Note: Community Living Center (CLC); Medicine (Med); Surgery (Surg); Mental Health (MH)

Source: Enrollee Healthcare Projection Model Base Year 2019

Outpatient

Table 45 – Demand and Supply Key Data Points for Scoring – Outpatient (OP)

Physician Supply Adequacy	Count of Specialties	Percentage
Adequately Supplied	13	48%
Under Supplied	14	52%

Note: VA supply in the Status Quo COA is quantitatively evaluated based on the data above. It is assumed the Modernization COA scales the capacity of existing facilities up or down to meet future Veteran in-house demand. Similar to the Modernization COA, it is assumed the VA Recommendation COA scales the capacity of existing and proposed facilities up or down to meet future Veteran in-house demand. However, the VA Recommendation COA may account for factors that demand projections do not consider that may shift the future balance of in-house and community workload, such as:

- Areas with unmet Veteran demand that may warrant a net new point of care
- Low-census inpatient acute programs that may pose risks to quality and training programs, potentially warranting a shift to community providers
- Community capacity factors that may warrant changes to VA capacity

Source: Office of Productivity, Efficiency and Staffing 2019 Capacity Report

Table 46 – New Facility Demand Guidelines

Facility or Service	Guideline
Inpatient Acute VAMCs	Greater than or equal to 35,000 overlapping enrollees
Inpatient CLC	Greater than or equal to 21,000 overlapping enrollees
Health Care Center	Greater than or equal to 34,000 overlapping enrollees
MS CBOC	Greater than or equal to 4,300 non-overlapping enrollees
CBOC	Greater than or equal to 2,500 non-overlapping enrollees

Note: The above guidelines are used to determine whether a new (not replacement) point of care or service proposed in the VA recommendation had adequate demand.

Access

Table 47 – Access Key Data Points for Scoring

COA	Measure	Current	Future	Result
Status Quo	% of enrollees within 30 minutes of VA-provided OP Mental Health	77.5%	77.5%	Maintained within 1%
Status Quo	% of enrollees within 30 minutes of VA-provided OP Primary Care	83.7%	83.7%	Maintained within 1%
Status Quo	% of enrollees within 60 minutes of VA-provided OP Specialty Care	64.4%	64.4%	Maintained within 1%

COA	Measure	Current	Future	Result
Status Quo	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	98.3%	98.3%	Maintained within 1%
Status Quo	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	98.6%	98.6%	Maintained within 1%
Status Quo	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	99.6%	99.6%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of VA-provided OP Mental Health	77.5%	77.5%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of VA-provided OP Primary Care	83.7%	83.7%	Maintained within 1%
Modernization	% of enrollees within 60 minutes of VA-provided OP Specialty Care	64.4%	64.4%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	98.3%	98.3%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	98.6%	98.6%	Maintained within 1%
Modernization	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	99.6%	99.6%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of VA-provided OP Mental Health	77.5%	78.0%	Maintained within 1%

COA	Measure	Current	Future	Result
VA Recommendation	% of enrollees within 30 minutes of VA-provided OP Primary Care	83.7%	82.5%	Decreased 1% or more
VA Recommendation	% of enrollees within 60 minutes of VA-provided OP Specialty Care	64.4%	73.7%	Increased 1% or more
VA Recommendation	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	98.3%	98.3%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	98.6%	98.7%	Maintained within 1%
VA Recommendation	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	99.6%	99.6%	Maintained within 1%

Note: the CBA Access domain score is based on enrollee proximity to VA-provided care only rather than the full high-performing integrated delivery network (HPIDN) (inclusive of VA, Community Care Network, and non-Community Care Network providers meeting quality criteria). While a COA may have a reduced access score within the CBA, the Section 203 Criteria analysis shows that the VA Recommendation COA maintains or improves access to all service lines in the future HPIDN. The table above shows the results for enrollee proximity to the full HPIDN as well as to VA-provided care in the market.

Source: Enrollee data from the FY19 Geocoded Enrollee File. Existing VA facility location data from VAST. Commercial provider location data from Definitive Healthcare.

Quality

Main Patient Care Facility Construction Date

Table 48 – Quality Key Data Points for Scoring – Age

Facility	Main Patient Care Facility Construction Date	Built Pre-1970?
(V19) (660) Salt Lake City	1949	Yes

Source: Main patient care facility construction and renovation dates from CAI Buildings and FCA Condition Gaps Reports 9-14-2020

Inpatient Acute Demand

Table 49 – Quality Key Data Points for Scoring – Inpatient Acute Demand

Facility	Service	Demand Guideline	Meets or Exceeds Guideline?	VA Recommendation
(V19) (660) Salt Lake City	IP Med	20 ADC	Yes	Maintain
(V19) (660) Salt Lake City	IP Surg	1,600 Cases	Yes	Maintain
(V19) (660) Salt Lake City	IP MH	8 ADC	Yes	Maintain

Note: The Status Quo and Modernization COAs are assumed to maintain all current facilities and services. The VA Recommendation COA proposes maintaining, partnering, and divesting of services at each facility, shown in the last column titled "VA Recommendation". To score a 3, the VA recommendation must partner or divest of all low-demand services.

Source: FY 2029 average daily census for inpatient services is based on Enrollee Healthcare Projection Model Base Year 2019. 2019 Total Surgical Cases is from the VA National Surgery Office.

Facilities and Sustainability

Table 50 – Facilities and Sustainability Key Data Points for Scoring

Facility	Main Patient Care Facility Construction Date	Most Recent Main Patient Care Facility Renovation Date	Exceeds Useful Life?
(V19) (660) Salt Lake City	1949	1988	Yes

Note: Exceeding useful life is defined as 1) When a main patient care facility was built before 1970 it has exceeded its useful life, even if it has undergone major renovation in the last 40 years. 2) When a main patient care facility was built after 1970 but is still more than 40 years old (built on or after 1971 and before 1989), it must have undergone major renovation within the last 40 years to not exceed its useful life. 3) When a main patient care facility was built in or after 1989, it has not exceeded its useful life.

Source: From CAI Buildings and FCA Condition Gaps Reports 9-14-2020

Table 51 – Key Data Points for Scoring - Recruitment and Retention

Facility	Expands VA's Ability to Recruit/Retain?
N/A	N/A

Mission

Table 52 – Mission Key Data Points for Scoring

The Status Quo and Modernization COAs are assumed to have no impact on VA's statutory missions. The impact of the VA Recommendation on VA's statutory missions is shown in the table below:

Facility	Training Impact	Research Impact	4th Mission Impact	Market Plan Includes New Facilities/Services To Increase Training/Research Opportunities
(V19) (660) Salt Lake City	No impact on training	Maintains or Has Plan to Transition	No PRC Designation	Increases Research Opportunities, Increases Training Opportunities

VISN 19 Sheridan

The recommendations for modernization and realignment of VHA infrastructure submitted by the Secretary of the Department of Veterans Affairs to the Asset and Infrastructure Review (AIR) Commission are focused on allowing VA to provide accessible, timely, and high-quality health care for Veterans now and in the future. To inform the recommendations, VA conducted a Cost Benefit Analysis (CBA) that examines the cost-efficiency and benefits to Veterans of various courses of action (COAs) within each market. The CBA compares the costs and benefits associated with maintaining the current facilities, modernizing the current facilities, or strategically realigning and modernizing facilities in each market to inform the identification of a preferred COA.

The CBA aligns with requirements outlined in Section 1703C of Title 38, United States Code (U.S.C.), as added by Section 203 of the VA MISSION Act of 2018.

> *VA MISSION Act, Section 203(2)(F)*
>
> *"In making recommendations under this subsection, the Secretary shall consider…the extent and timing of potential costs and savings, including the number of years such costs or savings will be incurred, beginning with the date of completion of the proposed recommendation."*

This CBA summary document defines the COAs, provides a brief overview of the methodology, and outlines the results of the CBA and the associated sensitivity analysis.

Overview of COAs and Methodology

The Cost Benefit Analysis (CBA) reviews, analyzes, and compares the costs and benefits of three distinct courses of action (COA):

- maintaining VA's current facilities assuming no changes or additional modernization to current facilities, programs, and infrastructure (COA Name: Status Quo)
- modernizing the current facilities without strategically realigning facilities (COA Name: Modernization)
- strategically realigning and modernizing facilities (COA Name: VA Recommendation to the AIR Commission)

To evaluate these courses of action, VA examined the combined cost and benefits of each COA for each market. The CBA was conducted at the market level, rather than at the facility level, to allow for a holistic assessment of a COA's impact that considers optimization of the market across all health care facilities. The financial costs were assessed using a Present Value (PV) analysis while the non-financial benefits were assessed using a Benefits Analysis Scoring process. Ultimately, the CBA results in a Cost-Benefit Index – a simple metric by which to compare the combined cost and non-financial benefits associated with each COA. The CBI equals the total life-cycle cost (PV) of each COA in PV dollars, divided by the Benefits Analysis score for that COA's non-financial benefits normalized to the billions place. The COA with the lowest CBI score is the preferred COA.

Summary of Results

The VA Recommendation COA is the leading COA analyzed in the VISN 19 Sheridan Market due to its leading Cost Benefit Index (CBI) score. The CBI score for the VA Recommendation COA (0.41) is 34.5% lower than the Status Quo COA (0.62) and 9.5% lower than the Modernization COA (0.45).

The VA Recommendation COA is $128.8 M (3.0%) more expensive than the Status Quo COA and $18.9 M (0.4%) less expensive than the Modernization COA. While the VA Recommendation COA increases cost compared to the Status Quo COA and decreases costs compared to the Modernization COA, it also increases benefits as seen by a 11-point benefits score compared to 7 for the Status Quo COA and 10 for the Modernization COA.

The tables below detail the present values, benefit scores, and CBIs for each COA.

Table 53 – CBI Scores by COA

	Status Quo	Modernization	VA Recommendation
COA PV ($)	($4,364,810,446)	($4,512,516,225)	($4,493,601,069)
Benefit Analysis Score	7	10	11
CBI (Normalized in $Billions)	0.62	0.45	0.41
CBI % Change vs. Status Quo	N/A	-27.6%	-34.5%
CBI % Change vs. Modernization	N/A	N/A	-9.5%

Table 54 – Cost Analysis Cost Variance by COA

Cost Variance	Status Quo	Modernization	VA Recommendation
Capital Cost Variance vs. Status Quo	N/A	($147,705,779)	($207,086,342)
Operational Cost Variance vs. Status Quo	N/A	$0	$78,295,719
Estimated Total Cost Variance vs. Status Quo	N/A	($147,705,779)	($128,790,623)
Estimated Total Cost Variance vs. Modernization	N/A	N/A	$18,915,156

Note: Operational unit costs were provided at the parent facility level not at the facility level. Therefore, the analysis does not estimate the changes in operational costs stemming from new, expanded, or removed points of care (POC). The analysis only shows changes to operational costs when a service line is shifted, at the parent facility level, from VA care to non-VA care.

Table 55 – Benefit Analysis Scores by COA

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	2
Access	2	2	2
Quality	1	2	3
Facilities and Sustainability	1	2	2
Mission	2	2	2
Total Benefit Score	**7**	**10**	**11**

VA Recommendation

The VA Recommendation for the VISN 19 Sheridan Market COA is detailed below.

- Modernize and realign the Sheridan VAMC by relocating inpatient medical and urgent care services provided at the Sheridan VAMC to community providers and discontinuing these services at the Sheridan VAMC

Cost Analysis

The Cost Analysis highlighted the estimated Present Value (PV) of each COA for the VISN 19 Sheridan Market across a 30-year horizon. The cost of the VA Recommendation COA ($4.49 B) was higher than the Status Quo COA ($4.4 B) and lower than the Modernization COA ($4.51 B).

For the VISN 19 Sheridan Market, the VA Recommendation COA is $128.8 M (3.0%) more expensive than the Status Quo COA and $18.9 M (0.4%) less expensive than the Modernization COA. The cost difference between the VA Recommendation COA and Status Quo COA can be attributed to new facilities, closing or modernizing existing facilities, and scaling capacity of existing facilities up or down to meet future Veteran in-house demand to accommodate changes in demand.

The table below outlines the costs associated with each of the COAs. For more detail refer to Appendix A – VISN 19 Sheridan: Capital and Operational Costs Detail.

Table 56 – Total Cost Summary by COA

	Status Quo	Modernization	VA Recommendation
Total Costs (PV)	($4,364,810,446)	($4,512,516,225)	($4,493,601,069)
Capital Cost Variance vs. Status Quo	N/A	($147,705,779)	($207,086,342)
Operational Cost Variance vs. Status Quo	N/A	$0	$78,295,719

	Status Quo	Modernization	VA Recommendation
Non-VA Care Operational Cost Variance	N/A	$0	($7,002,754)
VA Care Operational Cost Variance	N/A	$0	$85,298,472
Estimated Total Cost Variance vs. Status Quo	$0	($147,705,779)	($128,790,623)
Estimated Total Cost Variance vs. Modernization			$18,915,156

Benefit Analysis

This section describes the non-financial benefit analysis results for the VISN 19 Sheridan Market across five domains: Demand and Supply, Access, Quality, Facilities and Sustainability, and Mission. The results indicate that the VA Recommendation COA provides the most benefit (greatest Total Benefit Score) in comparison to the Status Quo and Modernization COAs.

Table 57 – Benefit Analysis Scores by COA

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	2
Access	2	2	2
Quality	1	2	3
Facilities and Sustainability	1	2	2
Mission	2	2	2
Total Benefit Score	**7**	**10**	**11**

The scoring and rationale within each domain are described in the following sections. The data underlying the analysis is provided in Appendix B – VISN 19 Sheridan: Benefits Analysis Key Data. Additional information regarding the scoring methodology is provided in the CBA Methodology.

Demand and Supply

Within the Demand and Supply domain, the CBA considers how each COA impacts VA's ability to meet Veteran demand in the future. Each COA is assessed on two benefit components: (1) the ability to

balance demand and supply; (2) the changes to facility placement or service offerings that improve VA's ability to meet future demand.

The table below shows the scores for VISN 19 Sheridan for this domain.

Table 58 – Demand and Supply Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	2

Status Quo: The COA received a score of 1 because at least one inpatient service line was over/under supplied, or more than 50% of specialties were inadequately supplied when compared to future Veteran in-house demand. Additionally, no changes to facilities or services were introduced that improve VA's ability to meet the future Veteran enrollee population (e.g., relocation or establishment of facilities in areas with greater Veteran demand, expansion of services).

Modernization: The COA received a score of 2 because, while Modernization right-sizes services to meet future Veteran in-house demand, the COA does not include changes to facilities or services that improve VA's ability to meet the future Veteran enrollee population (e.g., relocation or establishment of facilities in areas with greater Veteran demand, addition of new services).

VA Recommendation: The COA received a score of 2 because, while the COA right-sizes services to meet future Veteran in-house demand, the COA does not include changes to facilities or services that improve VA's ability to meet the future Veteran enrollee population (e.g., relocation or establishment of facilities in areas with greater Veteran demand, expansion of services).

Access

Within the Access domain, the CBA considers how each COA impacts Veteran access to care in the future. Each COA is assessed on the change in enrollee proximity to VA-provided primary care, specialty care, and outpatient mental health care.

The table below shows the CBA access scores for VISN 19 Sheridan for this domain.

Table 59 – Access Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Access	2	2	2

Note: the CBA Access domain score is based on enrollee proximity to VA-provided care only rather than the full high-performing integrated delivery network (inclusive of VA, Community Care Network providers, and non-Community Care Network providers meeting quality criteria). While a COA may have a reduced access score within the CBA, the Section 203 Criteria analysis shows that the VA Recommendation COA maintains or improves access to all service lines in the future high-performing integrated delivery network (HPIDN).

Status Quo: The COA received a score of 2 because access is maintained within 1% for VA-provided primary care, specialty care, and outpatient mental health care.

Modernization: The COA received a score of 2 because access is maintained within 1% for VA-provided primary care, specialty care, and outpatient mental health care.

VA Recommendation: The COA received a score of 2 because access to VA-provided primary care was maintained within 1%, specialty care was maintained within 1%, and outpatient mental health care was maintained within 1%.

Quality

Within the Quality domain, the CBA considers how each COA impacts the quality of Veteran care in the future. Each COA is assessed based on two benefit components: (1) the ability of the main patient care facilities to support modern healthcare; (2) the ability of demand to support clinical competency.

The table below shows the scores for VISN 19 Sheridan for this domain.

Table 60 – Quality Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Quality	1	2	3

Status Quo: The COA received a score of 1 for two reasons. First, the COA includes main patient care facilities that were built prior to the emergence of modern healthcare design principles and specific standards to support modern medicine (e.g., floor-to-floor heights, corridor widths, columns spacing, and utility infrastructure requirements). Second, the COA includes facilities with projected future demand below VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

Modernization: The COA received a score of 2 for two reasons. First, the COA replaces aged infrastructure with modern facilities that meet modern health care design standards. Modern facilities support current standards of care (e.g., PACT-enabled environment in the outpatient setting, single patient rooms in the inpatient setting) and utilization of technologies. They can also improve the experience for both Veterans and staff. Second, the COA includes facilities with projected future demand below VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

VA Recommendation: The COA received a score of 3 for two reasons. First, the COA contains only modern facilities that meet modern health care design standards. Modern facilities support current standards of care (e.g., PACT-enabled environment in the outpatient setting, single patient rooms in the inpatient setting) and utilization of technologies. They can also improve the experience for both Veterans and staff. Second, the COA includes facilities with projected future demand at or above VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery. The COA includes the following actions to ensure adequate demand across inpatient acute service lines throughout the market:

- Transition Sheridan VAMC's low census inpatient medicine program to community providers

Facilities and Sustainability

Within the Facilities and Sustainability domain, the CBA considers how each COA impacts the sustainability of Veteran care in the future. Each COA is assessed based on two benefit components: (1) the useful life of the main patient care facilities; (2) changes that strengthen VA's ability to recruit and retain providers.

The table below shows the scores for VISN 19 Sheridan for this domain.

Table 61 – Facilities and Sustainability Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Facilities and Sustainability	1	2	2

Note: The American Hospital Association estimates that a hospital's useful life, a measure which predicts the productive period of a typical capital asset before it becomes obsolete or needs replacement, is currently 40 years.

Status Quo: The COA received a score of 1 for two reasons. First, the COA includes at least one main patient care facility that exceeds its useful life as defined by the American Hospital Association, indicating it may be obsolete or need replacement. Second, the COA does not include changes that strengthen VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

Modernization: The COA received a score of 2 for two reasons. First, the COA replaces all main patient care facilities that have exceeded their useful life with modern facilities that can be sustained over the coming years. Second, while the COA includes modernized infrastructure, which may attract providers, it does not include additional changes to support VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

VA Recommendation: The COA received a score of 2 for two reasons. First, the COA replaces all main patient care facilities that have exceeded their useful life with modern facilities that can be sustained over the coming years. Second, while the COA includes modernized infrastructure, which may attract providers, it does not include additional changes to support VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

Mission

Within the Mission domain, the CBA considers how each COA impacts VA's ability to support its statutory missions of Education, Research, and Emergency Preparedness in the future. Each COA is assessed on three benefit components: (1) the impact on training programs; (2) the impact on research programs; (3) the impact on emergency preparedness.

A COA's overall score in the Mission domain is determined by the rounded average (unweighted) of its component (e.g., Education, Research, Emergency Preparedness) scores. The table below shows the scores for VISN 19 Sheridan for this domain.

Table 62 – Mission Scoring Summary

Subdomain	Status Quo	Modernization	VA Recommendation
Education	2	2	1
Research	2	2	3
Emergency Preparedness	2	2	2
Overall Mission Score (Rounded Average)	**2**	**2**	**2**

Status Quo: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because it does not impact inpatient acute service lines and thus maintains existing training programs.
- **Research:** The COA received a score of 2 because all existing facilities with research programs are maintained.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

Modernization: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because it does not impact inpatient acute service lines and thus maintains existing training programs.
- **Research:** The COA received a score of 2 because all existing facilities with research programs are maintained.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

VA Recommendation: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 1 because it impacts inpatient acute service lines and thus introduces risk to existing training programs.
- **Research:** The COA received a score of 3 because it maintains all research programs and builds new (not replacement) infrastructure to support additional research space.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

Sensitivity Analysis

A sensitivity analyses study shows how various sources of uncertainty in a mathematical model contribute to the model's overall uncertainty. The market is considered sensitive to a scenario when the VA Recommendation is no longer the leading COA due to changes in benefit scores, VA capital costs, VA operational costs, or non-VA operational costs.

The table below outlines the sensitivity analysis scenarios completed.

Table 63 – Sensitivity Analysis Scenarios

Sensitivity Analysis Scenarios
Increase Benefit Scores for Status Quo and Modernization in increments of one from 1 to 3 points
Increase VA Capital Costs in 50% increments from 0% to 300%
Increase VA Operational Costs in 50% increments from 0% to 300%
Increase Non-VA Operational Costs in 50% increments from 0% to 300%

Sensitivity Analysis Results Summary

In the VISN 19 Sheridan Market, two scenarios changed the outcome of the CBA:

- Increasing the Modernization benefits score by two points
- Increasing the Modernization benefits score by three points

Sensitivity Analysis Full Results

The below tables show the results across all sensitivity analysis scenarios.

Table 64 – Sensitivity Analyses – Benefit Score Increase

Status Quo and Modernization Benefit Score Change	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
+0	0.62	0.45	0.41	VA Recommendation
+1	0.55	0.41	0.41	VA Recommendation
+2	0.48	0.38	0.41	Modernization
+3	0.44	0.35	0.41	Modernization

Table 65 – Sensitivity Analyses – VA Capital Cost Increase

VA Capital Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	0.62	0.45	0.41	VA Recommendation
50%	0.66	0.48	0.44	VA Recommendation
100%	0.69	0.51	0.47	VA Recommendation
150%	0.73	0.55	0.50	VA Recommendation
200%	0.76	0.58	0.53	VA Recommendation
250%	0.80	0.61	0.56	VA Recommendation
300%	0.83	0.64	0.60	VA Recommendation

Table 66 – Sensitivity Analyses – VA Operational Cost Increase

VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	0.62	0.45	0.41	VA Recommendation
50%	0.77	0.56	0.50	VA Recommendation
100%	0.93	0.66	0.59	VA Recommendation
150%	1.08	0.77	0.68	VA Recommendation
200%	1.23	0.87	0.78	VA Recommendation
250%	1.38	0.98	0.87	VA Recommendation

VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
300%	1.53	1.09	0.96	VA Recommendation

Table 67 – Sensitivity Analyses – Non-VA Operational Cost Increase

Non-VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	0.62	0.45	0.41	VA Recommendation
50%	0.75	0.54	0.49	VA Recommendation
100%	0.88	0.63	0.57	VA Recommendation
150%	1.00	0.72	0.65	VA Recommendation
200%	1.13	0.81	0.73	VA Recommendation
250%	1.26	0.89	0.81	VA Recommendation
300%	1.38	0.98	0.89	VA Recommendation

Appendix A – VISN 19 Sheridan: Capital and Operational Costs Detail

Table 68 – Capital Costs by COA

	Status Quo	Modernization	VA Recommendation
VAMC Ideal Square Footage	-	455,422	484,934
Build New GSF	-	277,742	299,603
Renovate In Place GSF	-	39,067	39,067
Matched Convert To GSF	-	41,403	41,403
Demolition GSF	-	536,346	536,346
Total Build New Cost	$0	($241,941,273)	($260,127,198)
Total Renovate In Place Cost	$0	($10,955,996)	($10,955,997)
Total Matched Convert To Cost	$0	($15,845,212)	($15,907,341)
Total Demolition Cost	$0	($18,745,719)	($18,745,719)
Total Lease Build-Out Cost	$0	($32,755,405)	($41,002,963)
Total New Lease Cost	$0	($95,598,750)	($119,669,824)
Total Existing Lease Cost	($8,732,347)	($8,732,277)	($6,106,503)
NRM Costs for Owned Facilities	($399,143,065)	($53,167,119)	($56,612,467)
FCA Correction Cost	($50,115,183)	N/A	N/A
Estimated Base Modernization Cost	($457,990,596)	($477,741,751)	($529,128,013)
Additional Common/Lobby Space Needed (GSF)	-	97,210	104,861
Cost of Additional Common/Lobby Space	$0	($74,897,037)	($80,792,164)
Additional Parking Cost	$0	($8,406,209)	($9,556,432)

	Status Quo	Modernization	VA Recommendation
Potential Land Acquisition Cost	$0	($1,057,912)	($1,057,912)
Seismic Correction Cost	($5,278,023)	($1,326,101)	($1,326,102)
Non-Building FCA Correction Cost	($17,953,100)	($17,953,100)	($17,953,100)
Activation Costs	$0	($47,545,387)	($48,494,337)
Estimated Additional Costs for Modernization	($23,231,123)	($151,185,746)	($159,180,047)
Cost Adjustment: In-Progress Construction	N/A	N/A	$0
Cost Adjustment: In-Progress Lease	N/A	N/A	$0
Estimated Facilities Costs (PV)	($481,221,718)	($628,927,497)	($688,308,060)

Table 69 – Operational Costs by COA

	Status Quo	Modernization	VA Recommendation
VA Direct	($1,047,552,320)	($1,047,552,320)	($1,005,520,441)
Fixed Direct	($104,148,082)	($104,148,082)	($100,892,951)
VA Specific Direct	($53,244,053)	($53,244,053)	($52,074,583)
Indirect	($697,459,816)	($697,459,816)	($667,709,581)
VA Specific Indirect	($99,927,072)	($99,927,072)	($95,479,421)
Research and Education	($181,352)	($181,352)	($181,352)
VA Overhead	($110,215,092)	($110,215,092)	($105,570,987)
VA Care Operational Cost Total (PV)	($2,112,727,789)	($2,112,727,789)	($2,027,429,316)
CC Direct	($1,086,581,873)	($1,086,581,873)	($1,133,630,643)
Delivery and Operations	($49,536,405)	($49,536,405)	($50,619,137)

	Status Quo	Modernization	VA Recommendation
Care Coordination	($55,401,976)	($55,401,976)	($56,366,425)
CC Overhead	($65,832,348)	($65,832,348)	($67,279,022)
Admin PMPM	($513,508,337)	($513,508,337)	($469,968,465)
Non-VA Care Operational Cost Total (PV)	($1,770,860,939)	($1,770,860,939)	($1,777,863,692)
Estimated Operational Costs (PV)	($3,883,588,728)	($3,883,588,728)	($3,805,293,009)

Appendix B – VISN 19 Sheridan: Benefits Analysis Key Data

Below are key data points used in the benefit analysis, summarized in the above Benefit Analysis section.

Demand and Supply

Inpatient

Table 70 – Demand and Supply Key Data Points for Scoring – Inpatient (IP)

Service Line	100% of FY29 In-house Bed Need	120% of FY29 In-house Bed Need	Operating Beds	Supply Adequacy (within 100-120% of in-house demand)
IP CLC	27	32	40	Over Supplied
IP Med/Surg	5	7	10	Over Supplied
IP MH	9	11	20	Over Supplied

Note: Community Living Center (CLC); Medicine (Med); Surgery (Surg); Mental Health (MH)

Source: Enrollee Healthcare Projection Model Base Year 2019

Outpatient

Table 71 – Demand and Supply Key Data Points for Scoring – Outpatient (OP)

Physician Supply Adequacy	Count of Specialties	Percentage
Adequately Supplied	3	11%
Under Supplied	24	89%

Note: VA supply in the Status Quo COA is quantitatively evaluated based on the data above. It is assumed the Modernization COA scales the capacity of existing facilities up or down to meet future Veteran in-house demand. Similar to the Modernization COA, it is assumed the VA Recommendation COA scales the capacity of existing and proposed facilities up or down to meet future Veteran in-house demand. However, the VA Recommendation COA may account for factors that demand projections do not consider that may shift the future balance of in-house and community workload, such as:

- Areas with unmet Veteran demand that may warrant a net new point of care
- Low-census inpatient acute programs that may pose risks to quality and training programs, potentially warranting a shift to community providers
- Community capacity factors that may warrant changes to VA capacity

Source: Office of Productivity, Efficiency and Staffing 2019 Capacity Report

Table 72 – New Facility Demand Guidelines

Facility or Service	Guideline
Inpatient Acute VAMCs	Greater than or equal to 35,000 overlapping enrollees
Inpatient CLC	Greater than or equal to 21,000 overlapping enrollees
Health Care Center	Greater than or equal to 34,000 overlapping enrollees
MS CBOC	Greater than or equal to 4,300 non-overlapping enrollees
CBOC	Greater than or equal to 2,500 non-overlapping enrollees

Note: The above guidelines are used to determine whether a new (not replacement) point of care or service proposed in the VA recommendation had adequate demand.

Access

Table 73 – Access Key Data Points for Scoring

COA	Measure	Current	Future	Result
Status Quo	% of enrollees within 30 minutes of VA-provided OP Mental Health	66.6%	66.6%	Maintained within 1%
Status Quo	% of enrollees within 30 minutes of VA-provided OP Primary Care	77.3%	77.3%	Maintained within 1%

COA	Measure	Current	Future	Result
Status Quo	% of enrollees within 60 minutes of VA-provided OP Specialty Care	18.1%	18.1%	Maintained within 1%
Status Quo	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	92.4%	92.4%	Maintained within 1%
Status Quo	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	96.3%	96.3%	Maintained within 1%
Status Quo	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	99.4%	99.4%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of VA-provided OP Mental Health	66.6%	66.6%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of VA-provided OP Primary Care	77.3%	77.3%	Maintained within 1%
Modernization	% of enrollees within 60 minutes of VA-provided OP Specialty Care	18.1%	18.1%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	92.4%	92.4%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	96.3%	96.3%	Maintained within 1%
Modernization	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	99.4%	99.4%	Maintained within 1%

COA	Measure	Current	Future	Result
VA Recommendation	% of enrollees within 30 minutes of VA-provided OP Mental Health	66.6%	66.6%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of VA-provided OP Primary Care	77.3%	77.3%	Maintained within 1%
VA Recommendation	% of enrollees within 60 minutes of VA-provided OP Specialty Care	18.1%	18.1%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	92.4%	92.4%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	96.3%	96.3%	Maintained within 1%
VA Recommendation	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	99.4%	99.4%	Maintained within 1%

Note: the CBA Access domain score is based on enrollee proximity to VA-provided care only rather than the full high-performing integrated delivery network (HPIDN) (inclusive of VA, Community Care Network, and non-Community Care Network providers meeting quality criteria). While a COA may have a reduced access score within the CBA, the Section 203 Criteria analysis shows that the VA Recommendation COA maintains or improves access to all service lines in the future HPIDN. The table above shows the results for enrollee proximity to the full HPIDN as well as to VA-provided care in the market.

Source: Enrollee data from the FY19 Geocoded Enrollee File. Existing VA facility location data from VAST. Commercial provider location data from Definitive Healthcare.

Quality

Main Patient Care Facility Construction Date

Table 74 – Quality Key Data Points for Scoring – Age

Facility	Main Patient Care Facility Construction Date	Built Pre-1970?
(V19) (666) Sheridan	1932	Yes

Source: Main patient care facility construction and renovation dates from CAI Buildings and FCA Condition Gaps Reports 9-14-2020

Inpatient Acute Demand

Table 75 – Quality Key Data Points for Scoring – Inpatient Acute Demand

Facility	Service	Demand Guideline	Meets or Exceeds Guideline?	VA Recommendation
(V19) (666) Sheridan	IP Med	20 ADC	No	Partner (CCN)
(V19) (666) Sheridan	IP Surg	1,600 Cases	No Service	N/A
(V19) (666) Sheridan	IP MH	8 ADC	Yes	Maintain

Note: The Status Quo and Modernization COAs are assumed to maintain all current facilities and services. The VA Recommendation COA proposes maintaining, partnering, and divesting of services at each facility, shown in the last column titled "VA Recommendation". To score a 3, the VA recommendation must partner or divest of all low-demand services.

Source: FY 2029 average daily census for inpatient services is based on Enrollee Healthcare Projection Model Base Year 2019. 2019 Total Surgical Cases is from the VA National Surgery Office.

Facilities and Sustainability

Table 76 – Facilities and Sustainability Key Data Points for Scoring

Facility	Main Patient Care Facility Construction Date	Most Recent Main Patient Care Facility Renovation Date	Exceeds Useful Life?
(V19) (666) Sheridan	1932	2010	Yes

Source: From CAI Buildings and FCA Condition Gaps Reports 9-14-2020

Table 77: Key Data Points for Scoring - Recruitment and Retention

Facility	Expands VA's Ability to Recruit/Retain?
N/A	N/A

Mission

Table 78 – Mission Key Data Points for Scoring

The Status Quo and Modernization COAs are assumed to have no impact on VA's statutory missions. The impact of the VA Recommendation on VA's statutory missions is shown in the table below:

Facility	Training Impact	Research Impact	4th Mission Impact	Market Plan Includes New Facilities/Services To Increase Training/Research Opportunities
(V19) (666) Sheridan	Deactivates IP Acute Service with training	No Research Program	No PRC Designation	Increases Research Opportunities

VISN 19 Cheyenne

The recommendations for modernization and realignment of VHA infrastructure submitted by the Secretary of the Department of Veterans Affairs to the Asset and Infrastructure Review (AIR) Commission are focused on allowing VA to provide accessible, timely, and high-quality health care for Veterans now and in the future. To inform the recommendations, VA conducted a Cost Benefit Analysis (CBA) that examines the cost-efficiency and benefits to Veterans of various courses of action (COAs) within each market. The CBA compares the costs and benefits associated with maintaining the current facilities, modernizing the current facilities, or strategically realigning and modernizing facilities in each market to inform the identification of a preferred COA.

The CBA aligns with requirements outlined in Section 1703C of Title 38, United States Code (U.S.C.), as added by Section 203 of the VA MISSION Act of 2018.

> *VA MISSION Act, Section 203(2)(F)*
>
> *"In making recommendations under this subsection, the Secretary shall consider…the extent and timing of potential costs and savings, including the number of years such costs or savings will be incurred, beginning with the date of completion of the proposed recommendation."*

This CBA summary document defines the COAs, provides a brief overview of the methodology, and outlines the results of the CBA and the associated sensitivity analysis.

Overview of COAs and Methodology

The Cost Benefit Analysis (CBA) reviews, analyzes, and compares the costs and benefits of three distinct courses of action (COA):

- maintaining VA's current facilities assuming no changes or additional modernization to current facilities, programs, and infrastructure (COA Name: Status Quo)
- modernizing the current facilities without strategically realigning facilities (COA Name: Modernization)
- strategically realigning and modernizing facilities (COA Name: VA Recommendation to the AIR Commission)

To evaluate these courses of action, VA examined the combined cost and benefits of each COA for each market. The CBA was conducted at the market level, rather than at the facility level, to allow for a holistic assessment of a COA's impact that considers optimization of the market across all health care facilities. The financial costs were assessed using a Present Value (PV) analysis while the non-financial benefits were assessed using a Benefits Analysis Scoring process. Ultimately, the CBA results in a Cost-Benefit Index – a simple metric by which to compare the combined cost and non-financial benefits associated with each COA. The CBI equals the total life-cycle cost (PV) of each COA in PV dollars, divided by the Benefits Analysis score for that COA's non-financial benefits normalized to the billions place. The COA with the lowest CBI score is the preferred COA.

Summary of Results

The VA Recommendation COA is the leading COA analyzed in the VISN 19 Cheyenne Market due to its leading Cost Benefit Index (CBI) score. The CBI score for the VA Recommendation COA (0.63) is 31.7% lower than the Status Quo COA (0.93) and 9.6% lower than the Modernization COA (0.70).

The VA Recommendation COA is $472.7 M (7.3%) more expensive than the Status Quo COA and $41.5 M (0.6%) less expensive than the Modernization COA. While the VA Recommendation COA increases cost compared to the Status Quo COA and decreases costs compared to the Modernization COA, it also increases benefits as seen by a 11-point benefits score compared to 7 for the Status Quo COA and 10 for the Modernization COA.

The tables below detail the present values, benefit scores, and CBIs for each COA.

Table 79 – CBI Scores by COA

	Status Quo	Modernization	VA Recommendation
COA PV ($)	($6,482,228,170)	($6,996,432,416)	($6,954,967,194)
Benefit Analysis Score	7	10	11
CBI (Normalized in $Billions)	0.93	0.70	0.63
CBI % Change vs. Status Quo	N/A	-24.4%	-31.7%
CBI % Change vs. Modernization	N/A	N/A	-9.6%

Table 80 – Cost Analysis Cost Variance by COA

Cost Variance	Status Quo	Modernization	VA Recommendation
Capital Cost Variance vs. Status Quo	N/A	($514,204,246)	($516,338,442)
Operational Cost Variance vs. Status Quo	N/A	$0	$43,599,419
Estimated Total Cost Variance vs. Status Quo	N/A	($514,204,246)	($472,739,023)
Estimated Total Cost Variance vs. Modernization	N/A	N/A	$41,465,222

Note: Operational unit costs were provided at the parent facility level not at the facility level. Therefore, the analysis does not estimate the changes in operational costs stemming from new, expanded, or removed points of care (POC). The analysis only shows changes to operational costs when a service line is shifted, at the parent facility level, from VA care to non-VA care.

Table 81 – Benefit Analysis Scores by COA

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	2
Access	2	2	3
Quality	1	2	2
Facilities and Sustainability	1	2	2
Mission	2	2	2
Total Benefit Score	**7**	**10**	**11**

VA Recommendation

The VA Recommendation for the VISN 19 Cheyenne Market COA is detailed below.

- Modernize and realign the Cheyenne VAMC by converting the emergency department at the Cheyenne VAMC to an urgent care center
- Modernize and realign outpatient facilities in the market by:
  - Establishing a new OOS in the vicinity of Laramie, Wyoming
  - Relocating all services to the proposed new Albany County OOS and closing the Rawlins OOS site
  - Relocating all services at the Sidney OOS and closing the Sidney OOS

Cost Analysis

The Cost Analysis highlighted the estimated Present Value (PV) of each COA for the VISN 19 Cheyenne Market across a 30-year horizon. The cost of the VA Recommendation COA ($6.95 B) was higher than the Status Quo COA ($6.5 B) and lower than the Modernization COA ($7.0 B).

For the VISN 19 Cheyenne Market, the VA Recommendation COA is $472.7 M (7.3%) more expensive than the Status Quo COA and $41.5 M (0.6%) less expensive than the Modernization COA. The cost difference between the VA Recommendation COA and Status Quo COA can be attributed to new facilities, closing or modernizing existing facilities, and scaling capacity of existing facilities up or down to meet future Veteran in-house demand to accommodate changes in demand.

The table below outlines the costs associated with each of the COAs. For more detail refer to Appendix A – VISN 19 Cheyenne: Capital and Operational Costs Detail.

Table 82 – Total Cost Summary by COA

	Status Quo	Modernization	VA Recommendation
Total Costs (PV)	($6,482,228,170)	($6,996,432,416)	($6,954,967,194)
Capital Cost Variance vs. Status Quo	N/A	($514,204,246)	($516,338,442)
Operational Cost Variance vs. Status Quo	N/A	$0	$43,599,419
Non-VA Care Operational Cost Variance	N/A	$0	$43,599,419
VA Care Operational Cost Variance	N/A	$0	$0
Estimated Total Cost Variance vs. Status Quo	N/A	($514,204,246)	($472,739,023)
Estimated Total Cost Variance vs. Modernization	N/A	N/A	$41,465,222

Benefit Analysis

This section describes the non-financial benefit analysis results for the VISN 19 Cheyenne Market across five domains: Demand and Supply, Access, Quality, Facilities and Sustainability, and Mission. The results indicate that the VA Recommendation COA provides the most benefit (greatest Total Benefit Score) in comparison to the Status Quo and Modernization COAs.

Table 83 – Benefit Analysis Scores by COA

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	2
Access	2	2	3
Quality	1	2	2
Facilities and Sustainability	1	2	2
Mission	2	2	2

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Total Benefit Score	**7**	**10**	**11**

The scoring and rationale within each domain are described in the following sections. The data underlying the analysis is provided in Appendix B – VISN 19 Cheyenne: Benefits Analysis Key Data. Additional information regarding the scoring methodology is provided in the CBA Methodology.

Demand and Supply

Within the Demand and Supply domain, the CBA considers how each COA impacts VA's ability to meet Veteran demand in the future. Each COA is assessed on two benefit components: (1) the ability to balance demand and supply; (2) the changes to facility placement or service offerings that improve VA's ability to meet future demand.

The table below shows the scores for VISN 19 Cheyenne for this domain.

Table 84 – Demand and Supply Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	2

Status Quo: The COA received a score of 1 because at least one inpatient service line was over/under supplied, or more than 50% of specialties were inadequately supplied when compared to future Veteran in-house demand. Additionally, no changes to facilities or services were introduced that improve VA's ability to meet the future Veteran enrollee population (e.g., relocation or establishment of facilities in areas with greater Veteran demand, expansion of services).

Modernization: The COA received a score of 2 because, while Modernization right-sizes services to meet future Veteran in-house demand, the COA does not include changes to facilities or services that improve VA's ability to meet the future Veteran enrollee population (e.g., relocation or establishment of facilities in areas with greater Veteran demand, addition of new services).

VA Recommendation: The COA received a score of 2 because, while the COA right-sizes services to meet future Veteran in-house demand, the COA does not include changes to facilities or services that improve VA's ability to meet the future Veteran enrollee population (e.g., relocation or establishment of facilities in areas with greater Veteran demand, expansion of services).

Access

Within the Access domain, the CBA considers how each COA impacts Veteran access to care in the future. Each COA is assessed on the change in enrollee proximity to VA-provided primary care, specialty care, and outpatient mental health care.

The table below shows the CBA access scores for VISN 19 Cheyenne for this domain.

Table 85 – Access Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Access	2	2	3

Note: the CBA Access domain score is based on enrollee proximity to VA-provided care only rather than the full high-performing integrated delivery network (inclusive of VA, Community Care Network providers, and non-Community Care Network providers meeting quality criteria). While a COA may have a reduced access score within the CBA, the Section 203 Criteria analysis shows that the VA Recommendation COA maintains or improves access to all service lines in the future high-performing integrated delivery network (HPIDN).

Status Quo: The COA received a score of 2 because access is maintained within 1% for VA-provided primary care, specialty care, and outpatient mental health care.

Modernization: The COA received a score of 2 because access is maintained within 1% for VA-provided primary care, specialty care, and outpatient mental health care.

VA Recommendation: The COA received a score of 3 because access to VA-provided primary care increased 1% or more, specialty care was maintained within 1%, and outpatient mental health care was maintained within 1%.

Quality

Within the Quality domain, the CBA considers how each COA impacts the quality of Veteran care in the future. Each COA is assessed based on two benefit components: (1) the ability of the main patient care facilities to support modern healthcare; (2) the ability of demand to support clinical competency.

The table below shows the scores for VISN 19 Cheyenne for this domain.

Table 86 – Quality Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Quality	1	2	2

Status Quo: The COA received a score of 1 for two reasons. First, the COA includes main patient care facilities that were built prior to the emergence of modern healthcare design principles and specific standards to support modern medicine (e.g., floor-to-floor heights, corridor widths, columns spacing, and utility infrastructure requirements). Second, the COA includes facilities with projected future demand below VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

Modernization: The COA received a score of 2 for two reasons. First, the COA replaces aged infrastructure with modern facilities that meet modern health care design standards. Modern facilities support current standards of care (e.g., PACT-enabled environment in the outpatient setting, single patient rooms in the inpatient setting) and utilization of technologies. They can also improve the experience for both Veterans and staff. Second, the COA includes facilities with projected future demand below VA planning guidelines for maintaining programs. VA's planning guidelines reflect that

sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

VA Recommendation: The COA received a score of 2 for two reasons. First, the COA replaces aged infrastructure with modern facilities that meet modern health care design standards. Modern facilities support current standards of care (e.g., PACT-enabled environment in the outpatient setting, single patient rooms in the inpatient setting) and utilization of technologies. They can also improve the experience for both Veterans and staff. Second, the COA includes facilities with projected future demand below VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

Facilities and Sustainability

Within the Facilities and Sustainability domain, the CBA considers how each COA impacts the sustainability of Veteran care in the future. Each COA is assessed based on two benefit components: (1) the useful life of the main patient care facilities; (2) changes that strengthen VA's ability to recruit and retain providers.

The table below shows the scores for VISN 19 Cheyenne for this domain.

Table 87 – Facilities and Sustainability Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Facilities and Sustainability	1	2	2

Status Quo: The COA received a score of 1 for two reasons. First, the COA includes at least one main patient care facility that exceeds its useful life as defined by the American Hospital Association, indicating it may be obsolete or need replacement. Second, the COA does not include changes that strengthen VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

Modernization: The COA received a score of 2 for two reasons. First, the COA replaces all main patient care facilities that have exceeded their useful life with modern facilities that can be sustained over the coming years. Second, while the COA includes modernized infrastructure, which may attract providers, it does not include additional changes to support VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

VA Recommendation: The COA received a score of 2 for two reasons. First, the COA replaces all main patient care facilities that have exceeded their useful life with modern facilities that can be sustained over the coming years. Second, while the COA includes modernized infrastructure, which may attract providers, it does not include additional changes to support VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

Mission

Within the Mission domain, the CBA considers how each COA impacts VA's ability to support its statutory missions of Education, Research, and Emergency Preparedness in the future. Each COA is assessed on three benefit components: (1) the impact on training programs; (2) the impact on research programs; (3) the impact on emergency preparedness.

A COA's overall score in the Mission domain is determined by the rounded average (unweighted) of its component (e.g., Education, Research, Emergency Preparedness) scores. The table below shows the scores for VISN 19 Cheyenne for this domain.

Table 88 – Mission Scoring Summary

Subdomain	Status Quo	Modernization	VA Recommendation
Education	2	2	2
Research	2	2	3
Emergency Preparedness	2	2	2
Overall Mission Score (Rounded Average)	**2**	**2**	**2**

Status Quo: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because it does not impact inpatient acute service lines and thus maintains existing training programs.
- **Research:** The COA received a score of 2 because all existing facilities with research programs are maintained.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

Modernization: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because it does not impact inpatient acute service lines and thus maintains existing training programs.
- **Research:** The COA received a score of 2 because all existing facilities with research programs are maintained.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

VA Recommendation: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because inpatient acute services remain VA-delivered and thus the COA maintains existing training programs.
- **Research:** The COA received a score of 3 because it maintains all research programs and builds new (not replacement) infrastructure to support additional research space.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

Sensitivity Analysis

A sensitivity analyses study shows how various sources of uncertainty in a mathematical model contribute to the model's overall uncertainty. The market is considered sensitive to a scenario when the VA Recommendation is no longer the leading COA due to changes in benefit scores, VA capital costs, VA operational costs, or non-VA operational costs.

The table below outlines the sensitivity analysis scenarios completed.

Table 89 – Sensitivity Analysis Scenarios

Sensitivity Analysis Scenarios
Increase Benefit Scores for Status Quo and Modernization in increments of one from 1 to 3 points
Increase VA Capital Costs in 50% increments from 0% to 300%
Increase VA Operational Costs in 50% increments from 0% to 300%
Increase Non-VA Operational Costs in 50% increments from 0% to 300%

Sensitivity Analysis Results Summary

In the VISN 19 Cheyenne Market, two scenarios changed the outcome of the CBA:

- Increasing the Modernization benefits score by two points
- Increasing the Modernization benefits score by three points

Sensitivity Analysis Full Results

The below tables show the results across all sensitivity analysis scenarios.

Table 90 – Sensitivity Analyses – Benefit Score Increase

Status Quo and Modernization Benefit Score Change	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
+0	0.93	0.70	0.63	VA Recommendation
+1	0.81	0.64	0.63	VA Recommendation
+2	0.72	0.58	0.63	Modernization
+3	0.65	0.54	0.63	Modernization

Table 91 – Sensitivity Analyses – VA Capital Cost Increase

VA Capital Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	0.93	0.70	0.63	VA Recommendation
50%	0.94	0.73	0.66	VA Recommendation
100%	0.95	0.77	0.69	VA Recommendation
150%	0.96	0.80	0.72	VA Recommendation
200%	0.97	0.83	0.76	VA Recommendation
250%	0.98	0.87	0.79	VA Recommendation
300%	0.99	0.90	0.82	VA Recommendation

Table 92 – Sensitivity Analyses – VA Operational Cost Increase

VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	0.93	0.70	0.63	VA Recommendation
50%	1.21	0.90	0.81	VA Recommendation
100%	1.50	1.10	1.00	VA Recommendation
150%	1.79	1.30	1.18	VA Recommendation
200%	2.07	1.50	1.36	VA Recommendation
250%	2.36	1.70	1.54	VA Recommendation

VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
300%	2.65	1.90	1.73	VA Recommendation

Table 93 – Sensitivity Analyses – Non-VA Operational Cost Increase

Non-VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	0.93	0.70	0.63	VA Recommendation
50%	1.09	0.82	0.74	VA Recommendation
100%	1.26	0.93	0.84	VA Recommendation
150%	1.42	1.05	0.94	VA Recommendation
200%	1.59	1.16	1.04	VA Recommendation
250%	1.75	1.28	1.15	VA Recommendation
300%	1.92	1.39	1.25	VA Recommendation

Appendix A – VISN 19 Cheyenne: Capital and Operational Costs Detail

Table 94 – Capital Costs by COA

	Status Quo	Modernization	VA Recommendation
VAMC Ideal Square Footage	-	492,964	496,105
Build New GSF	-	231,302	233,629
Renovate In Place GSF	-	86,773	86,773
Matched Convert To GSF	-	93,933	93,933
Demolition GSF	-	146,438	146,438
Total Build New Cost	$0	($216,094,241)	($218,505,002)
Total Renovate In Place Cost	$0	($23,010,366)	($23,010,366)
Total Matched Convert To Cost	$0	($35,368,017)	($35,381,002)
Total Demolition Cost	$0	($5,118,123)	($5,118,123)
Total Lease Build-Out Cost	$0	($32,083,850)	($31,856,296)
Total New Lease Cost	$0	($131,993,236)	($131,031,531)
Total Existing Lease Cost	($22,618,520)	($22,618,461)	($20,286,639)
NRM Costs for Owned Facilities	($91,982,878)	($57,549,870)	($57,916,611)
FCA Correction Cost	($31,758,671)	N/A	N/A
Estimated Base Modernization Cost	($146,360,069)	($523,836,163)	($523,105,570)
Additional Common/Lobby Space Needed (GSF)	0 GSF	80,956	81,770
Cost of Additional Common/Lobby Space	$0	($62,373,838)	($63,001,347)
Additional Parking Cost	$0	($6,374,150)	($6,508,342)

	Status Quo	Modernization	VA Recommendation
Potential Land Acquisition Cost	$0	$0	$0
Seismic Correction Cost	($1,865,400)	($541,900)	($541,900)
Non-Building FCA Correction Cost	($11,297,842)	($11,297,842)	($11,297,842)
Activation Costs	$0	($69,303,664)	($71,406,753)
Estimated Additional Costs for Modernization	($13,163,242)	($149,891,394)	($152,756,183)
Cost Adjustment: In-Progress Construction	N/A	N/A	$0
Cost Adjustment: In-Progress Lease	N/A	N/A	$0
Estimated Facilities Costs (PV)	($159,523,312)	($673,727,557)	($675,861,754)

Table 95 – Operational Costs by COA

	Status Quo	Modernization	VA Recommendation
VA Direct	($2,168,793,382)	($2,168,793,382)	($2,168,793,382)
Fixed Direct	($330,568,293)	($330,568,293)	($330,568,293)
VA Specific Direct	($54,431,009)	($54,431,009)	($54,431,009)
Indirect	($1,106,413,340)	($1,106,413,340)	($1,106,413,340)
VA Specific Indirect	($146,366,774)	($146,366,774)	($146,366,774)
Research and Education	($241,938)	($241,938)	($241,938)
VA Overhead	($206,139,872)	($206,139,872)	($206,139,872)
VA Care Operational Cost Total (PV)	($4,012,954,608)	($4,012,954,608)	($4,012,954,608)
CC Direct	($1,297,192,567)	($1,297,192,567)	($1,297,192,567)
Delivery and Operations	($57,273,042)	($57,273,042)	($57,273,042)

	Status Quo	Modernization	VA Recommendation
Care Coordination	($60,446,882)	($60,446,882)	($60,446,882)
CC Overhead	($75,169,663)	($75,169,663)	($75,169,663)
Admin PMPM	($819,668,097)	($819,668,097)	($776,068,679)
Non-VA Care Operational Cost Total (PV)	($2,309,750,251)	($2,309,750,251)	($2,266,150,832)
Estimated Operational Costs (PV)	($6,322,704,859)	($6,322,704,859)	($6,279,105,440)

Appendix B – VISN 19 Cheyenne: Benefits Analysis Key Data

Below are key data points used in the benefit analysis, summarized in the above Benefit Analysis section.

Demand and Supply

Inpatient

Table 96 – Demand and Supply Key Data Points for Scoring – Inpatient (IP)

Service Line	100% of FY29 In-house Bed Need	120% of FY29 In-house Bed Need	Operating Beds	Supply Adequacy (within 100-120% of in-house demand)
IP CLC	46	55	42	Under Supplied
IP Med/Surg	15	18	22	Over Supplied
IP MH	3	4	0	Under Supplied

Note: Community Living Center (CLC); Medicine (Med); Surgery (Surg); Mental Health (MH)

Source: Enrollee Healthcare Projection Model Base Year 2019

Outpatient

Table 97 – Demand and Supply Key Data Points for Scoring – Outpatient (OP)

Physician Supply Adequacy	Count of Specialties	Percentage
Adequately Supplied	3	11%
Under Supplied	24	89%

Note: VA supply in the Status Quo COA is quantitatively evaluated based on the data above. It is assumed the Modernization COA scales the capacity of existing facilities up or down to meet future Veteran in-house demand. Similar to the Modernization COA, it is assumed the VA Recommendation COA scales the capacity of existing and proposed facilities up or down to meet future Veteran in-house demand. However, the VA Recommendation COA may account for factors that demand projections do not consider that may shift the future balance of in-house and community workload, such as:

- Areas with unmet Veteran demand that may warrant a net new point of care
- Low-census inpatient acute programs that may pose risks to quality and training programs, potentially warranting a shift to community providers
- Community capacity factors that may warrant changes to VA capacity

Source: Office of Productivity, Efficiency and Staffing 2019 Capacity Report

Table 98 – New Facility Demand Guidelines

Facility or Service	Guideline
Inpatient Acute VAMCs	Greater than or equal to 35,000 overlapping enrollees
Inpatient CLC	Greater than or equal to 21,000 overlapping enrollees
Health Care Center	Greater than or equal to 34,000 overlapping enrollees
MS CBOC	Greater than or equal to 4,300 non-overlapping enrollees
CBOC	Greater than or equal to 2,500 non-overlapping enrollees

Note: The above guidelines are used to determine whether a new (not replacement) point of care or service proposed in the VA recommendation had adequate demand.

Access

Table 99 – Access Key Data Points for Scoring

COA	Measure	Current	Future	Result
Status Quo	% of enrollees within 30 minutes of VA-provided OP Mental Health	75.6%	75.6%	Maintained within 1%
Status Quo	% of enrollees within 30 minutes of VA-provided OP Primary Care	80.4%	80.4%	Maintained within 1%
Status Quo	% of enrollees within 60 minutes of VA-provided OP Specialty Care	86.9%	86.9%	Maintained within 1%

COA	Measure	Current	Future	Result
Status Quo	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	93.8%	93.8%	Maintained within 1%
Status Quo	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	97.2%	97.2%	Maintained within 1%
Status Quo	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	99.6%	99.6%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of VA-provided OP Mental Health	75.6%	75.6%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of VA-provided OP Primary Care	80.4%	80.4%	Maintained within 1%
Modernization	% of enrollees within 60 minutes of VA-provided OP Specialty Care	86.9%	86.9%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	93.8%	93.8%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	97.2%	97.2%	Maintained within 1%
Modernization	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	99.6%	99.6%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of VA-provided OP Mental Health	75.6%	75.9%	Maintained within 1%

COA	Measure	Current	Future	Result
VA Recommendation	% of enrollees within 30 minutes of VA-provided OP Primary Care	80.4%	81.7%	Increased 1% or more
VA Recommendation	% of enrollees within 60 minutes of VA-provided OP Specialty Care	86.9%	86.9%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	93.8%	93.8%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	97.2%	98.0%	Maintained within 1%
VA Recommendation	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	99.6%	99.6%	Maintained within 1%

Note: the CBA Access domain score is based on enrollee proximity to VA-provided care only rather than the full high-performing integrated delivery network (HPIDN) (inclusive of VA, Community Care Network, and non-Community Care Network providers meeting quality criteria). While a COA may have a reduced access score within the CBA, the Section 203 Criteria analysis shows that the VA Recommendation COA maintains or improves access to all service lines in the future HPIDN. The table above shows the results for enrollee proximity to the full HPIDN as well as to VA-provided care in the market.

Source: Enrollee data from the FY19 Geocoded Enrollee File. Existing VA facility location data from VAST. Commercial provider location data from Definitive Healthcare.

Quality

Main Patient Care Facility Construction Date

Table 100 – Quality Key Data Points for Scoring – Age

Facility	Main Patient Care Facility Construction Date	Built Pre-1970?
(V19) (442) Cheyenne	1932	Yes

Source: Main patient care facility construction and renovation dates from CAI Buildings and FCA Condition Gaps Reports 9-14-2020

Inpatient Acute Demand

Table 101 – Quality Key Data Points for Scoring – Inpatient Acute Demand

Facility	Service	Demand Guideline	Meets or Exceeds Guideline?	VA Recommendation
(V19) (442) Cheyenne	IP Med	20 ADC	No	Maintain
(V19) (442) Cheyenne	IP Surg	1,600 Cases	No	Maintain
(V19) (442) Cheyenne	IP MH	8 ADC	No Service	N/A

Note: The Status Quo and Modernization COAs are assumed to maintain all current facilities and services. The VA Recommendation COA proposes maintaining, partnering, and divesting of services at each facility, shown in the last column titled "VA Recommendation". To score a 3, the VA recommendation must partner or divest of all low-demand services.

Source: FY 2029 average daily census for inpatient services is based on Enrollee Healthcare Projection Model Base Year 2019. 2019 Total Surgical Cases is from the VA National Surgery Office.

Facilities and Sustainability

Table 102 – Facilities and Sustainability Key Data Points for Scoring

Facility	Main Patient Care Facility Construction Date	Most Recent Main Patient Care Facility Renovation Date	Exceeds Useful Life?
(V19) (442) Cheyenne	1932	1996	Yes

Source: From CAI Buildings and FCA Condition Gaps Reports 9-14-2020

Table 103 – Key Data Points for Scoring - Recruitment and Retention

Facility	Expands VA's Ability to Recruit/Retain?
N/A	N/A

Mission

Table 104 – Mission Key Data Points for Scoring

The Status Quo and Modernization COAs are assumed to have no impact on VA's statutory missions. The impact of the VA Recommendation on VA's statutory missions is shown in the table below:

Facility	Training Impact	Research Impact	4th Mission Impact	Market Plan Includes New Facilities/Services To Increase Training/Research Opportunities
(V19) (442) Cheyenne	No impact on training	No Research Program	No PRC Designation	Increases Research Opportunities

VISN 19 Denver

The recommendations for modernization and realignment of VHA infrastructure submitted by the Secretary of the Department of Veterans Affairs to the Asset and Infrastructure Review (AIR) Commission are focused on allowing VA to provide accessible, timely, and high-quality health care for Veterans now and in the future. To inform the recommendations, VA conducted a Cost Benefit Analysis (CBA) that examines the cost-efficiency and benefits to Veterans of various courses of action (COAs) within each market. The CBA compares the costs and benefits associated with maintaining the current facilities, modernizing the current facilities, or strategically realigning and modernizing facilities in each market to inform the identification of a preferred COA.

The CBA aligns with requirements outlined in Section 1703C of Title 38, United States Code (U.S.C.), as added by Section 203 of the VA MISSION Act of 2018.

> *VA MISSION Act, Section 203(2)(F)*
>
> *"In making recommendations under this subsection, the Secretary shall consider…the extent and timing of potential costs and savings, including the number of years such costs or savings will be incurred, beginning with the date of completion of the proposed recommendation."*

This CBA summary document defines the COAs, provides a brief overview of the methodology, and outlines the results of the CBA and the associated sensitivity analysis.

Overview of COAs and Methodology

The Cost Benefit Analysis (CBA) reviews, analyzes, and compares the costs and benefits of three distinct courses of action (COA):

- maintaining VA's current facilities assuming no changes or additional modernization to current facilities, programs, and infrastructure (COA Name: Status Quo)
- modernizing the current facilities without strategically realigning facilities (COA Name: Modernization)
- strategically realigning and modernizing facilities (COA Name: VA Recommendation to the AIR Commission)

To evaluate these courses of action, VA examined the combined cost and benefits of each COA for each market. The CBA was conducted at the market level, rather than at the facility level, to allow for a holistic assessment of a COA's impact that considers optimization of the market across all health care facilities. The financial costs were assessed using a Present Value (PV) analysis while the non-financial benefits were assessed using a Benefits Analysis Scoring process. Ultimately, the CBA results in a Cost-Benefit Index – a simple metric by which to compare the combined cost and non-financial benefits associated with each COA. The CBI equals the total life-cycle cost (PV) of each COA in PV dollars, divided by the Benefits Analysis score for that COA's non-financial benefits normalized to the billions place. The COA with the lowest CBI score is the preferred COA.

Summary of Results

The VA Recommendation COA is the leading COA analyzed in the VISN 19 Denver Market due to its leading Cost Benefit Index (CBI) score. The CBI score for the VA Recommendation COA (1.85) is 31.9% lower than the Status Quo COA (2.72) and 26.6% lower than the Modernization COA (2.52).

The VA Recommendation COA is $598.0 M (2.2%) more expensive than the Status Quo COA and $33.2 M (0.1%) more expensive than the Modernization COA. While the VA Recommendation COA increases cost compared to the Status Quo and Modernization COAs, it also increases benefits as seen by a 15-point benefits score compared to 10 for the Status Quo COA and 11 for the Modernization COA.

The tables below detail the present values, benefit scores, and CBIs for each COA.

Table 105 – CBI Scores by COA

	Status Quo	Modernization	VA Recommendation
COA PV ($)	($27,183,932,086)	($27,748,755,984)	($27,781,952,955)
Benefit Analysis Score	10	11	15
CBI (Normalized in $Billions)	2.72	2.52	1.85
CBI % Change vs. Status Quo	N/A	-7.2%	-31.9%
CBI % Change vs. Modernization	N/A	N/A	-26.6%

Table 106 – Cost Analysis Cost Variance by COA

Cost Variance	Status Quo	Modernization	VA Recommendation
Capital Cost Variance vs. Status Quo	N/A	($564,823,898)	($598,020,869)
Operational Cost Variance vs. Status Quo	N/A	$0	$0
Estimated Total Cost Variance vs. Status Quo	N/A	($564,823,898)	($598,020,869)
Estimated Total Cost Variance vs. Modernization	N/A	N/A	($33,196,971)

Note: Operational unit costs were provided at the parent facility level not at the facility level. Therefore, the analysis does not estimate the changes in operational costs stemming from new, expanded, or removed points of care (POC). The analysis only shows changes to operational costs when a service line is shifted, at the parent facility level, from VA care to non-VA care.

Table 107 – Benefit Analysis Scores by COA

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	3
Access	2	2	3
Quality	3	3	3
Facilities and Sustainability	2	2	3
Mission	2	2	3
Total Benefit Score	**10**	**11**	**15**

VA Recommendation

The VA Recommendation for the VISN 19 Denver Market COA is detailed below.

- Modernize and realign the market by:
  - Establishing a strategic collaboration to provide inpatient medical and surgical services in the vicinity of Colorado Springs, Colorado. If unable to enter into a strategic collaboration, construct a new VA Medical Center in the vicinity of Colorado Springs
  - Establishing a strategic collaboration to provide inpatient mental health services in the vicinity of Colorado Springs, Colorado. If unable to enter into a strategic collaboration, continue to utilize community providers and the Aurora VAMC until a new VA Medical Center is constructed in the vicinity of Colorado Springs, Colorado
- Modernize by establishing a new stand-alone CLC in the vicinity of Colorado Springs, Colorado
- Modernize and realign outpatient facilities in the market by:
  - Establishing a new MS CBOC in the vicinity of Castle Rock, Colorado
  - Relocating the Aurora East Mississippi Avenue CBOC to a new site in the vicinity of Aurora, Colorado, and closing the Aurora East Mississippi Avenue CBOC
  - Relocating the Denver E. 9th Avenue CBOC to the Denver hospital property in Denver, Colorado, and closing the temporarily deactivated Denver E. 9th Avenue CBOC
  - Relocating all services at the La Junta CBOC and closing the La Junta CBOC
  - Relocating all services at the Salida OOS and closing the Salida OOS
  - Relocating all services at the Lamar OOS and closing the Lamar OOS
  - Relocating all services at the Burlington OOS and closing the Burlington OOS

Cost Analysis

The Cost Analysis highlighted the estimated Present Value (PV) of each COA for the VISN 19 Denver Market across a 30-year horizon. The cost of the VA Recommendation COA ($27.8 B) was higher than the Status Quo COA ($27.2 B) and the Modernization COA ($27.7 B).

For the VISN 19 Denver Market, the VA Recommendation COA $598.0 M (2.2%) more expensive than the Status Quo COA and $33.2 M (0.1%) more expensive than the Modernization COA. The cost difference between the VA Recommendation COA and Status Quo COA can be attributed to new facilities, closing or modernizing existing facilities, and scaling capacity of existing facilities up or down to meet future Veteran in-house demand to accommodate changes in demand.

The table below outlines the costs associated with each of the COAs. For more detail refer to Appendix A – VISN 19 Denver: Capital and Operational Costs Detail.

Table 108 – Total Cost Summary by COA

	Status Quo	Modernization	VA Recommendation
Total Costs (PV)	($27,183,932,086)	($27,748,755,984)	($27,781,952,955)
Capital Cost Variance vs. Status Quo	N/A	($564,823,898)	($598,020,869)
Operational Cost Variance vs. Status Quo	N/A	$0	$0
Non-VA Care Operational Cost Variance	N/A	$0	$0
VA Care Operational Cost Variance	N/A	$0	$0
Estimated Total Cost Variance vs. Status Quo	N/A	($564,823,898)	($598,020,869)
Estimated Total Cost Variance vs. Modernization	N/A	N/A	($33,196,971)

Benefit Analysis

This section describes the non-financial benefit analysis results for the VISN 19 Denver Market across five domains: Demand and Supply, Access, Quality, Facilities and Sustainability, and Mission. The results indicate that the VA Recommendation COA provides the most benefit (greatest Total Benefit Score) in comparison to the Status Quo and Modernization COAs.

Table 109 – Benefit Analysis Scores by COA

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	3
Access	2	2	3

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Quality	3	3	3
Facilities and Sustainability	2	2	3
Mission	2	2	3
Total Benefit Score	**10**	**11**	**15**

The scoring and rationale within each domain are described in the following sections. The data underlying the analysis is provided in Appendix B – VISN 19 Denver: Benefits Analysis Key Data. Additional information regarding the scoring methodology is provided in the CBA Methodology.

Demand and Supply

Within the Demand and Supply domain, the CBA considers how each COA impacts VA's ability to meet Veteran demand in the future. Each COA is assessed on two benefit components: (1) the ability to balance demand and supply; (2) the changes to facility placement or service offerings that improve VA's ability to meet future demand.

The table below shows the scores for VISN 19 Denver for this domain.

Table 110 – Demand and Supply Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	3

Status Quo: The COA received a score of 1 because at least one inpatient service line was over/under supplied, or more than 50% of specialties were inadequately supplied when compared to future Veteran in-house demand. Additionally, no changes to facilities or services were introduced that improve VA's ability to meet the future Veteran enrollee population (e.g., relocation or establishment of facilities in areas with greater Veteran demand, expansion of services).

Modernization: The COA received a score of 2 because, while Modernization right-sizes services to meet future Veteran in-house demand, the COA does not include changes to facilities or services that improve VA's ability to meet future Veteran enrollee population (e.g., relocation or establishment of facilities in areas with greater Veteran demand, addition of new services).

VA Recommendation: The COA received a score of 3 because it right-sizes services to meet future Veteran enrollee demand and includes changes to facilities or services that improve VA's ability to meet future Veteran enrollee demand based on guidelines established in the CBA methodology. These changes include the following:

- Establishes a new Colorado Springs CLC to provide inpatient community living center services; 60,225 enrollees live within 60 minutes of the proposed facility
- Establishes a new Castle Rock MS CBOC to provide primary care, specialty care, and outpatient mental health services; there are 6,236 enrollees for which the proposed facility is the closest VA point of care within 60 minutes

- Establishes a new Aurora CBOC to provide primary care and outpatient mental health services; there are 7,089 enrollees for which the proposed facility is the closest VA point of care within 30 minutes
- Establishes a new Lieutenant Colonel John W. Mosley CBOC to provide primary care and outpatient mental health services; there are 11,277 enrollees for which the proposed facility is the closest VA point of care within 30 minutes
- Establishes a new Denver CBOC to provide primary care and outpatient mental health services; there are 4,139 enrollees for which the proposed facility is the closest VA point of care within 30 minutes
- Expands the Colorado Springs MS CBOC to an HCC, adding outpatient surgery services.
- Establishes the new Colorado Springs, CO (El Paso) inpatient mental health partnership
- Establishes the new Colorado Springs, CO inpatient medicine and surgery partnership (DoD)

Access

Within the Access domain, the CBA considers how each COA impacts Veteran access to care in the future. Each COA is assessed on the change in enrollee proximity to VA-provided primary care, specialty care, and outpatient mental health care.

The table below shows the CBA access scores for VISN 19 Denver for this domain.

Table 111 – Access Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Access	2	2	3

Note: the CBA Access domain score is based on enrollee proximity to VA-provided care only rather than the full high-performing integrated delivery network (inclusive of VA, Community Care Network providers, and non-Community Care Network providers meeting quality criteria). While a COA may have a reduced access score within the CBA, the Section 203 Criteria analysis shows that the VA Recommendation COA maintains or improves access to all service lines in the future high-performing integrated delivery network (HPIDN).

Status Quo: The COA received a score of 2 because access is maintained within 1% for VA-provided primary care, specialty care, and outpatient mental health care.

Modernization: The COA received a score of 2 because access is maintained within 1% for VA-provided primary care, specialty care, and outpatient mental health care.

VA Recommendation: The COA received a score of 3 because access to VA-provided primary care was maintained within 1%, specialty care was maintained within 1%, and outpatient mental health care increased 1% or more.

Quality

Within the Quality domain, the CBA considers how each COA impacts the quality of Veteran care in the future. Each COA is assessed based on two benefit components: (1) the ability of the main patient care facilities to support modern healthcare; (2) the ability of demand to support clinical competency.

The table below shows the scores for VISN 19 Denver for this domain.

Table 112 – Quality Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Quality	3	3	3

Status Quo: The COA received a score of 3 for two reasons. First, the COA contains only modern facilities that meet modern health care design standards. Modern facilities support current standards of care (e.g., PACT-enabled environment in the outpatient setting, single patient rooms in the inpatient setting) and utilization of technologies. They can also improve the experience for both Veterans and staff. Second, the COA includes facilities with projected future demand at or above VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

Modernization: The COA received a score of 3 for two reasons. First, the COA contains only modern facilities that meet modern health care design standards. Modern facilities support current standards of care (e.g., PACT-enabled environment in the outpatient setting, single patient rooms in the inpatient setting) and utilization of technologies. They can also improve the experience for both Veterans and staff. Second, the COA includes facilities with projected future demand at or above VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

VA Recommendation: The COA received a score of 3 for two reasons. First, the COA contains only modern facilities that meet modern health care design standards. Modern facilities support current standards of care (e.g., PACT-enabled environment in the outpatient setting, single patient rooms in the inpatient setting) and utilization of technologies. They can also improve the experience for both Veterans and staff. Second, the COA includes facilities with projected future demand at or above VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

Facilities and Sustainability

Within the Facilities and Sustainability domain, the CBA considers how each COA impacts the sustainability of Veteran care in the future. Each COA is assessed based on two benefit components: (1) the useful life of the main patient care facilities; (2) changes that strengthen VA's ability to recruit and retain providers.

The table below shows the scores for VISN 19 Denver for this domain.

Table 113 – Facilities and Sustainability Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Facilities and Sustainability	2	2	3

Note: The American Hospital Association estimates that a hospital's useful life, a measure which predicts the productive period of a typical capital asset before it becomes obsolete or needs replacement, is currently 40 years.

Status Quo: The COA received a score of 2 for two reasons. First, the COA's main patient care facilities are still within their useful life, indicating they can be sustained over the coming years. Second, while the COA includes modern infrastructure, which may attract providers, it does not include additional changes to support VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

Modernization: The COA received a score of 2 for two reasons. First, the COA's main patient care facilities are still within their useful life, indicating they can be sustained over the coming years. Second, while the COA includes modern infrastructure, which may attract providers, it does not include additional changes to support VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

VA Recommendation: The COA received a score of 3 for two reasons. First, the COA replaces all main patient care facilities that have exceeded their useful life with modern facilities that can be sustained over the coming years. Second, in addition to modernized infrastructure which may attract providers, it also includes additional changes to support VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities). The COA includes the following actions to support VA's ability to recruit or retain providers:

- Establishes the new Colorado Springs, CO (El Paso) inpatient mental health partnership
- Establishes the new Colorado Springs, CO inpatient medicine and surgery partnership (DoD)

Mission

Within the Mission domain, the CBA considers how each COA impacts VA's ability to support its statutory missions of Education, Research, and Emergency Preparedness in the future. Each COA is assessed on three benefit components: (1) the impact on training programs; (2) the impact on research programs; (3) the impact on emergency preparedness.

A COA's overall score in the Mission domain is determined by the rounded average (unweighted) of its component (e.g., Education, Research, Emergency Preparedness) scores. The table below shows the scores for VISN 19 Denver for this domain.

Table 114 – Mission Scoring Summary

Subdomain	Status Quo	Modernization	VA Recommendation
Education	2	2	3
Research	2	2	3
Emergency Preparedness	2	2	2
Overall Mission Score (Rounded Average)	**2**	**2**	**3**

Status Quo: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because it does not impact inpatient acute service lines and thus maintains existing training programs.
- **Research:** The COA received a score of 2 because all existing facilities with research programs are maintained.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

Modernization: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because it does not impact inpatient acute service lines and thus maintains existing training programs.
- **Research:** The COA received a score of 2 because all existing facilities with research programs are maintained.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

VA Recommendation: The COA received a score of 3 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 3 because inpatient acute services remain VA-delivered and thus the COA maintains existing training programs. Additionally, the COA includes new (not replacement) infrastructure that creates new opportunities for training within the market.
- **Research:** The COA received a score of 3 because it maintains all research programs and builds new (not replacement) infrastructure to support additional research space.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

Sensitivity Analysis

A sensitivity analyses study shows how various sources of uncertainty in a mathematical model contribute to the model's overall uncertainty. The market is considered sensitive to a scenario when the VA Recommendation is no longer the leading COA due to changes in benefit scores, VA capital costs, VA operational costs, or non-VA operational costs.

The table below outlines the sensitivity analysis scenarios completed.

Table 115 – Sensitivity Analysis Scenarios

Sensitivity Analysis Scenarios
Increase Benefit Scores for Status Quo and Modernization in increments of one from 1 to 3 points
Increase VA Capital Costs in 50% increments from 0% to 300%
Increase VA Operational Costs in 50% increments from 0% to 300%
Increase Non-VA Operational Costs in 50% increments from 0% to 300%

Sensitivity Analysis Results Summary

In the VISN 19 Denver, no scenarios changed the outcome of the CBA.

Sensitivity Analysis Full Results

The below tables show the results across all sensitivity analysis scenarios.

Table 116 – Sensitivity Analyses – Benefit Score Increase

Status Quo and Modernization Benefit Score Change	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
+0	2.72	2.52	1.85	VA Recommendation
+1	2.47	2.31	1.85	VA Recommendation
+2	2.27	2.13	1.85	VA Recommendation
+3	2.09	1.98	1.85	VA Recommendation

Table 117 – Sensitivity Analyses – VA Capital Cost Increase

VA Capital Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	2.72	2.52	1.85	VA Recommendation
50%	2.77	2.60	1.91	VA Recommendation
100%	2.83	2.68	1.97	VA Recommendation
150%	2.89	2.75	2.02	VA Recommendation
200%	2.94	2.83	2.08	VA Recommendation
250%	3.00	2.91	2.14	VA Recommendation

VA Capital Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
300%	3.05	2.98	2.20	VA Recommendation

Table 118 – Sensitivity Analyses – VA Operational Cost Increase

VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	2.72	2.52	1.85	VA Recommendation
50%	3.53	3.26	2.39	VA Recommendation
100%	4.34	4.00	2.94	VA Recommendation
150%	5.16	4.74	3.48	VA Recommendation
200%	5.97	5.48	4.02	VA Recommendation
250%	6.78	6.22	4.56	VA Recommendation
300%	7.59	6.96	5.10	VA Recommendation

Table 119 – Sensitivity Analyses – Non-VA Operational Cost Increase

Non-VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	2.72	2.52	1.85	VA Recommendation
50%	3.21	2.97	2.18	VA Recommendation
100%	3.70	3.41	2.51	VA Recommendation

Non-VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
150%	4.19	3.86	2.83	VA Recommendation
200%	4.68	4.31	3.16	VA Recommendation
250%	5.17	4.75	3.49	VA Recommendation
300%	5.66	5.20	3.81	VA Recommendation

Appendix A – VISN 19 Denver: Capital and Operational Costs Detail

Table 120 – Capital Costs by COA

	Status Quo	Modernization	VA Recommendation
VAMC Ideal Square Footage	-	1,567,932	1,692,901
Build New GSF	-	224,654	317,224
Renovate In Place GSF	-	918,008	906,464
Matched Convert To GSF	-	346,641	358,185
Demolition GSF	-	3,419	3,419
Total Build New Cost	$0	($226,073,802)	($309,789,479)
Total Renovate In Place Cost	$0	($4,283,497)	($4,438,832)
Total Matched Convert To Cost	$0	($148,961,983)	($153,173,652)
Total Demolition Cost	$0	($123,480)	($123,480)
Total Lease Build-Out Cost	$0	($135,019,253)	($117,273,630)
Total New Lease Cost	$0	($596,610,525)	($518,286,935)
Total Existing Lease Cost	($179,353,715)	($179,353,542)	($142,133,139)
NRM Costs for Owned Facilities	($751,275,846)	($183,044,465)	($197,633,731)
FCA Correction Cost	($154,455,860)	N/A	N/A
Estimated Base Modernization Cost	($1,085,085,421)	($1,473,470,547)	($1,442,852,876)
Additional Common/Lobby Space Needed (GSF)	-	78,629	111,028
Cost of Additional Common/Lobby Space	$0	($62,600,481)	($88,395,378)
Additional Parking Cost	$0	($1,515,418)	($31,999,954)

	Status Quo	Modernization	VA Recommendation
Potential Land Acquisition Cost	$0	($1,212,222)	($951,949)
Seismic Correction Cost	($14,624,200)	($757,000)	($490,000)
Non-Building FCA Correction Cost	($21,844,971)	($21,844,971)	($21,844,971)
Activation Costs	$0	($124,977,852)	($133,040,333)
Estimated Additional Costs for Modernization	($36,469,171)	($212,907,944)	($276,722,585)
Cost Adjustment: In-Progress Construction	N/A	N/A	$0
Cost Adjustment: In-Progress Lease	N/A	N/A	$0
Estimated Facilities Costs (PV)	($1,121,554,593)	($1,686,378,491)	($1,719,575,462)

Table 121 – Operational Costs by COA

	Status Quo	Modernization	VA Recommendation
VA Direct	($8,447,178,049)	($8,447,178,049)	($8,447,178,049)
Fixed Direct	($978,165,408)	($978,165,408)	($978,165,408)
VA Specific Direct	($530,367,214)	($530,367,214)	($530,367,214)
Indirect	($4,369,116,743)	($4,369,116,743)	($4,369,116,743)
VA Specific Indirect	($868,261,937)	($868,261,937)	($868,261,937)
Research and Education	($281,051,523)	($281,051,523)	($281,051,523)
VA Overhead	($778,296,244)	($778,296,244)	($778,296,244)
VA Care Operational Cost Total (PV)	($16,252,437,119)	($16,252,437,119)	($16,252,437,119)
CC Direct	($5,120,154,816)	($5,120,154,816)	($5,120,154,816)
Delivery and Operations	($219,785,220)	($219,785,220)	($219,785,220)

	Status Quo	Modernization	VA Recommendation
Care Coordination	($212,920,838)	($212,920,838)	($212,920,838)
CC Overhead	($289,720,662)	($289,720,662)	($289,720,662)
Admin PMPM	($3,967,358,839)	($3,967,358,839)	($3,967,358,839)
Non-VA Care Operational Cost Total (PV)	($9,809,940,375)	($9,809,940,375)	($9,809,940,375)
Estimated Operational Costs (PV)	($26,062,377,494)	($26,062,377,494)	($26,062,377,494)

Appendix B – VISN 19 Denver: Benefits Analysis Key Data

Below are key data points used in the benefit analysis, summarized in the above Benefit Analysis section.

Demand and Supply

Inpatient

Table 122 – Demand and Supply Key Data Points for Scoring – Inpatient (IP)

Service Line	100% of FY29 In-house Bed Need	120% of FY29 In-house Bed Need	Operating Beds	Supply Adequacy (within 100-120% of in-house demand)
IP CLC	59	71	30	Under Supplied
IP Med/Surg	45	53	80	Over Supplied
IP MH	35	43	30	Under Supplied

Note: Community Living Center (CLC); Medicine (Med); Surgery (Surg); Mental Health (MH)

Source: Enrollee Healthcare Projection Model Base Year 2019

Outpatient

Table 123 – Demand and Supply Key Data Points for Scoring – Outpatient (OP)

Physician Supply Adequacy	Count of Specialties	Percentage
Adequately Supplied	17	63%
Under Supplied	10	37%

Note: VA supply in the Status Quo COA is quantitatively evaluated based on the data above. It is assumed the Modernization COA scales the capacity of existing facilities up or down to meet future Veteran in-house demand. Similar to the Modernization COA, it is assumed the VA Recommendation COA scales the capacity of existing and proposed facilities up or down to meet future Veteran in-house demand. However, the VA Recommendation COA may account for factors that demand projections do not consider that may shift the future balance of in-house and community workload, such as:

- Areas with unmet Veteran demand that may warrant a net new point of care
- Low-census inpatient acute programs that may pose risks to quality and training programs, potentially warranting a shift to community providers
- Community capacity factors that may warrant changes to VA capacity

Source: Office of Productivity, Efficiency and Staffing 2019 Capacity Report

Table 124 – New Facility Demand Guidelines

Facility or Service	Guideline
Inpatient Acute VAMCs	Greater than or equal to 35,000 overlapping enrollees
Inpatient CLC	Greater than or equal to 21,000 overlapping enrollees
Health Care Center	Greater than or equal to 34,000 overlapping enrollees
MS CBOC	Greater than or equal to 4,300 non-overlapping enrollees
CBOC	Greater than or equal to 2,500 non-overlapping enrollees

Note: The above guidelines are used to determine whether a new (not replacement) point of care or service proposed in the VA recommendation had adequate demand.

Access

Table 125 – Access Key Data Points for Scoring

COA	Measure	Current	Future	Result
Status Quo	% of enrollees within 30 minutes of VA-provided OP Mental Health	88.7%	88.7%	Maintained within 1%
Status Quo	% of enrollees within 30 minutes of VA-provided OP Primary Care	90.3%	90.3%	Maintained within 1%
Status Quo	% of enrollees within 60 minutes of VA-provided OP Specialty Care	95.4%	95.4%	Maintained within 1%

COA	Measure	Current	Future	Result
Status Quo	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	98.0%	98.0%	Maintained within 1%
Status Quo	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	98.6%	98.6%	Maintained within 1%
Status Quo	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	100.0%	100.0%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of VA-provided OP Mental Health	88.7%	88.7%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of VA-provided OP Primary Care	90.3%	90.3%	Maintained within 1%
Modernization	% of enrollees within 60 minutes of VA-provided OP Specialty Care	95.4%	95.4%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	98.0%	98.0%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	98.6%	98.6%	Maintained within 1%
Modernization	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	100.0%	100.0%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of VA-provided OP Mental Health	88.7%	89.9%	Increased 1% or more

COA	Measure	Current	Future	Result
VA Recommendation	% of enrollees within 30 minutes of VA-provided OP Primary Care	90.3%	90.2%	Maintained within 1%
VA Recommendation	% of enrollees within 60 minutes of VA-provided OP Specialty Care	95.4%	95.4%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	98.0%	98.1%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	98.6%	99.0%	Maintained within 1%
VA Recommendation	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	100.0%	100.0%	Maintained within 1%

Note: the CBA Access domain score is based on enrollee proximity to VA-provided care only rather than the full high-performing integrated delivery network (HPIDN) (inclusive of VA, Community Care Network, and non-Community Care Network providers meeting quality criteria). While a COA may have a reduced access score within the CBA, the Section 203 Criteria analysis shows that the VA Recommendation COA maintains or improves access to all service lines in the future HPIDN. The table above shows the results for enrollee proximity to the full HPIDN as well as to VA-provided care in the market.

Source: Enrollee data from the FY19 Geocoded Enrollee File. Existing VA facility location data from VAST. Commercial provider location data from Definitive Healthcare.

Quality

Main Patient Care Facility Construction Date

Table 126 – Quality Key Data Points for Scoring – Age

Facility	Main Patient Care Facility Construction Date	Built Pre-1970?
(V19) (554) Aurora-Colorado	2017	No

Source: Main patient care facility construction and renovation dates from CAI Buildings and FCA Condition Gaps Reports 9-14-2020

Inpatient Acute Demand

Table 127 – Quality Key Data Points for Scoring – Inpatient Acute Demand

Facility	Service	Demand Guideline	Meets or Exceeds Guideline?	VA Recommendation
(V19) (554) Aurora	IP Med	20 ADC	Yes	Maintain
(V19) (554) Aurora	IP Surg	1,600 Cases	Yes	Maintain
(V19) (554) Aurora	IP MH	8 ADC	Yes	Maintain

Note: The Status Quo and Modernization COAs are assumed to maintain all current facilities and services. The VA Recommendation COA proposes maintaining, partnering, and divesting of services at each facility, shown in the last column titled "VA Recommendation". To score a 3, the VA recommendation must partner or divest of all low-demand services.

Source: FY 2029 average daily census for inpatient services is based on Enrollee Healthcare Projection Model Base Year 2019. 2019 Total Surgical Cases is from the VA National Surgery Office.

Facilities and Sustainability

Table 128 – Facilities and Sustainability Key Data Points for Scoring

Facility	Main Patient Care Facility Construction Date	Most Recent Main Patient Care Facility Renovation Date	Exceeds Useful Life?
(V19) (554) Aurora-Colorado	2017	N/A	No

Note: Exceeding useful life is defined as 1) When a main patient care facility was built before 1970 it has exceeded its useful life, even if it has undergone major renovation in the last 40 years. 2) When a main patient care facility was built after 1970 but is still more than 40 years old (built on or after 1971 and before 1989), it must have undergone major renovation within the last 40 years to not exceed its useful life. 3) When a main patient care facility was built in or after 1989, it has not exceeded its useful life.

Source: From CAI Buildings and FCA Condition Gaps Reports 9-14-2020

Table 129 – Key Data Points for Scoring - Recruitment and Retention

Facility	Expands VA's Ability to Recruit/Retain?
(V19) Colorado Springs, CO IP Partnership (DoD)	Yes
(V19) Colorado Springs, CO (El Paso) IP Partnership	Yes

Mission

Table 130 – Mission Key Data Points for Scoring

The Status Quo and Modernization COAs are assumed to have no impact on VA's statutory missions. The impact of the VA Recommendation on VA's statutory missions is shown in the table below:

Facility	Training Impact	Research Impact	4th Mission Impact	Market Plan Includes New Facilities/Services To Increase Training/Research Opportunities
(V19) (554) Aurora	No impact on training	Maintains or Has Plan to Transition	Maintains PRC-designation	Increases Research Opportunities, Increases Training Opportunities

VISN 19 Oklahoma City

The recommendations for modernization and realignment of VHA infrastructure submitted by the Secretary of the Department of Veterans Affairs to the Asset and Infrastructure Review (AIR) Commission are focused on allowing VA to provide accessible, timely, and high-quality health care for Veterans now and in the future. To inform the recommendations, VA conducted a Cost Benefit Analysis (CBA) that examines the cost-efficiency and benefits to Veterans of various courses of action (COAs) within each market. The CBA compares the costs and benefits associated with maintaining the current facilities, modernizing the current facilities, or strategically realigning and modernizing facilities in each market to inform the identification of a preferred COA.

The CBA aligns with requirements outlined in Section 1703C of Title 38, United States Code (U.S.C.), as added by Section 203 of the VA MISSION Act of 2018.

> *VA MISSION Act, Section 203(2)(F)*
>
> *"In making recommendations under this subsection, the Secretary shall consider…the extent and timing of potential costs and savings, including the number of years such costs or savings will be incurred, beginning with the date of completion of the proposed recommendation."*

This CBA summary document defines the COAs, provides a brief overview of the methodology, and outlines the results of the CBA and the associated sensitivity analysis.

Overview of COAs and Methodology

The Cost Benefit Analysis (CBA) reviews, analyzes, and compares the costs and benefits of three distinct courses of action (COA):

- maintaining VA's current facilities assuming no changes or additional modernization to current facilities, programs, and infrastructure (COA Name: Status Quo)
- modernizing the current facilities without strategically realigning facilities (COA Name: Modernization)
- strategically realigning and modernizing facilities (COA Name: VA Recommendation to the AIR Commission)

To evaluate these courses of action, VA examined the combined cost and benefits of each COA for each market. The CBA was conducted at the market level, rather than at the facility level, to allow for a holistic assessment of a COA's impact that considers optimization of the market across all health care facilities. The financial costs were assessed using a Present Value (PV) analysis while the non-financial benefits were assessed using a Benefits Analysis Scoring process. Ultimately, the CBA results in a Cost-Benefit Index – a simple metric by which to compare the combined cost and non-financial benefits associated with each COA. The CBI equals the total life-cycle cost (PV) of each COA in PV dollars, divided by the Benefits Analysis score for that COA's non-financial benefits normalized to the billions place. The COA with the lowest CBI score is the preferred COA.

Summary of Results

The VA Recommendation COA is the leading COA analyzed in the VISN 19 Oklahoma City Market due to its leading Cost Benefit Index (CBI) score. The CBI score for the VA Recommendation COA (1.42) is 27.0% lower than the Status Quo COA (1.95) and 8.3% lower than the Modernization COA (1.55).

The VA Recommendation COA is $1.5 B (9.5%) more expensive than the Status Quo COA and $6.5 M (0.04%) more expensive than the Modernization COA. While the VA Recommendation COA increases cost compared to the Status Quo and Modernization COAs, it also increases benefits as seen by a 12-point benefits score compared to 8 for the Status Quo COA and 11 for the Modernization COA.

The tables below detail the present values, benefit scores, and CBIs for each COA.

Table 131 – CBI Scores by COA

	Status Quo	Modernization	VA Recommendation
COA PV ($)	($15,588,836,021)	($17,058,875,047)	($17,065,410,318)
Benefit Analysis Score	8	11	12
CBI (Normalized in $Billions)	1.95	1.55	1.42
CBI % Change vs. Status Quo	N/A	-20.4%	-27.0%
CBI % Change vs. Modernization	N/A	N/A	-8.3%

Table 132 – Cost Analysis Cost Variance by COA

Cost Variance	Status Quo	Modernization	VA Recommendation
Capital Cost Variance vs. Status Quo	N/A	($1,470,039,026)	($1,476,574,298)
Operational Cost Variance vs. Status Quo	N/A	$0	$0
Estimated Total Cost Variance vs. Status Quo	N/A	($1,470,039,026)	($1,476,574,298)
Estimated Total Cost Variance vs. Modernization	N/A	N/A	($6,535,271)

Note: Operational unit costs were provided at the parent facility level not at the facility level. Therefore, the analysis does not estimate the changes in operational costs stemming from new, expanded, or removed points of care (POC). The analysis only shows changes to operational costs when a service line is shifted, at the parent facility level, from VA care to non-VA care.

Table 133 – Benefit Analysis Scores by COA

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	3
Access	2	2	1
Quality	2	3	3
Facilities and Sustainability	1	2	2
Mission	2	2	3
Total Benefit Score	**8**	**11**	**12**

VA Recommendation

The VA Recommendation for the VISN 19 Oklahoma City Market COA is detailed below.

- Modernize and realign the Oklahoma City VAMC by building a new mental health facility on the Oklahoma City VAMC
- Modernize and realign outpatient facilities in the market by:
  - Establishing a new OOS in the vicinity of Woodward, Oklahoma
  - Relocating the North May CBOC to a new site in the vicinity of northern Oklahoma City, Oklahoma, and closing the North May CBOC
  - Relocating all services at the Blackwell OOS and closing the Blackwell OOS

Cost Analysis

The Cost Analysis highlighted the estimated Present Value (PV) of each COA for the VISN 19 Oklahoma City Market across a 30-year horizon. The cost of the VA Recommendation COA ($17.07 B) was higher than the Status Quo COA ($15.6 B) and the Modernization COA ($17.06 B).

For the VISN 19 Oklahoma City Market, the VA Recommendation COA is $1.5 B (9.5%) more expensive than the Status Quo COA and $6.5 M (0.04%) more expensive than the Modernization COA. The cost difference between the VA Recommendation COA and Status Quo COA can be attributed to new facilities, closing or modernizing existing facilities, and scaling capacity of existing facilities up or down to meet future Veteran in-house demand to accommodate changes in demand.

The table below outlines the costs associated with each of the COAs. For more detail refer to Appendix A – VISN 19 Oklahoma City: Capital and Operational Costs Detail.

Table 134 – Total Cost Summary by COA

	Status Quo	Modernization	VA Recommendation
Total Costs (PV)	($15,588,836,021)	($17,058,875,047)	($17,065,410,318)
Capital Cost Variance vs. Status Quo	N/A	($1,470,039,026)	($1,476,574,298)
Operational Cost Variance vs. Status Quo	N/A	$0	$0
Non-VA Care Operational Cost Variance	N/A	$0	$0
VA Care Operational Cost Variance	N/A	$0	$0
Estimated Total Cost Variance vs. Status Quo	N/A	($1,470,039,026)	($1,476,574,298)
Estimated Total Cost Variance vs. Modernization	N/A	N/A	($6,535,271)

Benefit Analysis

This section describes the non-financial benefit analysis results for the VISN 19 Oklahoma City Market across five domains: Demand and Supply, Access, Quality, Facilities and Sustainability, and Mission. The results indicate that the VA Recommendation COA provides the most benefit (greatest Total Benefit Score) in comparison to the Status Quo and Modernization COAs.

Table 135 – Benefit Analysis Scores by COA

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	3
Access	2	2	1
Quality	2	3	3
Facilities and Sustainability	1	2	2
Mission	2	2	3

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Total Benefit Score	**8**	**11**	**12**

The scoring and rationale within each domain are described in the following sections. The data underlying the analysis is provided in Appendix B – VISN 19 Oklahoma City: Benefits Analysis Key Data. Additional information regarding the scoring methodology is provided in the CBA Methodology.

Demand and Supply

Within the Demand and Supply domain, the CBA considers how each COA impacts VA's ability to meet Veteran demand in the future. Each COA is assessed on two benefit components: (1) the ability to balance demand and supply; (2) the changes to facility placement or service offerings that improve VA's ability to meet future demand.

The table below shows the scores for VISN 19 Oklahoma City for this domain.

Table 136 – Demand and Supply Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	3

Status Quo: The COA received a score of 1 because at least one inpatient service line was over/under supplied, or more than 50% of specialties were inadequately supplied when compared to future Veteran in-house demand. Additionally, no changes to facilities or services were introduced that improve VA's ability to meet future Veteran enrollee population (e.g., relocation or establishment of facilities in areas with greater Veteran demand, expansion of services).

Modernization: The COA received a score of 2 because, while Modernization right-sizes services to meet future Veteran in-house demand, the COA does not include changes to facilities or services that improve VA's ability to meet future Veteran enrollee population (e.g., relocation or establishment of facilities in areas with greater Veteran demand, addition of new services).

VA Recommendation: The COA received a score of 3 because it right-sizes services to meet future Veteran enrollee demand and includes changes to facilities or services that improve VA's ability to meet future Veteran enrollee demand based on guidelines established in the CBA methodology. These changes include the following:

- Establishes a new North Oklahoma MS CBOC to provide primary care, specialty care, and outpatient mental health services; there are 12,874 enrollees for which the proposed facility is the closest VA point of care within 60 minutes

Access

Within the Access domain, the CBA considers how each COA impacts Veteran access to care in the future. Each COA is assessed on the change in enrollee proximity to VA-provided primary care, specialty care, and outpatient mental health care.

The table below shows the CBA access scores for VISN 19 Oklahoma City for this domain.

Table 137 – Access Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Access	2	2	1

Note: the CBA Access domain score is based on enrollee proximity to VA-provided care only rather than the full high-performing integrated delivery network (inclusive of VA, Community Care Network providers, and non-Community Care Network providers meeting quality criteria). While a COA may have a reduced access score within the CBA, the Section 203 Criteria analysis shows that the VA Recommendation COA maintains or improves access to all service lines in the future high-performing integrated delivery network (HPIDN).

Status Quo: The COA received a score of 2 because access is maintained within 1% for VA-provided primary care, specialty care, and outpatient mental health care.

Modernization: The COA received a score of 2 because access is maintained within 1% for VA-provided primary care, specialty care, and outpatient mental health care.

VA Recommendation: The COA received a score of 1 because access to VA-provided primary care decreased 1% or more, specialty care was maintained within 1%, and outpatient mental health care increased 1% or more.

Quality

Within the Quality domain, the CBA considers how each COA impacts the quality of Veteran care in the future. Each COA is assessed based on two benefit components: (1) the ability of the main patient care facilities to support modern healthcare; (2) the ability of demand to support clinical competency.

The table below shows the scores for VISN 19 Oklahoma City for this domain.

Table 138 – Quality Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Quality	2	3	3

Status Quo: The COA received a score of 2 for two reasons. First, the COA includes main patient care facilities that were built prior to the emergence of modern healthcare design principles and specific standards to support modern medicine (e.g., floor-to-floor heights, corridor widths, columns spacing, and utility infrastructure requirements). Second, the COA includes facilities with projected future demand at or above VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

Modernization: The COA received a score of 3 for two reasons. First, the COA contains only modern facilities that meet modern health care design standards. Modern facilities support current standards of care (e.g., PACT-enabled environment in the outpatient setting, single patient rooms in the inpatient setting) and utilization of technologies. They can also improve the experience for both Veterans and staff. Second, the COA includes facilities with projected future demand at or above VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

VA Recommendation: The COA received a score of 3 for two reasons. First, the COA contains only modern facilities that meet modern health care design standards. Modern facilities support current standards of care (e.g., PACT-enabled environment in the outpatient setting, single patient rooms in the inpatient setting) and utilization of technologies. They can also improve the experience for both Veterans and staff. Second, the COA includes facilities with projected future demand at or above VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

Facilities and Sustainability

Within the Facilities and Sustainability domain, the CBA considers how each COA impacts the sustainability of Veteran care in the future. Each COA is assessed based on two benefit components: (1) the useful life of the main patient care facilities; (2) changes that strengthen VA's ability to recruit and retain providers.

The table below shows the scores for VISN 19 Oklahoma City for this domain.

Table 139 – Facilities and Sustainability Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Facilities and Sustainability	1	2	2

Note: The American Hospital Association estimates that a hospital's useful life, a measure which predicts the productive period of a typical capital asset before it becomes obsolete or needs replacement, is currently 40 years.

Status Quo: The COA received a score of 1 for two reasons. First, the COA includes at least one main patient care facility that exceeds its useful life as defined by the American Hospital Association, indicating it may be obsolete or need replacement. Second, the COA does not include changes that strengthen VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

Modernization: The COA received a score of 2 for two reasons. First, the COA replaces all main patient care facilities that have exceeded their useful life with modern facilities that can be sustained over the coming years. Second, while the COA includes modernized infrastructure, which may attract providers, it does not include additional changes to support VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

VA Recommendation: The COA received a score of 2 for two reasons. First, the COA replaces all main patient care facilities that have exceeded their useful life with modern facilities that can be sustained over the coming years. Second, while the COA includes modernized infrastructure, which may attract providers, it does not include additional changes to support VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

Mission

Within the Mission domain, the CBA considers how each COA impacts VA's ability to support its statutory missions of Education, Research, and Emergency Preparedness in the future. Each COA is assessed on three benefit components: (1) the impact on training programs; (2) the impact on research programs; (3) the impact on emergency preparedness.

A COA's overall score in the Mission domain is determined by the rounded average (unweighted) of its component (e.g., Education, Research, Emergency Preparedness) scores. The table below shows the scores for VISN 19 Oklahoma City for this domain.

Table 140 – Mission Scoring Summary

Subdomain	Status Quo	Modernization	VA Recommendation
Education	2	2	3
Research	2	2	3
Emergency Preparedness	2	2	2
Overall Mission Score (Rounded Average)	**2**	**2**	**3**

Status Quo: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because it does not impact inpatient acute service lines and thus maintains existing training programs.
- **Research:** The COA received a score of 2 because all existing facilities with research programs are maintained.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

Modernization: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because it does not impact inpatient acute service lines and thus maintains existing training programs.
- **Research:** The COA received a score of 2 because all existing facilities with research programs are maintained.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

VA Recommendation: The COA received a score of 3 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 3 because inpatient acute services remain VA-delivered and thus the COA maintains existing training programs. Additionally, the COA includes new (not replacement) infrastructure that creates new opportunities for training within the market.
- **Research:** The COA received a score of 3 because it maintains all research programs and builds new (not replacement) infrastructure to support additional research space.

- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

Sensitivity Analysis

A sensitivity analyses study shows how various sources of uncertainty in a mathematical model contribute to the model's overall uncertainty. The market is considered sensitive to a scenario when the VA Recommendation is no longer the leading COA due to changes in benefit scores, VA capital costs, VA operational costs, or non-VA operational costs.

The table below outlines the sensitivity analysis scenarios completed.

Table 141 – Sensitivity Analysis Scenarios

Sensitivity Analysis Scenarios
Increase Benefit Scores for Status Quo and Modernization in increments of one from 1 to 3 points
Increase VA Capital Costs in 50% increments from 0% to 300%
Increase VA Operational Costs in 50% increments from 0% to 300%
Increase Non-VA Operational Costs in 50% increments from 0% to 300%

Sensitivity Analysis Results Summary

In the VISN 19 Oklahoma City Market, three scenarios changed the outcome of the CBA:

- Increasing the Modernization benefits score by one point
- Increasing the Modernization benefits score by two points
- Increasing the Modernization benefits score by three points

Sensitivity Analysis Full Results

The below tables show the results across all sensitivity analysis scenarios.

Table 142 – Sensitivity Analyses – Benefit Score Increase

Status Quo and Modernization Benefit Score Change	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
+0	1.95	1.55	1.42	VA Recommendation
+1	1.73	1.42	1.42	Modernization
+2	1.56	1.31	1.42	Modernization
+3	1.42	1.22	1.42	Modernization

Table 143 – Sensitivity Analyses – VA Capital Cost Increase

VA Capital Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	1.95	1.55	1.42	VA Recommendation
50%	1.98	1.64	1.50	VA Recommendation
100%	2.00	1.72	1.58	VA Recommendation
150%	2.03	1.81	1.66	VA Recommendation
200%	2.06	1.90	1.74	VA Recommendation
250%	2.09	1.98	1.82	VA Recommendation
300%	2.11	2.07	1.90	VA Recommendation

Table 144 – Sensitivity Analyses – VA Operational Cost Increase

VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	1.95	1.55	1.42	VA Recommendation
50%	2.63	2.05	1.88	VA Recommendation
100%	3.32	2.55	2.34	VA Recommendation
150%	4.01	3.05	2.79	VA Recommendation
200%	4.69	3.55	3.25	VA Recommendation
250%	5.38	4.04	3.71	VA Recommendation

VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
300%	6.06	4.54	4.16	VA Recommendation

Table 145 – Sensitivity Analyses – Non-VA Operational Cost Increase

Non-VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	1.95	1.55	1.42	VA Recommendation
50%	2.21	1.74	1.60	VA Recommendation
100%	2.47	1.93	1.77	VA Recommendation
150%	2.73	2.12	1.95	VA Recommendation
200%	2.99	2.31	2.12	VA Recommendation
250%	3.26	2.50	2.29	VA Recommendation
300%	3.52	2.69	2.47	VA Recommendation

Appendix A – VISN 19 Oklahoma City: Capital and Operational Costs Detail

Table 146 – Capital Costs by COA

	Status Quo	Modernization	VA Recommendation
VAMC Ideal Square Footage	-	1,571,875	1,551,368
Build New GSF	-	1,089,004	1,073,813
Renovate In Place GSF	-	30,951	30,951
Matched Convert To GSF	-	70,769	70,769
Demolition GSF	-	937,493	937,493
Total Build New Cost	$0	($917,212,431)	($903,976,306)
Total Renovate In Place Cost	$0	($9,740,358)	($9,740,358)
Total Matched Convert To Cost	$0	($25,838,385)	($25,838,385)
Total Demolition Cost	$0	($31,309,851)	($31,309,851)
Total Lease Build-Out Cost	$0	($15,567,257)	($23,465,037)
Total New Lease Cost	$0	($52,521,730)	($79,167,784)
Total Existing Lease Cost	($33,475,703)	($33,475,594)	($27,903,584)
NRM Costs for Owned Facilities	($280,145,087)	($183,504,839)	($181,110,699)
FCA Correction Cost	($105,032,127)	N/A	N/A
Estimated Base Modernization Cost	($418,652,918)	($1,269,170,445)	($1,282,512,005)
Additional Common/Lobby Space Needed (GSF)	-	381,151	375,835
Cost of Additional Common/Lobby Space	$0	($280,613,460)	($276,699,059)
Additional Parking Cost	$0	($48,168,123)	($47,435,389)

	Status Quo	Modernization	VA Recommendation
Potential Land Acquisition Cost	$0	($13,542,639)	($13,351,305)
Seismic Correction Cost	($2,042,700)	($8,200)	($8,200)
Non-Building FCA Correction Cost	($16,135,502)	($16,135,502)	($16,135,502)
Activation Costs	$0	($279,231,777)	($277,263,958)
Estimated Additional Costs for Modernization	($18,178,202)	($637,699,701)	($630,893,412)
Cost Adjustment: In-Progress Construction	N/A	N/A	$0
Cost Adjustment: In-Progress Lease	N/A	N/A	$0
Estimated Facilities Costs (PV)	($436,831,120)	($1,906,870,146)	($1,913,405,418)

Table 147 – Operational Costs by COA

	Status Quo	Modernization	VA Recommendation
VA Direct	($6,379,583,246)	($6,379,583,246)	($6,379,583,246)
Fixed Direct	($826,284,572)	($826,284,572)	($826,284,572)
VA Specific Direct	($260,989,487)	($260,989,487)	($260,989,487)
Indirect	($2,526,103,409)	($2,526,103,409)	($2,526,103,409)
VA Specific Indirect	($447,462,446)	($447,462,446)	($447,462,446)
Research and Education	($260,086)	($260,086)	($260,086)
VA Overhead	($527,482,673)	($527,482,673)	($527,482,673)
VA Care Operational Cost Total (PV)	($10,968,165,918)	($10,968,165,918)	($10,968,165,918)
CC Direct	($2,885,610,643)	($2,885,610,643)	($2,885,610,643)
Delivery and Operations	($134,581,619)	($134,581,619)	($134,581,619)

	Status Quo	Modernization	VA Recommendation
Care Coordination	($135,490,576)	($135,490,576)	($135,490,576)
CC Overhead	($166,376,570)	($166,376,570)	($166,376,570)
Admin PMPM	($861,779,574)	($861,779,574)	($861,779,574)
Non-VA Care Operational Cost Total (PV)	($4,183,838,982)	($4,183,838,982)	($4,183,838,982)
Estimated Operational Costs (PV)	($15,152,004,901)	($15,152,004,901)	($15,152,004,901)

Appendix B – VISN 19 Oklahoma City: Benefits Analysis Key Data

Below are key data points used in the benefit analysis, summarized in the above Benefit Analysis section.

Demand and Supply

Inpatient

Table 148 – Demand and Supply Key Data Points for Scoring – Inpatient (IP)

Service Line	100% of FY29 In-house Bed Need	120% of FY29 In-house Bed Need	Operating Beds	Supply Adequacy (within 100-120% of in-house demand)
IP CLC	41	49	31	Under Supplied
IP Med/Surg	66	80	81	Over Supplied
IP MH	25	30	25	Under Supplied

Note: Community Living Center (CLC); Medicine (Med); Surgery (Surg); Mental Health (MH)

Source: Enrollee Healthcare Projection Model Base Year 2019

Outpatient

Table 149 – Demand and Supply Key Data Points for Scoring – Outpatient (OP)

Physician Supply Adequacy	Count of Specialties	Percentage
Adequately Supplied	19	70%
Under Supplied	8	30%

Note: VA supply in the Status Quo COA is quantitatively evaluated based on the data above. It is assumed the Modernization COA scales the capacity of existing facilities up or down to meet future Veteran in-house demand. Similar to the Modernization COA, it is assumed the VA Recommendation COA scales the capacity of existing and proposed facilities up or down to meet future Veteran in-house demand. However, the VA Recommendation COA may account for factors that demand projections do not consider that may shift the future balance of in-house and community workload, such as:

- Areas with unmet Veteran demand that may warrant a net new point of care
- Low-census inpatient acute programs that may pose risks to quality and training programs, potentially warranting a shift to community providers
- Community capacity factors that may warrant changes to VA capacity

Source: Office of Productivity, Efficiency and Staffing 2019 Capacity Report

Table 150 – New Facility Demand Guidelines

Facility or Service	Guideline
Inpatient Acute VAMCs	Greater than or equal to 35,000 overlapping enrollees
Inpatient CLC	Greater than or equal to 21,000 overlapping enrollees
Health Care Center	Greater than or equal to 34,000 overlapping enrollees
MS CBOC	Greater than or equal to 4,300 non-overlapping enrollees
CBOC	Greater than or equal to 2,500 non-overlapping enrollees

Note: The above guidelines are used to determine whether a new (not replacement) point of care or service proposed in the VA recommendation had adequate demand.

Access

Table 151 – Access Key Data Points for Scoring

COA	Measure	Current	Future	Result
Status Quo	% of enrollees within 30 minutes of VA-provided OP Mental Health	77.6%	77.6%	Maintained within 1%
Status Quo	% of enrollees within 30 minutes of VA-provided OP Primary Care	83.9%	83.9%	Maintained within 1%
Status Quo	% of enrollees within 60 minutes of VA-provided OP Specialty Care	82.9%	82.9%	Maintained within 1%

COA	Measure	Current	Future	Result
Status Quo	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	97.6%	97.6%	Maintained within 1%
Status Quo	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	99.7%	99.7%	Maintained within 1%
Status Quo	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	100.0%	100.0%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of VA-provided OP Mental Health	77.6%	77.6%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of VA-provided OP Primary Care	83.9%	83.9%	Maintained within 1%
Modernization	% of enrollees within 60 minutes of VA-provided OP Specialty Care	82.9%	82.9%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	97.6%	97.6%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	99.7%	99.7%	Maintained within 1%
Modernization	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	100.0%	100.0%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of VA-provided OP Mental Health	77.6%	79.7%	Increased 1% or more

COA	Measure	Current	Future	Result
VA Recommendation	% of enrollees within 30 minutes of VA-provided OP Primary Care	83.9%	82.8%	Decreased 1% or more
VA Recommendation	% of enrollees within 60 minutes of VA-provided OP Specialty Care	82.9%	83.0%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	97.6%	97.8%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	99.7%	99.9%	Maintained within 1%
VA Recommendation	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	100.0%	100.0%	Maintained within 1%

Note: the CBA Access domain score is based on enrollee proximity to VA-provided care only rather than the full high-performing integrated delivery network (HPIDN) (inclusive of VA, Community Care Network, and non-Community Care Network providers meeting quality criteria). While a COA may have a reduced access score within the CBA, the Section 203 Criteria analysis shows that the VA Recommendation COA maintains or improves access to all service lines in the future HPIDN. The table above shows the results for enrollee proximity to the full HPIDN as well as to VA-provided care in the market.

Source: Enrollee data from the FY19 Geocoded Enrollee File. Existing VA facility location data from VAST. Commercial provider location data from Definitive Healthcare.

Quality

Main Patient Care Facility Construction Date

Table 152 – Quality Key Data Points for Scoring – Age

Facility	Main Patient Care Facility Construction Date	Built Pre-1970?
(V19) (635) Oklahoma City	1950	Yes

Source: Main patient care facility construction and renovation dates from CAI Buildings and FCA Condition Gaps Reports 9-14-2020

Inpatient Acute Demand

Table 153 – Quality Key Data Points for Scoring – Inpatient Acute Demand

Facility	Service	Demand Guideline	Meets or Exceeds Guideline?	VA Recommendation
(V19) (635) Oklahoma City	IP Med	20 ADC	Yes	Maintain
(V19) (635) Oklahoma City	IP Surg	1,600 Cases	Yes	Maintain
(V19) (635) Oklahoma City	IP MH	8 ADC	Yes	Maintain

Note: The Status Quo and Modernization COAs are assumed to maintain all current facilities and services. The VA Recommendation COA proposes maintaining, partnering, and divesting of services at each facility, shown in the last column titled "VA Recommendation". To score a 3, the VA recommendation must partner or divest of all low-demand services.

Source: FY 2029 average daily census for inpatient services is based on Enrollee Healthcare Projection Model Base Year 2019. 2019 Total Surgical Cases is from the VA National Surgery Office.

Facilities and Sustainability

Table 154 – Facilities and Sustainability Key Data Points for Scoring

Facility	Main Patient Care Facility Construction Date	Most Recent Main Patient Care Facility Renovation Date	Exceeds Useful Life?
(V19) (635) Oklahoma City	1950	1994	Yes

Note: Exceeding useful life is defined as 1) When a main patient care facility was built before 1970 it has exceeded its useful life, even if it has undergone major renovation in the last 40 years. 2) When a main patient care facility was built after 1970 but is still more than 40 years old (built on or after 1971 and before 1989), it must have undergone major renovation within the last 40 years to not exceed its useful life. 3) When a main patient care facility was built in or after 1989, it has not exceeded its useful life.

Source: From CAI Buildings and FCA Condition Gaps Reports 9-14-2020

Table 155 – Key Data Points for Scoring - Recruitment and Retention

Facility	Expands VA's Ability to Recruit/Retain?
N/A	N/A

Mission

Table 156 – Mission Key Data Points for Scoring

The Status Quo and Modernization COAs are assumed to have no impact on VA's statutory missions. The impact of the VA Recommendation on VA's statutory missions is shown in the table below:

Facility	Training Impact	Research Impact	4th Mission Impact	Market Plan Includes New Facilities/Services To Increase Training/Research Opportunities
(V19) (635) Oklahoma City	No impact on training	Maintains or Has Plan to Transition	No PRC Designation	Increases Research Opportunities, Increases Training Opportunities

VISN 19 Eastern Oklahoma

The recommendations for modernization and realignment of VHA infrastructure submitted by the Secretary of the Department of Veterans Affairs to the Asset and Infrastructure Review (AIR) Commission are focused on allowing VA to provide accessible, timely, and high-quality health care for Veterans now and in the future. To inform the recommendations, VA conducted a Cost Benefit Analysis (CBA) that examines the cost-efficiency and benefits to Veterans of various courses of action (COAs) within each market. The CBA compares the costs and benefits associated with maintaining the current facilities, modernizing the current facilities, or strategically realigning and modernizing facilities in each market to inform the identification of a preferred COA.

The CBA aligns with requirements outlined in Section 1703C of Title 38, United States Code (U.S.C.), as added by Section 203 of the VA MISSION Act of 2018.

> *VA MISSION Act, Section 203(2)(F)*
>
> *"In making recommendations under this subsection, the Secretary shall consider…the extent and timing of potential costs and savings, including the number of years such costs or savings will be incurred, beginning with the date of completion of the proposed recommendation."*

This CBA summary document defines the COAs, provides a brief overview of the methodology, and outlines the results of the CBA and the associated sensitivity analysis.

Overview of COAs and Methodology

The Cost Benefit Analysis (CBA) reviews, analyzes, and compares the costs and benefits of three distinct courses of action (COA):

- maintaining VA's current facilities assuming no changes or additional modernization to current facilities, programs, and infrastructure (COA Name: Status Quo)
- modernizing the current facilities without strategically realigning facilities (COA Name: Modernization)
- strategically realigning and modernizing facilities (COA Name: VA Recommendation to the AIR Commission)

To evaluate these courses of action, VA examined the combined cost and benefits of each COA for each market. The CBA was conducted at the market level, rather than at the facility level, to allow for a holistic assessment of a COA's impact that considers optimization of the market across all health care facilities. The financial costs were assessed using a Present Value (PV) analysis while the non-financial benefits were assessed using a Benefits Analysis Scoring process. Ultimately, the CBA results in a Cost-Benefit Index – a simple metric by which to compare the combined cost and non-financial benefits associated with each COA. The CBI equals the total life-cycle cost (PV) of each COA in PV dollars, divided by the Benefits Analysis score for that COA's non-financial benefits normalized to the billions place. The COA with the lowest CBI score is the preferred COA.

Summary of Results

The VA Recommendation COA is the leading COA analyzed in the VISN 19 Eastern Oklahoma Market due to its leading Cost Benefit Index (CBI) score. The CBI score for the VA Recommendation COA (0.88) is 7.7% lower than the Status Quo COA (0.95) and 1.1% lower than the Modernization COA (0.89).

The VA Recommendation COA is $218.2 M (2.5%) more expensive than the Status Quo COA and $94.7 M (1.1%) less expensive than the Modernization COA. While the VA Recommendation COA increases cost compared to the Status Quo COA and decreases costs compared to the Modernization COA, it also increases benefits; the VA Recommendation (10 points) outscored the Status Quo COA (9 points) and tied the Modernization COA (10 points).

The tables below detail the present values, benefit scores, and CBIs for each COA.

Table 157 – CBI Scores by COA

	Status Quo	Modernization	VA Recommendation
COA PV ($)	($8,560,676,284)	($8,873,550,362)	($8,778,833,000)
Benefit Analysis Score	9	10	10
CBI (Normalized in $Billions)	0.95	0.89	0.88
CBI % Change vs. Status Quo	N/A	-6.7%	-7.7%
CBI % Change vs. Modernization	N/A	N/A	-1.1%

Table 158 -- Cost Analysis Cost Variance by COA

Cost Variance	Status Quo	Modernization	VA Recommendation
Capital Cost Variance vs. Status Quo	N/A	($312,874,078)	($294,418,943)
Operational Cost Variance vs. Status Quo	N/A	$0	$76,262,228
Estimated Total Cost Variance vs. Status Quo	N/A	($312,874,078)	($218,156,715)
Estimated Total Cost Variance vs. Modernization	N/A	N/A	$94,717,362

Note: Operational unit costs were provided at the parent facility level not at the facility level. Therefore, the analysis does not estimate the changes in operational costs stemming from new, expanded, or removed points of care (POC). The analysis only shows changes to operational costs when a service line is shifted, at the parent facility level, from VA care to non-VA care.

Table 159 – Benefit Analysis Scores by COA

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	3
Access	2	2	1
Quality	2	2	2
Facilities and Sustainability	2	2	2
Mission	2	2	2
Total Benefit Score	**9**	**10**	**10**

VA Recommendation

The VA Recommendation for the VISN 19 Eastern Oklahoma Market COA is detailed below.

- Modernize and realign the Muskogee VAMC by:
  - Relocating inpatient medical and surgical, rehabilitation medicine, emergency department, and outpatient surgical services provided at the Muskogee VAMC to current or future VA facilities and discontinuing these services at the Muskogee VAMC
  - Relocating inpatient mental health services at the Muskogee VAMC to community providers and discontinuing these services at the Muskogee VAMC
  - Closing the Muskogee VAMC
- Modernize by establishing a new stand-alone RRTP in the vicinity of Tulsa, Oklahoma
- Modernize by establishing a new stand-alone CLC in the vicinity of Tulsa, Oklahoma
- Modernize and realign outpatient facilities in the market by establishing a new MS CBOC in the vicinity of Muskogee, Oklahoma

Cost Analysis

The Cost Analysis highlighted the estimated Present Value (PV) of each COA for the VISN 19 Eastern Oklahoma Market across a 30-year horizon. The cost of the VA Recommendation COA ($8.8 B) was higher than the Status Quo COA ($8.6 B) and lower than the Modernization COA ($8.9 B).

For the VISN 19 Eastern Oklahoma Market, the VA Recommendation COA is $218.2 M (2.5%) more expensive than the Status Quo COA and $94.7 M (1.1%) less expensive than the Modernization COA. The cost difference between the VA Recommendation COA and Status Quo COA can be attributed to new facilities, closing or modernizing existing facilities, and scaling capacity of existing facilities up or down to meet future Veteran in-house demand to accommodate changes in demand.

The table below outlines the costs associated with each of the COAs. For more detail refer to Appendix A – VISN 19 Eastern Oklahoma: Capital and Operational Costs Detail.

Table 160 – Total Cost Summary by COA

	Status Quo	Modernization	VA Recommendation
Total Costs (PV)	($8,560,676,284)	($8,873,550,362)	($8,778,833,000)
Capital Cost Variance vs. Status Quo	N/A	($312,874,078)	($294,418,943)
Operational Cost Variance vs. Status Quo	N/A	$0	$76,262,228
Non-VA Care Operational Cost Variance	N/A	$0	($100,681,929)
VA Care Operational Cost Variance	N/A	$0	$176,944,157
Estimated Total Cost Variance vs. Status Quo	$0	($312,874,078)	($218,156,715)
Estimated Total Cost Variance vs. Modernization	N/A	N/A	$94,717,362

Benefit Analysis

This section describes the non-financial benefit analysis results for the VISN 19 Eastern Oklahoma Market across five domains: Demand and Supply, Access, Quality, Facilities and Sustainability, and Mission. The results indicate that the VA Recommendation COA and Modernization COA provide the most benefit (greatest Total Benefit Score) in comparison to the Status Quo COA.

Table 161 – Benefit Analysis Scores by COA

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	3
Access	2	2	1
Quality	2	2	2
Facilities and Sustainability	2	2	2
Mission	2	2	2

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Total Benefit Score	**9**	**10**	**10**

The scoring and rationale within each domain are described in the following sections. The data underlying the analysis is provided in Appendix B – VISN 19 Eastern Oklahoma: Benefits Analysis Key Data. Additional information regarding the scoring methodology is provided in the CBA Methodology.

Demand and Supply

Within the Demand and Supply domain, the CBA considers how each COA impacts VA's ability to meet Veteran demand in the future. Each COA is assessed on two benefit components: (1) the ability to balance demand and supply; (2) the changes to facility placement or service offerings that improve VA's ability to meet future demand.

The table below shows the scores for VISN 19 Eastern Oklahoma for this domain.

Table 162 – Demand and Supply Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	3

Status Quo: The COA received a score of 1 because at least one inpatient service line was over/under supplied, or more than 50% of specialties were inadequately supplied when compared to future Veteran in-house demand. Additionally, no changes to facilities or services were introduced that improve VA's ability to meet the future Veteran enrollee population (e.g., relocation or establishment of facilities in areas with greater Veteran demand, expansion of services).

Modernization: The COA received a score of 2 because, while Modernization right-sizes services to meet future Veteran in-house demand, the COA does not include changes to facilities or services that improve VA's ability to meet the future Veteran enrollee population (e.g., relocation or establishment of facilities in areas with greater Veteran demand, addition of new services).

VA Recommendation: The COA received a score of 3 because it right-sizes services to meet future Veteran enrollee demand and includes changes to facilities or services that improve VA's ability to meet future Veteran enrollee demand based on guidelines established in the CBA methodology. These changes include the following:

- Establishes a new Tulsa Hospital VAMC to provide inpatient medicine and surgery, and inpatient mental health services; 35,873 enrollees live within 60 minutes of the proposed facility
- Establishes a new Tulsa CLC to provide inpatient community living center services; 35,914 enrollees live within 60 minutes of the proposed facility
- Establishes a new Tulsa RRTP to provide inpatient residential rehabilitative services; 35,873 enrollees live within 60 minutes of the proposed facility

Access

Within the Access domain, the CBA considers how each COA impacts Veteran access to care in the future. Each COA is assessed on the change in enrollee proximity to VA-provided primary care, specialty care, and outpatient mental health care.

The table below shows the CBA access scores for VISN 19 Eastern Oklahoma for this domain.

Table 163 – Access Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Access	2	2	1

Note: the CBA Access domain score is based on enrollee proximity to VA-provided care only rather than the full high-performing integrated delivery network (inclusive of VA, Community Care Network providers, and non-Community Care Network providers meeting quality criteria). While a COA may have a reduced access score within the CBA, the Section 203 Criteria analysis shows that the VA Recommendation COA maintains or improves access to all service lines in the future high-performing integrated delivery network (HPIDN).

Status Quo: The COA received a score of 2 because access is maintained within 1% for VA-provided primary care, specialty care, and outpatient mental health care.

Modernization: The COA received a score of 2 because access is maintained within 1% for VA-provided primary care, specialty care, and outpatient mental health care.

VA Recommendation: The COA received a score of 1 because access to VA-provided primary care was maintained within 1%, specialty care increased 1% or more, and outpatient mental health care decreased 1% or more.

Quality

Within the Quality domain, the CBA considers how each COA impacts the quality of Veteran care in the future. Each COA is assessed based on two benefit components: (1) the ability of the main patient care facilities to support modern healthcare; (2) the ability of demand to support clinical competency.

The table below shows the scores for VISN 19 Eastern Oklahoma for this domain.

Table 164 – Quality Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Quality	2	2	2

Status Quo: The COA received a score of 2 for two reasons. First, the COA contains only modern facilities that meet modern health care design standards. Modern facilities support current standards of care (e.g., PACT-enabled environment in the outpatient setting, single patient rooms in the inpatient setting) and utilization of technologies. They can also improve the experience for both Veterans and staff. Second, the COA includes facilities with projected future demand below VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

Modernization: The COA received a score of 2 for two reasons. First, the COA replaces aged infrastructure with modern facilities that meet modern health care design standards. Modern facilities support current standards of care (e.g., PACT-enabled environment in the outpatient setting, single patient rooms in the inpatient setting) and utilization of technologies. They can also improve the experience for both Veterans and staff. Second, the COA includes facilities with projected future demand below VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

VA Recommendation: The COA received a score of 2 for two reasons. First, the COA replaces aged infrastructure with modern facilities that meet modern health care design standards. Modern facilities support current standards of care (e.g., PACT-enabled environment in the outpatient setting, single patient rooms in the inpatient setting) and utilization of technologies. They can also improve the experience for both Veterans and staff. Second, the COA includes facilities with projected future demand below VA planning guidelines for maintaining programs.

Facilities and Sustainability

Within the Facilities and Sustainability domain, the CBA considers how each COA impacts the sustainability of Veteran care in the future. Each COA is assessed based on two benefit components: (1) the useful life of the main patient care facilities; (2) changes that strengthen VA's ability to recruit and retain providers.

The table below shows the scores for VISN 19 Eastern Oklahoma for this domain.

Table 165 – Facilities and Sustainability Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Facilities and Sustainability	2	2	2

Note: The American Hospital Association estimates that a hospital's useful life, a measure which predicts the productive period of a typical capital asset before it becomes obsolete or needs replacement, is currently 40 years.

Status Quo: The COA received a score of 2 for two reasons. First, the COA's main patient care facilities are still within their useful life, indicating they can be sustained over the coming years. Second, while the COA includes modern infrastructure, which may attract providers, it does not include additional changes to support VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

Modernization: The COA received a score of 2 for two reasons. First, the COA's main patient care facilities are still within their useful life, indicating they can be sustained over the coming years. Second, while the COA includes modern infrastructure, which may attract providers, it does not include additional changes to support VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

VA Recommendation: The COA received a score of 2 for two reasons. First, the COA replaces all main patient care facilities that have exceeded their useful life with modern facilities that can be sustained

over the coming years. Second, while the COA includes modernized infrastructure, which may attract providers, it does not include additional changes to support VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

Mission

Within the Mission domain, the CBA considers how each COA impacts VA's ability to support its statutory missions of Education, Research, and Emergency Preparedness in the future. Each COA is assessed on three benefit components: (1) the impact on training programs; (2) the impact on research programs; (3) the impact on emergency preparedness.

A COA's overall score in the Mission domain is determined by the rounded average (unweighted) of its component (e.g., Education, Research, Emergency Preparedness) scores. The table below shows the scores for VISN 19 Eastern Oklahoma for this domain.

Table 166 – Mission Scoring Summary

Subdomain	Status Quo	Modernization	VA Recommendation
Education	2	2	1
Research	2	2	3
Emergency Preparedness	2	2	2
Overall Mission Score (Rounded Average)	**2**	**2**	**2**

Status Quo: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because it does not impact inpatient acute service lines and thus maintains existing training programs.
- **Research:** The COA received a score of 2 because all existing facilities with research programs are maintained.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

Modernization: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because it does not impact inpatient acute service lines and thus maintains existing training programs.
- **Research:** The COA received a score of 2 because all existing facilities with research programs are maintained.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

VA Recommendation: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 1 because it impacts inpatient acute service lines and thus introduces risk to existing training programs.
- **Research:** The COA received a score of 3 because it maintains all research programs and builds new (not replacement) infrastructure to support additional research space.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

Sensitivity Analysis

A sensitivity analyses study shows how various sources of uncertainty in a mathematical model contribute to the model's overall uncertainty. The market is considered sensitive to a scenario when the VA Recommendation is no longer the leading COA due to changes in benefit scores, VA capital costs, VA operational costs, or non-VA operational costs.

The table below outlines the sensitivity analysis scenarios completed.

Table 167 – Sensitivity Analysis Scenarios

Sensitivity Analysis Scenarios
Increase Benefit Scores for Status Quo and Modernization in increments of one from 1 to 3 points
Increase VA Capital Costs in 50% increments from 0% to 300%
Increase VA Operational Costs in 50% increments from 0% to 300%
Increase Non-VA Operational Costs in 50% increments from 0% to 300%

Sensitivity Analysis Results Summary

In the VISN 19 Eastern Oklahoma Market, eight scenarios changed the outcome of the CBA:

- Increasing the Modernization benefits score by one point
- Increasing the Modernization benefits score by two points
- Increasing the Modernization benefits score by three points
- Increasing the Non-VA Operational Cost by 100%; Modernization becomes the preferred COA
- Increasing the Non-VA Operational Cost by 150%; Modernization becomes the preferred COA
- Increasing the Non-VA Operational Cost by 200%; Modernization becomes the preferred COA
- Increasing the Non-VA Operational Cost by 250%; Modernization becomes the preferred COA
- Increasing the Non-VA Operational Cost by 300%; Modernization becomes the preferred COA

Sensitivity Analysis Full Results

The below tables show the results across all sensitivity analysis scenarios.

Table 168 – Sensitivity Analyses – Benefit Score Increase

Status Quo and Modernization Benefit Score Change	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
+0	0.95	0.89	0.88	VA Recommendation
+1	0.86	0.81	0.88	Modernization
+2	0.78	0.74	0.88	Modernization
+3	0.71	0.68	0.88	Modernization

Table 169 – Sensitivity Analyses – VA Capital Cost Increase

VA Capital Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	0.95	0.89	0.88	VA Recommendation
50%	0.98	0.93	0.92	VA Recommendation
100%	1.01	0.97	0.96	VA Recommendation
150%	1.03	1.01	1.00	VA Recommendation
200%	1.06	1.05	1.04	VA Recommendation
250%	1.09	1.09	1.08	VA Recommendation
300%	1.12	1.13	1.12	VA Recommendation

Table 170 – Sensitivity Analyses – VA Operational Cost Increase

VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	0.95	0.89	0.88	VA Recommendation
50%	1.18	1.09	1.07	VA Recommendation
100%	1.40	1.29	1.26	VA Recommendation
150%	1.62	1.49	1.46	VA Recommendation
200%	1.85	1.69	1.65	VA Recommendation
250%	2.07	1.90	1.84	VA Recommendation
300%	2.30	2.10	2.03	VA Recommendation

Table 171 – Sensitivity Analyses – Non-VA Operational Cost Increase

Non-VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	0.95	0.89	0.88	VA Recommendation
50%	1.17	1.09	1.08	VA Recommendation
100%	1.40	1.29	1.29	Modernization
150%	1.62	1.49	1.50	Modernization
200%	1.85	1.69	1.70	Modernization
250%	2.07	1.89	1.91	Modernization
300%	2.29	2.10	2.12	Modernization

Appendix A – VISN 19 Eastern Oklahoma: Capital and Operational Costs Detail

Table 172 – Capital Costs by COA

	Status Quo	Modernization	VA Recommendation
VAMC Ideal Square Footage	-	588,374	463,216
Build New GSF	-	254,981	343,123
Renovate In Place GSF	-	147,439	0
Matched Convert To GSF	-	96,711	0
Demolition GSF	-	247,878	492,028
Total Build New Cost	$0	($223,065,881)	($282,749,576)
Total Renovate In Place Cost	$0	($51,217,800)	$0
Total Matched Convert To Cost	$0	($33,784,426)	$0
Total Demolition Cost	$0	($8,085,963)	($9,348,532)
Total Lease Build-Out Cost	$0	($47,562,959)	($99,842,667)
Total New Lease Cost	$0	($138,815,557)	($291,397,341)
Total Existing Lease Cost	($44,042,664)	($44,042,621)	($44,042,664)
NRM Costs for Owned Facilities	($346,135,750)	($68,688,358)	($54,077,051)
FCA Correction Cost	($81,303,563)	N/A	N/A
Estimated Base Modernization Cost	($471,481,977)	($615,263,566)	($781,457,831)
Additional Common/Lobby Space Needed (GSF)	-	89,243	120,093
Cost of Additional Common/Lobby Space	$0	($64,175,266)	($86,359,415)
Additional Parking Cost	$0	($7,326,917)	($93,935,350)

	Status Quo	Modernization	VA Recommendation
Potential Land Acquisition Cost	$0	($2,033,774)	($1,147,327)
Seismic Correction Cost	($3,741,800)	($2,113,800)	$0
Non-Building FCA Correction Cost	($25,918,126)	($25,918,126)	$0
Activation Costs	$0	($97,184,532)	($53,560,923)
Estimated Additional Costs for Modernization	($29,659,926)	($198,752,415)	($235,003,015)
Cost Adjustment: In-Progress Construction	N/A	N/A	$0
Cost Adjustment: In-Progress Lease	N/A	N/A	$220,900,000
Estimated Facilities Costs (PV)	($501,141,903)	($814,015,981)	($795,560,846)

Table 173 – Operational Costs by COA

	Status Quo	Modernization	VA Recommendation
VA Direct	($2,099,320,507)	($2,099,320,507)	($2,008,305,268)
Fixed Direct	($215,928,974)	($215,928,974)	($204,320,193)
VA Specific Direct	($57,462,261)	($57,462,261)	($54,649,825)
Indirect	($1,272,492,232)	($1,272,492,232)	($1,218,337,865)
VA Specific Indirect	($156,716,822)	($156,716,822)	($149,865,247)
Research and Education	$0	$0	$0
VA Overhead	($230,807,589)	($230,807,589)	($220,305,830)
VA Care Operational Cost Total (PV)	($4,032,728,385)	($4,032,728,385)	($3,855,784,228)
CC Direct	($3,040,833,473)	($3,040,833,473)	($3,139,449,803)
Delivery and Operations	($131,245,686)	($131,245,686)	($133,519,080)

	Status Quo	Modernization	VA Recommendation
Care Coordination	($133,062,737)	($133,062,737)	($135,087,695)
CC Overhead	($171,623,914)	($171,623,914)	($174,642,107)
Admin PMPM	($550,040,185)	($550,040,185)	($544,789,241)
Non-VA Care Operational Cost Total (PV)	($4,026,805,996)	($4,026,805,996)	($4,127,487,925)
Estimated Operational Costs (PV)	($8,059,534,381)	($8,059,534,381)	($7,983,272,153)

Appendix B – VISN 19 Eastern Oklahoma: Benefits Analysis Key Data

Below are key data points used in the benefit analysis, summarized in the above Benefit Analysis section.

Demand and Supply

Inpatient

Table 174 – Demand and Supply Key Data Points for Scoring – Inpatient (IP)

Service Line	100% of FY29 In-house Bed Need	120% of FY29 In-house Bed Need	Operating Beds	Supply Adequacy (within 100-120% of in-house demand)
IP CLC	3	4	0	Under Supplied
IP Med/Surg	31	37	42	Over Supplied
IP MH	15	18	16	Adequately Supplied

Note: Community Living Center (CLC); Medicine (Med); Surgery (Surg); Mental Health (MH)

Source: Enrollee Healthcare Projection Model Base Year 2019

Outpatient

Table 175 – Demand and Supply Key Data Points for Scoring – Outpatient (OP)

Physician Supply Adequacy	Count of Specialties	Percentage
Adequately Supplied	6	22%
Under Supplied	21	78%

Note: VA supply in the Status Quo COA is quantitatively evaluated based on the data above. It is assumed the Modernization COA scales the capacity of existing facilities up or down to meet future Veteran in-house demand. Similar to the Modernization COA, it is assumed the VA Recommendation COA scales the capacity of existing and proposed facilities up or down to meet future Veteran in-house demand. However, the VA Recommendation COA may account for factors that demand projections do not consider that may shift the future balance of in-house and community workload, such as:

- Areas with unmet Veteran demand that may warrant a net new point of care
- Low-census inpatient acute programs that may pose risks to quality and training programs, potentially warranting a shift to community providers
- Community capacity factors that may warrant changes to VA capacity

Source: Office of Productivity, Efficiency and Staffing 2019 Capacity Report

Table 176 – New Facility Demand Guidelines

Facility or Service	Guideline
Inpatient Acute VAMCs	Greater than or equal to 35,000 overlapping enrollees
Inpatient CLC	Greater than or equal to 21,000 overlapping enrollees
Health Care Center	Greater than or equal to 34,000 overlapping enrollees
MS CBOC	Greater than or equal to 4,300 non-overlapping enrollees
CBOC	Greater than or equal to 2,500 non-overlapping enrollees

Note: The above guidelines are used to determine whether a new (not replacement) point of care or service proposed in the VA recommendation had adequate demand.

Access

Table 177 – Access Key Data Points for Scoring

COA	Measure	Current	Future	Result
Status Quo	% of enrollees within 30 minutes of VA-provided OP Mental Health	72.4%	72.4%	Maintained within 1%
Status Quo	% of enrollees within 30 minutes of VA-provided OP Primary Care	73.9%	73.9%	Maintained within 1%
Status Quo	% of enrollees within 60 minutes of VA-provided OP Specialty Care	81.4%	81.4%	Maintained within 1%

COA	Measure	Current	Future	Result
Status Quo	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	97.1%	97.1%	Maintained within 1%
Status Quo	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	99.4%	99.4%	Maintained within 1%
Status Quo	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	100.0%	100.0%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of VA-provided OP Mental Health	72.4%	72.4%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of VA-provided OP Primary Care	73.9%	73.9%	Maintained within 1%
Modernization	% of enrollees within 60 minutes of VA-provided OP Specialty Care	81.4%	81.4%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	97.1%	97.1%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	99.4%	99.4%	Maintained within 1%
Modernization	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	100.0%	100.0%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of VA-provided OP Mental Health	72.4%	71.4%	Decreased 1% or more

COA	Measure	Current	Future	Result
VA Recommendation	% of enrollees within 30 minutes of VA-provided OP Primary Care	73.9%	74.1%	Maintained within 1%
VA Recommendation	% of enrollees within 60 minutes of VA-provided OP Specialty Care	81.4%	89.8%	Increased 1% or more
VA Recommendation	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	97.1%	98.3%	Increased 1% or more
VA Recommendation	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	99.4%	99.7%	Maintained within 1%
VA Recommendation	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	100.0%	100.0%	Maintained within 1%

Note: the CBA Access domain score is based on enrollee proximity to VA-provided care only rather than the full high-performing integrated delivery network (HPIDN) (inclusive of VA, Community Care Network, and non-Community Care Network providers meeting quality criteria). While a COA may have a reduced access score within the CBA, the Section 203 Criteria analysis shows that the VA Recommendation COA maintains or improves access to all service lines in the future HPIDN. The table above shows the results for enrollee proximity to the full HPIDN as well as to VA-provided care in the market.

Source: Enrollee data from the FY19 Geocoded Enrollee File. Existing VA facility location data from VAST. Commercial provider location data from Definitive Healthcare.

Quality

Main Patient Care Facility Construction Date

Table 178 – Quality Key Data Points for Scoring – Age

Facility	Main Patient Care Facility Construction Date	Built Pre-1970?
(V19) (623) Muskogee-Oklahoma	1998	No

Source: Main patient care facility construction and renovation dates from CAI Buildings and FCA Condition Gaps Reports 9-14-2020

Inpatient Acute Demand

Table 179 – Quality Key Data Points for Scoring – Inpatient Acute Demand

Facility	Service	Demand Guideline	Meets or Exceeds Guideline?	VA Recommendation
(V19) (623) Muskogee	IP Med	20 ADC	No	Relocate
(V19) (623) Muskogee	IP Surg	1,600 Cases	Yes	Relocate
(V19) (623) Muskogee	IP MH	8 ADC	Yes	Partner (CCN)

Note: The Status Quo and Modernization COAs are assumed to maintain all current facilities and services. The VA Recommendation COA proposes maintaining, partnering, and divesting of services at each facility, shown in the last column titled "VA Recommendation". To score a 3, the VA recommendation must partner or divest of all low-demand services.

Source: FY 2029 average daily census for inpatient services is based on Enrollee Healthcare Projection Model Base Year 2019. 2019 Total Surgical Cases is from the VA National Surgery Office.

Facilities and Sustainability

Table 180 – Facilities and Sustainability Key Data Points for Scoring

Facility	Main Patient Care Facility Construction Date	Most Recent Main Patient Care Facility Renovation Date	Exceeds Useful Life?
(V19) (623) Muskogee-Oklahoma	1998	2008	No

Note: Exceeding useful life is defined as 1) When a main patient care facility was built before 1970 it has exceeded its useful life, even if it has undergone major renovation in the last 40 years. 2) When a main patient care facility was built after 1970 but is still more than 40 years old (built on or after 1971 and before 1989), it must have undergone major renovation within the last 40 years to not exceed its useful life. 3) When a main patient care facility was built in or after 1989, it has not exceeded its useful life.

Source: From CAI Buildings and FCA Condition Gaps Reports 9-14-2020

Table 181: Key Data Points for Scoring - Recruitment and Retention

Facility	Expands VA's Ability to Recruit/Retain?
N/A	N/A

Mission

Table 182 – Mission Key Data Points for Scoring

The Status Quo and Modernization COAs are assumed to have no impact on VA's statutory missions. The impact of the VA Recommendation on VA's statutory missions is shown in the table below:

Facility	Training Impact	Research Impact	4th Mission Impact	Market Plan Includes New Facilities/Services To Increase Training/Research Opportunities
(V19) (623) Muskogee	Deactivates IP Acute Service with training	Maintains or Has Plan to Transition	No PRC Designation	Increases Research Opportunities

VISN 19 Montana

The recommendations for modernization and realignment of VHA infrastructure submitted by the Secretary of the Department of Veterans Affairs to the Asset and Infrastructure Review (AIR) Commission are focused on allowing VA to provide accessible, timely, and high-quality health care for Veterans now and in the future. To inform the recommendations, VA conducted a Cost Benefit Analysis (CBA) that examines the cost-efficiency and benefits to Veterans of various courses of action (COAs) within each market. The CBA compares the costs and benefits associated with maintaining the current facilities, modernizing the current facilities, or strategically realigning and modernizing facilities in each market to inform the identification of a preferred COA.

The CBA aligns with requirements outlined in Section 1703C of Title 38, United States Code (U.S.C.), as added by Section 203 of the VA MISSION Act of 2018.

> *VA MISSION Act, Section 203(2)(F)*
>
> *"In making recommendations under this subsection, the Secretary shall consider…the extent and timing of potential costs and savings, including the number of years such costs or savings will be incurred, beginning with the date of completion of the proposed recommendation."*

This CBA summary document defines the COAs, provides a brief overview of the methodology, and outlines the results of the CBA and the associated sensitivity analysis.

Overview of COAs and Methodology

The Cost Benefit Analysis (CBA) reviews, analyzes, and compares the costs and benefits of three distinct courses of action (COA):

- maintaining VA's current facilities assuming no changes or additional modernization to current facilities, programs, and infrastructure (COA Name: Status Quo)
- modernizing the current facilities without strategically realigning facilities (COA Name: Modernization)
- strategically realigning and modernizing facilities (COA Name: VA Recommendation to the AIR Commission)

To evaluate these courses of action, VA examined the combined cost and benefits of each COA for each market. The CBA was conducted at the market level, rather than at the facility level, to allow for a holistic assessment of a COA's impact that considers optimization of the market across all health care facilities. The financial costs were assessed using a Present Value (PV) analysis while the non-financial benefits were assessed using a Benefits Analysis Scoring process. Ultimately, the CBA results in a Cost-Benefit Index – a simple metric by which to compare the combined cost and non-financial benefits associated with each COA. The CBI equals the total life-cycle cost (PV) of each COA in PV dollars, divided by the Benefits Analysis score for that COA's non-financial benefits normalized to the billions place. The COA with the lowest CBI score is the preferred COA.

Summary of Results

The VA Recommendation COA is the leading COA analyzed in the VISN 19 Montana Market due to its leading Cost Benefit Index (CBI) score. The CBI score for the VA Recommendation COA (1.03) is 29.5% lower than the Status Quo COA (1.46) and 2.1% lower than the Modernization COA (1.05).

The VA Recommendation COA is $66.9 M (0.7%) more expensive than the Status Quo COA and $221.7 M (2.1%) less expensive than the Modernization COA. While the VA Recommendation COA increases cost compared to the Status Quo COA and decreases costs compared to the Modernization COA, it also increases benefits; the VA Recommendation (10 points) outscored the Status Quo COA (7 points) and tied the Modernization COA (10 points).

The tables below detail the present values, benefit scores, and CBIs for each COA.

Table 183 – CBI Scores by COA

	Status Quo	Modernization	VA Recommendation
COA PV ($)	($10,238,251,988)	($10,526,785,701)	($10,305,132,438)
Benefit Analysis Score	7	10	10
CBI (Normalized in $Billions)	1.46	1.05	1.03
CBI % Change vs. Status Quo	N/A	-28.0%	-29.5%
CBI % Change vs. Modernization	N/A	N/A	-2.1%

Table 184 – Cost Analysis Cost Variance by COA

Cost Variance	Status Quo	Modernization	VA Recommendation
Capital Cost Variance vs. Status Quo	N/A	($288,533,713)	($232,197,909)
Operational Cost Variance vs. Status Quo	N/A	$0	$165,317,458
Estimated Total Cost Variance vs. Status Quo	N/A	($288,533,713)	($66,880,451)
Estimated Total Cost Variance vs. Modernization	N/A	N/A	$221,653,263

Note: Operational unit costs were provided at the parent facility level not at the facility level. Therefore, the analysis does not estimate the changes in operational costs stemming from new, expanded, or removed points of care (POC). The analysis only shows changes to operational costs when a service line is shifted, at the parent facility level, from VA care to non-VA care.

Table 185 – Benefit Analysis Scores by COA

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	2
Access	2	2	1
Quality	1	2	2
Facilities and Sustainability	1	2	2
Mission	2	2	3
Total Benefit Score	**7**	**10**	**10**

VA Recommendation

The VA Recommendation for the VISN 19 Montana Market COA is detailed below.

- Modernize and realign the Fort Harrison VAMC by:
  - Converting the emergency department at the Fort Harrison VAMC to an urgent care center
  - Modernizing the RRTP at the Fort Harrison VAMC
- Modernize and realign the Miles City CLC by relocating CLC services from the Miles City CLC to State Veterans Homes and community providers and discontinuing these services at the Miles City CLC
- Modernize and realign outpatient facilities in the market by:
  - Relocating outpatient surgical services provided at the Billings-Majestic HCC to community providers and discontinuing these services at the Billings-Majestic HCC
  - Establishing a new CBOC in the vicinity of Butte, Montana
  - Relocating the Missoula MS CBOC to a new site in the vicinity of Missoula, Montana, and closing the Missoula MS CBOC
  - Relocating all services at the Plentywood OOS and closing the Plentywood OOS
  - Relocating all services at the Glasgow OOS and closing the Glasgow OOS
  - Relocating all services to the Cut Bank OOS and closing the Browning OOS

Cost Analysis

The Cost Analysis highlighted the estimated Present Value (PV) of each COA for the VISN 19 Montana Market across a 30-year horizon. The cost of the VA Recommendation COA ($10.3 B) was higher than the Status Quo COA ($10.2 B) and lower than the Modernization COA ($10.5 B).

For the VISN 19 Montana Market, the VA Recommendation COA is $66.9 M (0.7%) more expensive than the Status Quo COA and $221.7 M (2.1%) less expensive than the Modernization COA. The cost difference between the VA Recommendation COA and Status Quo COA can be attributed to new facilities, closing or modernizing existing facilities, and scaling capacity of existing facilities up or down to meet future Veteran in-house demand to accommodate changes in demand.

The table below outlines the costs associated with each of the COAs. For more detail refer to Appendix A – VISN 19 Montana: Capital and Operational Costs Detail.

Table 186 – Total Cost Summary by COA

	Status Quo	Modernization	VA Recommendation
Total Costs (PV)	($10,238,251,988)	($10,526,785,701)	($10,305,132,438)
Capital Cost Variance vs. Status Quo	N/A	($288,533,713)	($232,197,909)
Operational Cost Variance vs. Status Quo	N/A	$0	$165,317,458
Non-VA Care Operational Cost Variance	N/A	$0	$5,013,972
VA Care Operational Cost Variance	N/A	$0	$160,303,486
Estimated Total Cost Variance vs. Status Quo	N/A	($288,533,713)	($66,880,451)
Estimated Total Cost Variance vs. Modernization	N/A	N/A	$221,653,263

Benefit Analysis

This section describes the non-financial benefit analysis results for the VISN 19 Montana Market across five domains: Demand and Supply, Access, Quality, Facilities and Sustainability, and Mission. The results indicate that the VA Recommendation COA provides the most benefit (greatest Total Benefit Score) in comparison to the Status Quo and Modernization COAs.

Table 187 – Benefit Analysis Scores by COA

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	2
Access	2	2	1
Quality	1	2	2
Facilities and Sustainability	1	2	2
Mission	2	2	3

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Total Benefit Score	**7**	**10**	**10**

The scoring and rationale within each domain are described in the following sections. The data underlying the analysis is provided in Appendix B – VISN 19 Montana: Benefits Analysis Key Data. Additional information regarding the scoring methodology is provided in the CBA Methodology.

Demand and Supply

Within the Demand and Supply domain, the CBA considers how each COA impacts VA's ability to meet Veteran demand in the future. Each COA is assessed on two benefit components: (1) the ability to balance demand and supply; (2) the changes to facility placement or service offerings that improve VA's ability to meet future demand.

The table below shows the scores for VISN 19 Montana for this domain.

Table 188 – Demand and Supply Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Demand and Supply	1	2	2

Status Quo: The COA received a score of 1 because at least one inpatient service line was over/under supplied, or more than 50% of specialties were inadequately supplied when compared to future Veteran in-house demand. Additionally, no changes to facilities or services were introduced that improve VA's ability to meet the future Veteran enrollee population (e.g., relocation or establishment of facilities in areas with greater Veteran demand, expansion of services).

Modernization: The COA received a score of 2 because, while Modernization right-sizes services to meet future Veteran in-house demand, the COA does not include changes to facilities or services that improve VA's ability to meet the future Veteran enrollee population (e.g., relocation or establishment of facilities in areas with greater Veteran demand, addition of new services).

VA Recommendation: The COA received a score of 2 because, while the COA right-sizes services to meet future Veteran in-house demand, the COA does not include changes to facilities or services that improve VA's ability to meet future Veteran demand (e.g., relocation or establishment of facilities in areas with greater Veteran demand, expansion of services).

Access

Within the Access domain, the CBA considers how each COA impacts Veteran access to care in the future. Each COA is assessed on the change in enrollee proximity to VA-provided primary care, specialty care, and outpatient mental health care.

The table below shows the CBA access scores for VISN 19 Montana for this domain.

Table 189 – Access Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Access	2	2	1

Note: the CBA Access domain score is based on enrollee proximity to VA-provided care only rather than the full high-performing integrated delivery network (inclusive of VA, Community Care Network providers, and non-Community Care Network providers meeting quality criteria). While a COA may have a reduced access score within the CBA, the Section 203 Criteria analysis shows that the VA Recommendation COA maintains or improves access to all service lines in the future high-performing integrated delivery network (HPIDN).

Status Quo: The COA received a score of 2 because access is maintained within 1% for VA-provided primary care, specialty care, and outpatient mental health care.

Modernization: The COA received a score of 2 because access is maintained within 1% for VA-provided primary care, specialty care, and outpatient mental health care.

VA Recommendation: The COA received a score of 1 because access to VA-provided primary care decreased 1% or more, specialty care increased 1% or more, and outpatient mental health care increased 1% or more.

Quality

Within the Quality domain, the CBA considers how each COA impacts the quality of Veteran care in the future. Each COA is assessed based on two benefit components: (1) the ability of the main patient care facilities to support modern healthcare; (2) the ability of demand to support clinical competency.

The table below shows the scores for VISN 19 Montana for this domain.

Table 190 – Quality Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Quality	1	2	2

Status Quo: The COA received a score of 1 for two reasons. First, the COA includes main patient care facilities that were built prior to the emergence of modern healthcare design principles and specific standards to support modern medicine (e.g., floor-to-floor heights, corridor widths, columns spacing, and utility infrastructure requirements). Second, the COA includes facilities with projected future demand below VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

Modernization: The COA received a score of 2 for two reasons. First, the COA replaces aged infrastructure with modern facilities that meet modern health care design standards. Modern facilities support current standards of care (e.g., PACT-enabled environment in the outpatient setting, single patient rooms in the inpatient setting) and utilization of technologies. They can also improve the experience for both Veterans and staff. Second, the COA includes facilities with projected future demand below VA planning guidelines for maintaining programs. VA's planning guidelines reflect that

sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

VA Recommendation: The COA received a score of 2 for two reasons. First, the COA replaces aged infrastructure with modern facilities that meet modern health care design standards. Modern facilities support current standards of care (e.g., PACT-enabled environment in the outpatient setting, single patient rooms in the inpatient setting) and utilization of technologies. They can also improve the experience for both Veterans and staff. Second, the COA includes facilities with projected future demand below VA planning guidelines for maintaining programs. VA's planning guidelines reflect that sufficient volume and diversity of cases are required for all members of the care team to maintain proficiency and quality care delivery.

Facilities and Sustainability

Within the Facilities and Sustainability domain, the CBA considers how each COA impacts the sustainability of Veteran care in the future. Each COA is assessed based on two benefit components: (1) the useful life of the main patient care facilities; (2) changes that strengthen VA's ability to recruit and retain providers.

The table below shows the scores for VISN 19 Montana for this domain.

Table 191 – Facilities and Sustainability Scoring Summary

Key Benefit Domain	Status Quo	Modernization	VA Recommendation
Facilities and Sustainability	1	2	2

Note: The American Hospital Association estimates that a hospital's useful life, a measure which predicts the productive period of a typical capital asset before it becomes obsolete or needs replacement, is currently 40 years.

Status Quo: The COA received a score of 1 for two reasons. First, the COA includes at least one main patient care facility that exceeds its useful life as defined by the American Hospital Association, indicating it may be obsolete or need replacement. Second, the COA does not include changes that strengthen VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

Modernization: The COA received a score of 2 for two reasons. First, the COA replaces all main patient care facilities that have exceeded their useful life with modern facilities that can be sustained over the coming years. Second, while the COA includes modernized infrastructure, which may attract providers, it does not include additional changes to support VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

VA Recommendation: The COA received a score of 2 for two reasons. First, the COA replaces all main patient care facilities that have exceeded their useful life with modern facilities that can be sustained over the coming years. Second, while the COA includes modernized infrastructure, which may attract providers, it does not include additional changes to support VA's ability to recruit or retain providers (e.g., relocation of VA facilities closer to health care hubs based on Hospital Referral Regions; new or expanded partnerships between VA and academic affiliates, other Federal facilities, or community facilities).

Mission

Within the Mission domain, the CBA considers how each COA impacts VA's ability to support its statutory missions of Education, Research, and Emergency Preparedness in the future. Each COA is assessed on three benefit components: (1) the impact on training programs; (2) the impact on research programs; (3) the impact on emergency preparedness.

A COA's overall score in the Mission domain is determined by the rounded average (unweighted) of its component (e.g., Education, Research, Emergency Preparedness) scores.

The table below shows the scores for VISN 19 Montana for this domain.

Table 192 – Mission Scoring Summary

Subdomain	Status Quo	Modernization	VA Recommendation
Education	2	2	3
Research	2	2	3
Emergency Preparedness	2	2	2
Overall Mission Score (Rounded Average)	**2**	**2**	**3**

Status Quo: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because it does not impact inpatient acute service lines and thus maintains existing training programs.
- **Research:** The COA received a score of 2 because all existing facilities with research programs are maintained.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

Modernization: The COA received a score of 2 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 2 because it does not impact inpatient acute service lines and thus maintains existing training programs.
- **Research:** The COA received a score of 2 because all existing facilities with research programs are maintained.
- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

VA Recommendation: The COA received a score of 3 (rounded average of scores across Education, Research, and Emergency Preparedness).

- **Education:** The COA received a score of 3 because inpatient acute services remain VA-delivered and thus the COA maintains existing training programs. Additionally, the COA includes new (not replacement) infrastructure that creates new opportunities for training within the market.
- **Research:** The COA received a score of 3 because it maintains all research programs and builds new (not replacement) infrastructure to support additional research space.

- **Emergency Preparedness:** The COA received a score of 2 because it maintains the current count of Primary Receiving Center-designated VAMCs in the market.

Sensitivity Analysis

A sensitivity analyses study shows how various sources of uncertainty in a mathematical model contribute to the model's overall uncertainty. The market is considered sensitive to a scenario when the VA Recommendation is no longer the leading COA due to changes in benefit scores, VA capital costs, VA operational costs, or non-VA operational costs.

The table below outlines the sensitivity analysis scenarios completed.

Table 193 – Sensitivity Analysis Scenarios

Sensitivity Analysis Scenarios
Increase Benefit Scores for Status Quo and Modernization in increments of one from 1 to 3 points
Increase VA Capital Costs in 50% increments from 0% to 300%
Increase VA Operational Costs in 50% increments from 0% to 300%
Increase Non-VA Operational Costs in 50% increments from 0% to 300%

Sensitivity Analysis Results Summary

In the VISN 19 Montana Market, three scenarios changed the outcome of the CBA:

- Increasing the Modernization benefits score by one point
- Increasing the Modernization benefits score by two points
- Increasing the Modernization benefits score by three points

Sensitivity Analysis Full Results

The below tables show the results across all sensitivity analysis scenarios.

Table 194 – Sensitivity Analyses – Benefit Score Increase

Status Quo and Modernization Benefit Score Change	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
+0	1.46	1.05	1.03	VA Recommendation
+1	1.28	0.96	1.03	Modernization
+2	1.14	0.88	1.03	Modernization
+3	1.02	0.81	1.03	Modernization

Table 195 – Sensitivity Analyses – VA Capital Cost Increase

VA Capital Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	1.46	1.05	1.03	VA Recommendation
50%	1.51	1.10	1.07	VA Recommendation
100%	1.55	1.14	1.12	VA Recommendation
150%	1.60	1.19	1.16	VA Recommendation
200%	1.64	1.24	1.20	VA Recommendation
250%	1.69	1.28	1.25	VA Recommendation
300%	1.73	1.33	1.29	VA Recommendation

Table 196 – Sensitivity Analyses – VA Operational Cost Increase

VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	1.46	1.05	1.03	VA Recommendation
50%	1.79	1.28	1.25	VA Recommendation
100%	2.13	1.52	1.48	VA Recommendation
150%	2.46	1.75	1.70	VA Recommendation
200%	2.79	1.98	1.93	VA Recommendation
250%	3.12	2.21	2.15	VA Recommendation

VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
300%	3.45	2.44	2.37	VA Recommendation

Table 197 – Sensitivity Analyses – Non-VA Operational Cost Increase

Non-VA Operational Cost Increase %	Status Quo CBI	Modernization CBI	VA Recommendation CBI	Leader (lowest CBI)
0%	1.46	1.05	1.03	VA Recommendation
50%	1.82	1.30	1.28	VA Recommendation
100%	2.17	1.55	1.53	VA Recommendation
150%	2.53	1.80	1.78	VA Recommendation
200%	2.88	2.05	2.02	VA Recommendation
250%	3.24	2.30	2.27	VA Recommendation
300%	3.59	2.54	2.52	VA Recommendation

Appendix A – VISN 19 Montana: Capital and Operational Costs Detail

Table 198 – Capital Costs by COA

	Status Quo	Modernization	VA Recommendation
VAMC Ideal Square Footage	-	409,180	356,763
Build New GSF	-	190,718	166,899
Renovate In Place GSF	-	70,495	64,784
Matched Convert To GSF	-	81,216	66,665
Demolition GSF	-	347,889	368,151
Total Build New Cost	$0	($175,242,267)	($151,412,144)
Total Renovate In Place Cost	$0	($14,244,911)	($12,017,263)
Total Matched Convert To Cost	$0	($30,501,716)	($25,052,854)
Total Demolition Cost	$0	($12,158,995)	($11,581,168)
Total Lease Build-Out Cost	$0	($73,417,921)	($75,674,222)
Total New Lease Cost	$0	($333,240,384)	($343,532,196)
Total Existing Lease Cost	($104,781,220)	($104,781,047)	($89,228,414)
NRM Costs for Owned Facilities	($346,135,750)	($47,768,777)	($41,649,403)
FCA Correction Cost	($137,825,078)	N/A	N/A
Estimated Base Modernization Cost	($588,742,048)	($791,356,018)	($750,147,665)
Additional Common/Lobby Space Needed (GSF)	-	66,751	58,415
Cost of Additional Common/Lobby Space	$0	($51,429,790)	($45,006,663)
Additional Parking Cost	$0	($2,703,022)	($1,409,023)

	Status Quo	Modernization	VA Recommendation
Potential Land Acquisition Cost	$0	($1,141,028)	($89,146)
Seismic Correction Cost	($33,069,322)	($72,501)	($72,501)
Non-Building FCA Correction Cost	($8,065,706)	($8,065,705)	($8,065,706)
Activation Costs	$0	($63,642,726)	($57,284,280)
Estimated Additional Costs for Modernization	($41,135,028)	($127,054,772)	($111,927,320)
Cost Adjustment: In-Progress Construction	N/A	N/A	$0
Cost Adjustment: In-Progress Lease	N/A	N/A	$0
Estimated Facilities Costs (PV)	($629,877,076)	($918,410,790)	($862,074,985)

Table 199 – Operational Costs by COA

	Status Quo	Modernization	VA Recommendation
VA Direct	($2,259,590,450)	($2,259,590,450)	($2,171,196,644)
Fixed Direct	($345,509,962)	($345,509,962)	($340,209,078)
VA Specific Direct	($69,077,899)	($69,077,899)	($66,063,842)
Indirect	($1,498,373,428)	($1,498,373,428)	($1,448,514,973)
VA Specific Indirect	($238,038,044)	($238,038,044)	($232,471,473)
Research and Education	($89,746)	($89,746)	$0
VA Overhead	($228,036,326)	($228,036,326)	($219,956,359)
VA Care Operational Cost Total (PV)	($4,638,715,855)	($4,638,715,855)	($4,478,412,369)
CC Direct	($3,230,350,979)	($3,230,350,979)	($3,244,109,960)
Delivery and Operations	($151,645,435)	($151,645,435)	($152,383,736)

	Status Quo	Modernization	VA Recommendation
Care Coordination	($165,773,296)	($165,773,296)	($166,650,608)
CC Overhead	($197,872,501)	($197,872,501)	($198,864,111)
Admin PMPM	($1,224,016,846)	($1,224,016,846)	($1,202,636,669)
Non-VA Care Operational Cost Total (PV)	($4,969,659,056)	($4,969,659,056)	($4,964,645,085)
Estimated Operational Costs (PV)	($9,608,374,911)	($9,608,374,911)	($9,443,057,453)

Appendix B – VISN 19 Montana: Benefits Analysis Key Data

Below are key data points used in the benefit analysis, summarized in the above Benefit Analysis section.

Demand and Supply

Inpatient

Table 200 – Demand and Supply Key Data Points for Scoring – Inpatient (IP)

Service Line	100% of FY29 In-house Bed Need	120% of FY29 In-house Bed Need	Operating Beds	Supply Adequacy (within 100-120% of in-house demand)
IP CLC	20	24	29	Over Supplied
IP Med/Surg	13	15	29	Over Supplied
IP MH	7	8	0	Under Supplied

Note: Community Living Center (CLC); Medicine (Med); Surgery (Surg); Mental Health (MH)

Source: Enrollee Healthcare Projection Model Base Year 2019

Outpatient

Table 201 – Demand and Supply Key Data Points for Scoring – Outpatient (OP)

Physician Supply Adequacy	Count of Specialties	Percentage
Adequately Supplied	4	15%
Under Supplied	23	85%

Note: VA supply in the Status Quo COA is quantitatively evaluated based on the data above. It is assumed the Modernization COA scales the capacity of existing facilities up or down to meet future Veteran in-house demand.

Similar to the Modernization COA, it is assumed the VA Recommendation COA scales the capacity of existing and proposed facilities up or down to meet future Veteran in-house demand. However, the VA Recommendation COA may account for factors that demand projections do not consider that may shift the future balance of in-house and community workload, such as:

- Areas with unmet Veteran demand that may warrant a net new point of care
- Low-census inpatient acute programs that may pose risks to quality and training programs, potentially warranting a shift to community providers
- Community capacity factors that may warrant changes to VA capacity

Source: Office of Productivity, Efficiency and Staffing 2019 Capacity Report

Table 202 – New Facility Demand Guidelines

Facility or Service	Guideline
Inpatient Acute VAMCs	Greater than or equal to 35,000 overlapping enrollees
Inpatient CLC	Greater than or equal to 21,000 overlapping enrollees
Health Care Center	Greater than or equal to 34,000 overlapping enrollees
MS CBOC	Greater than or equal to 4,300 non-overlapping enrollees
CBOC	Greater than or equal to 2,500 non-overlapping enrollees

Note: The above guidelines are used to determine whether a new (not replacement) point of care or service proposed in the VA recommendation had adequate demand.

Access

Table 203 – Access Key Data Points for Scoring

COA	Measure	Current	Future	Result
Status Quo	% of enrollees within 30 minutes of VA-provided OP Mental Health	61.7%	61.7%	Maintained within 1%
Status Quo	% of enrollees within 30 minutes of VA-provided OP Primary Care	75.5%	75.5%	Maintained within 1%
Status Quo	% of enrollees within 60 minutes of VA-provided OP Specialty Care	54.0%	54.0%	Maintained within 1%

COA	Measure	Current	Future	Result
Status Quo	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	90.7%	90.7%	Maintained within 1%
Status Quo	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	94.6%	94.6%	Maintained within 1%
Status Quo	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	98.4%	98.4%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of VA-provided OP Mental Health	61.7%	61.7%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of VA-provided OP Primary Care	75.5%	75.5%	Maintained within 1%
Modernization	% of enrollees within 60 minutes of VA-provided OP Specialty Care	54.0%	54.0%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	90.7%	90.7%	Maintained within 1%
Modernization	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	94.6%	94.6%	Maintained within 1%
Modernization	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	98.4%	98.4%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of VA-provided OP Mental Health	61.7%	66.2%	Increased 1% or more

COA	Measure	Current	Future	Result
VA Recommendation	% of enrollees within 30 minutes of VA-provided OP Primary Care	75.5%	74.3%	Decreased 1% or more
VA Recommendation	% of enrollees within 60 minutes of VA-provided OP Specialty Care	54.0%	67.5%	Increased 1% or more
VA Recommendation	% of enrollees within 30 minutes of HPIDN-provided OP Mental Health	90.7%	90.7%	Maintained within 1%
VA Recommendation	% of enrollees within 30 minutes of HPIDN-provided OP Primary Care	94.6%	94.7%	Maintained within 1%
VA Recommendation	% of enrollees within 60 minutes of HPIDN-provided OP Specialty Care	98.4%	98.6%	Maintained within 1%

Note: the CBA Access domain score is based on enrollee proximity to VA-provided care only rather than the full high-performing integrated delivery network (HPIDN) (inclusive of VA, Community Care Network, and non-Community Care Network providers meeting quality criteria). While a COA may have a reduced access score within the CBA, the Section 203 Criteria analysis shows that the VA Recommendation COA maintains or improves access to all service lines in the future HPIDN. The table above shows the results for enrollee proximity to the full HPIDN as well as to VA-provided care in the market.

Source: Enrollee data from the FY19 Geocoded Enrollee File. Existing VA facility location data from VAST. Commercial provider location data from Definitive Healthcare.

Quality

Main Patient Care Facility Construction Date

Table 204 – Quality Key Data Points for Scoring – Age

Facility	Main Patient Care Facility Construction Date	Built Pre-1970?
(V19) (436) Fort Harrison	1963	Yes
(V19) (436A4) Miles City	1948	Yes

Source: Main patient care facility construction and renovation dates from CAI Buildings and FCA Condition Gaps Reports 9-14-2020

Inpatient Acute Demand

Table 205 – Quality Key Data Points for Scoring – Inpatient Acute Demand

Facility	Service	Demand Guideline	Meets or Exceeds Guideline?	VA Recommendation
(V19) (436) Fort Harrison	IP Med	20 ADC	No	Maintain
(V19) (436) Fort Harrison	IP Surg	1,600 Cases	No	Maintain
(V19) (436) Fort Harrison	IP MH	8 ADC	No Service	N/A

Note: The Status Quo and Modernization COAs are assumed to maintain all current facilities and services. The VA Recommendation COA proposes maintaining, partnering, and divesting of services at each facility, shown in the last column titled "VA Recommendation". To score a 3, the VA recommendation must partner or divest of all low-demand services.

Source: FY 2029 average daily census for inpatient services is based on Enrollee Healthcare Projection Model Base Year 2019. 2019 Total Surgical Cases is from the VA National Surgery Office.

Facilities and Sustainability

Table 206 – Facilities and Sustainability Key Data Points for Scoring

Facility	Main Patient Care Facility Construction Date	Most Recent Main Patient Care Facility Renovation Date	Exceeds Useful Life?
(V19) (436) Fort Harrison	1963	2016	Yes
(V19) (436A4) Miles City	1948	1997	Yes

Note: Exceeding useful life is defined as 1) When a main patient care facility was built before 1970 it has exceeded its useful life, even if it has undergone major renovation in the last 40 years. 2) When a main patient care facility was built after 1970 but is still more than 40 years old (built on or after 1971 and before 1989), it must have undergone major renovation within the last 40 years to not exceed its useful life. 3) When a main patient care facility was built in or after 1989, it has not exceeded its useful life.

Source: From CAI Buildings and FCA Condition Gaps Reports 9-14-2020

Table 207 – Key Data Points for Scoring - Recruitment and Retention

Facility	Expands VA's Ability to Recruit/Retain?
N/A	N/A

Mission

Table 208 – Mission Key Data Points for Scoring

The Status Quo and Modernization COAs are assumed to have no impact on VA's statutory missions. The impact of the VA Recommendation on VA's statutory missions is shown in the table below:

Facility	Training Impact	Research Impact	4th Mission Impact	Market Plan Includes New Facilities/Services To Increase Training/Research Opportunities
(V19) (436) Fort Harrison	No impact on training	No Research Program	No PRC Designation	Increases Training Opportunities, Increases Research Opportunities