

Housing & Dining Master Plan JUNE 2022

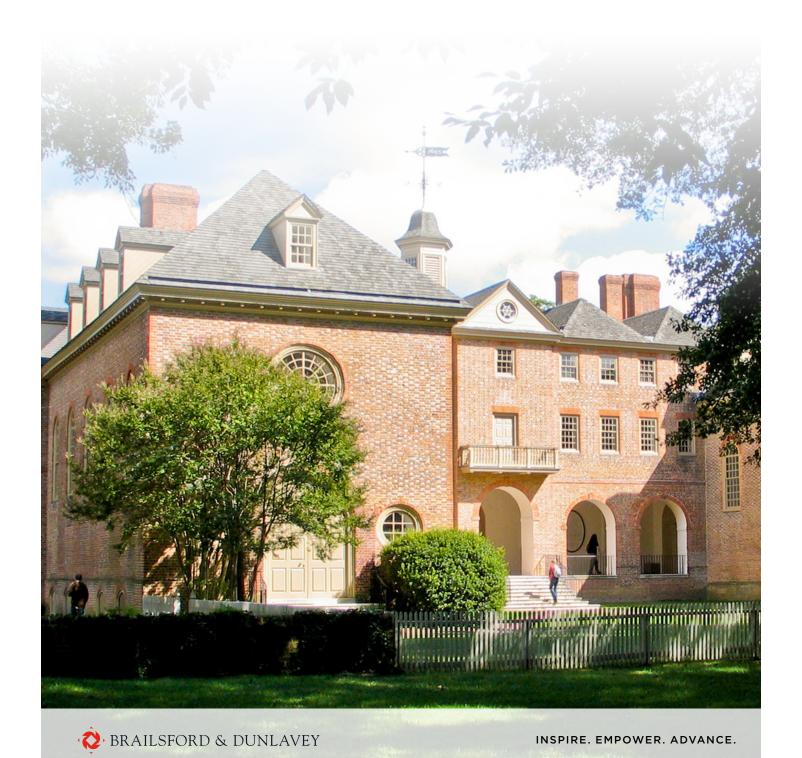


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Preface

PROJECT BACKGROUND

In February 2020, the College of William & Mary ("William & Mary", "W&M", or the "University") engaged Brailsford & Dunlavey, Inc. ("B&D") and VMDO Architects, Inc. ("VMDO"), jointly "the Project Team," to develop a comprehensive Housing and Dining Master Plan (the "Plan") for the first time in the University's 328-year history. In May of 2020, shortly after the project's inception, the Master Plan was placed on hold due to the COVID-19 pandemic, and the University redirected the Project Team to develop a strategic reopening plan for the housing system for the Fall 2020 semester. The master planning process resumed in October 2020 and continued through June 2021, culminating in a series of draft recommendations.

Throughout the summer and fall of 2021, William & Mary shared the findings and initial recommendations with various campus stakeholders. In December 2021, William & Mary reengaged the Project Team to test the capacity of the Campus Center site for a renovation or replacement project to deliver on new student housing, dining space, and the potential to co-locate other campus functions. With many existing Campus Center tenants already moved or planning to move into the newly renovated Sadler Center, the building will be mostly vacated by July 2022, and the University saw a larger opportunity to reimagine the entire Campus Center Precinct and incorporate it into the Housing and Dining Master Plan effort.

The University's housing portfolio includes approximately 5,000 beds in more than seventy individual residence hall facilities that span architectural eras dating from the early 20th century through today. To date, most of the University's renovation efforts have been targeted towards specific projects with limited scopes. Given the aging housing portfolio with an average age of 54 years, the University acknowledged the need for a proactive campus-wide approach to plan for renovations to, and replacements of, the existing housing inventory over the next ten to fifteen years. With other comparable institutions both in the Commonwealth and out of state upgrading their housing stock, the dated facilities at W&M are quickly becoming a competitive disadvantage for recruiting future students.

The William & Mary dining program consists of residential dining, retail locations, convenience stores, and cafes, and has been operated by Sodexo under the current contract since 2014. The three primary dining halls include Commons ("The Caf"), a 740-seat all-you-care-to-eat ("AYCTE") operation on the western side of campus; Sadler, a centrally located 665-seat AYCTE dining operation; and Marketplace, a 300-seat a la carte / fast casual operation on the southeastern portion of campus. Like housing, the existing dining venues on William & Mary's campus are facing challenges with building systems at the end of their useful lives, and thus presented an opportunity to seamlessly integrate housing and dining into one comprehensive Housing and Dining Master Plan.

The goal of this planning effort was to comprehensively assess the current and future housing and dining operations and facilities on campus, while developing short-, medium-, and long-term strategies to prioritize investments, optimize affordability, and enhance the student experience in alignment with the University's strategic objectives and priorities. This document provides a summary of the outcomes of the Housing and Dining Master Plan and is intended to serve as a foundation for decision making in the future.

In April 2022, the William & Mary Board of Visitors voted to unanimously approve the following Plan, which will transform approximately eighty percent (80%) of the housing inventory through renovations or replacement projects, and will replace two of the University's three primary dining venues over the next ten years. As of the date of this report, the design stage for renovations to Monroe Hall and Old Dominion Hall are underway, and the University is seeking a third-party development partner for the first phase of new construction projects.

WORK PLAN

In order to determine how to most effectively leverage the campus housing and dining experience to enhance the strategic goals of the University, the Project Team conducted the following analyses to develop its recommendations:

- Strategic Asset Value (SAV) Work Session with institutional leadership to identify strategic
 criteria and define institutional priorities related to housing and dining. Session participants were
 comprised of stakeholders from the following departments: Student Affairs, Auxiliary Services,
 University Operations, Academic Affairs, Enrollment Management, and the Real Estate
 Foundation.
- Focus Groups and Interviews with William & Mary faculty, staff, parents and students to gain qualitative insights and identify campus sensitivities. In October 2020, B&D met with more than 50 students, faculty, and staff to better understand their perspectives and experiences related to William & Mary Housing and Dining.
- Existing Conditions Assessment of facilities to determine the appropriate priorities related to the potential renovation, divestment, and / or repurposing of assets. The Project Team performed various physical analyses on the existing residential facilities and identified opportunities to reconfigure unit types to align more closely with the student development continuum. Current dining locations, capacities, and offerings were reviewed and compared against peer institutions.
- Web-Based Survey development to assess student satisfaction with the existing housing program, student, faculty, and staff satisfaction with the existing dining program, and their preferences for future offerings. In total, data was collected from more than 3,080 respondents, which resulted in

a statistically representative sample with a 1.8% and 3.8% margin of error for students and faculty/staff, respectively, assuming a 95% confidence interval. The statistical strength of the survey allowed for an in-depth analysis of preferences by demographic subpopulation.

- Demand Analysis to quantify future housing and dining needs. Housing demand was defined in terms of bed counts, by class level and unit type configurations, and then compared against William & Mary's existing inventory. Dining demand was analyzed in terms of location, time, and meal type, and compared against existing offerings and facility capacities to identify gaps across campus.
- Architectural Study to develop a conceptual working program, test renovation concepts, and create a site planning strategy to anticipate new construction needed within the housing portfolio (Facilities Observations and Recommendations).
- Integrated Financial Models were developed to assess existing housing and dining operating paradigms and financial realities, develop phasing recommendations, and pressure test the Plan's financial feasibility at system-wide level.

ACKNOWLEDGEMENTS

The Project Team would like to acknowledge the contributions of the following participants from William & Mary who generously supported the development of the Housing and Dining Master Plan:

William & Mary Working Group:

- Chris Durden, Director of Business Operations
- Maggie Evans, Associate Vice President for Student Affairs and Director of Residence Life
- Cindy Glavas, Director of Auxiliary Services
- Adam Witkowski, Senior Project Manager, Facilities Planning, Design, & Construction

William & Mary Steering Committee:

- Virginia M. Ambler, Vice President for Student Affairs
- Andrew Gilstrap, Director of Building Services at the School of Business
- Eden Harris, Associate Director of Marketing, Administration and Licensing, Auxiliary Services
- Samuel Hayes, Chief Facilities Officer
- Abby Houser, Associate Director of Budget
- Sean Hughes, Executive Director of W&M Real Estate Foundation
- Grace Klopp, Student Representative and Student Culinary Council Member
- Matthew Lambert, Director of University Advancement
- Shylan Scott, Assistant Director for Residence Life
- Amy Sebring, Chief Operating Officer
- Gregg Shipp, Director of Facilities Planning, Design, & Construction
- Mark Sikes, Vice Dean for Student Success
- Calandra Waters Lake, Director of Sustainability
- ◆ Tim Wolfe, Associate Vice President for Enrollment and Dean of Admission

The Housing and Dining Master Plan research, analysis, and concept recommendation was conducted by the following members of the Project Team:

Brailsford & Dunlavey:

- Jeffrey Turner, Executive Vice President
- Katie Karp, Vice President
- Caroline Edwards, Associate
- Kaylin Brewer, Senior Analyst

VMDO Architects:

- David Oakland, FAIA, LEED AP, Resident Life Specialist
- Michele Westrick, AIA, LEED AP BD+C, Principal-In-Charge
- Frances Watson Lengowski, AIA, LEED AP BD+C, Project Manager
- Jim Richardson, AIA, LEED AP BD+C, Associate Principal
- Rebecca Shealy, AIA, LEED AP BD+C, Architect
- Yimeng Ting, AIA, LEED AP BD+C, Architect
- Cody Solberg, Designer
- Michelle Amt, AIA, LEED AP BD+C, WELL AP, Director of Sustainability

Subconsultants:

- CMTA, Inc. sustainability and mechanical systems consultant
- Forella Group, LLC construction cost estimator

This report sets forth the Project Team's findings and recommendations as part of the Housing and Dining Master Plan. Although there are many unknowns regarding the length of the COVID-19 crisis and full impact on higher education, the findings contained herein represent the professional opinions of the Project Team's personnel based on assumptions and conditions detailed in this report. The Project Team relied extensively on information provided by the University, accepting this information as accurate. The Project Team conducted research using both primary and secondary information sources that are deemed to be reliable. The Project Team makes no assurance and provides no guarantee or warranty that the estimates and projections presented in this report will reflect the University's actual costs and financial performance. Economic and market conditions, William & Mary's actions and implementation timing, as well as other important circumstances beyond the Project Team's control, often do not occur as planned and such deviations can be material.

Executive Summary

The Housing & Dining Master Plan identifies opportunities for reinvestment across the housing and dining systems. The resulting Plan recommends the renovation or replacement of targeted facilities and the right-sizing of existing programmatic offerings to enhance the overall student experience.

As one of the nation's first institutions of higher learning, William & Mary is a pioneer in developing the leaders of tomorrow. Today, the University enrolls over 6,200 undergraduates and 2,700 graduate students at its Williamsburg, Virginia campus. William & Mary is a highly residential campus, housing more than 70% of its undergraduate population in on-campus University housing facilities and requiring all freshman and sophomore students to live on campus. All on-campus residents are required to enroll in a university-provided dining meal plan, uniting housing and dining under a single residential student experience. To deliver on a high-quality student experience, the University must ensure housing and dining provide an equitable student experience across all classifications, offerings are diverse and calibrated to align with demand, and facilities and programming are inviting and comfortable, balancing William & Mary's signature historic campus aesthetic with modern systems and amenities.

KEY FINDINGS

Students value the on-campus experience, but there are major infrastructure challenges and external factors that stand to threaten that experience and the housing and dining systems' long-term health. Survey and focus group results indicated moderate overall satisfaction with on-campus housing, and low overall satisfaction with the current dining program. Nearly 50% of students rated W&M's housing worse than other university housing programs that they were familiar with. Students highlight the lack of parity in the residential housing experience as a contributing factor to their dissatisfaction; often citing a lack of air conditioning and poor indoor environment as well as accessibility within the University's historic and midcentury residence halls. Off-campus housing projects with newer amenities are also pulling more upperclassman students off-campus, threatening the on-campus vibrancy of a school that prides itself on housing over 70% of its undergraduate students on-campus. Dining dissatisfaction is tied primarily to lack of menu variety and overall food quality, while students are generally satisfied with quality of service, location convenience, and hours of operation. The Commons Dining Hall on the west side of campus was built in 1967 and was last renovated over 15 years ago, despite that fact that food service trends evolve every three to five years. Due to the campus configuration and its central location, Sadler dining becomes the preferred lunch location and struggles with capacity issues during peak time. While William & Mary remains highly competitive and a top choice among high school graduates, the housing and dining program are quickly becoming a competitive disadvantage against similar institutions who have invested significant resources in upgraded facilities over the last ten years. The key findings in this report demonstrate:

- Despite the low overall satisfaction, students value the residential experience and are willing to pay
 a premium to live and dine on campus. Student reported housing demand aligns with current
 undergraduate capture rate (70%) although additional beds may be required if the university grows
 its undergraduate enrollment.
- Dining demand currently aligns with existing seat capacity, but the allocation of those seats does not align with meal-type demand. There is a need to right-size program offerings with design capacity.
- 3. The existing infrastructure cannot support operations much longer. Deferred maintenance is extensive, and many building systems are at the end of their useful life. This condition is amplified by the University's operation of primarily smaller residence halls (<50 beds) as opposed to fewer, but more efficient larger halls (>250 beds).
- 4. The inconsistency in inventory across campus fosters an inequitable student experience with some students in newly renovated halls with air-conditioning and considerable out-of-unit space and the remaining students in older, underperforming halls without proper ventilation or out-of-unit space.
- 5. External factors (e.g., peers, off-campus market, COVID-19 pandemic) have heightened students' expectations for increased quality, flexibility, and variety. In short, the overall value proposition for on-campus housing is changing especially for upperclassman students who have more off-campus options.
- 6. As the University looks to the future, there are opportunities to improve and strategically replace existing facilities and offerings to better serve the campus community.

RECOMMENDATIONS

Developing and implementing effective solutions will require a system-wide comprehensive approach, including short-, medium-, and long-term initiatives, with programmatic and facility-based solutions. The housing system will require a combination of focused renovations, major renovations, and replacement projects on a scale that will impact approximately 80% of the total campus inventory (3,735 beds).

The Plan begins with the renovation of key historic halls, Monroe and Old Dominion, in need of immediate attention to address mechanical systems, air quality concerns, and programmatic space use changes. Following the historic renovations, the plan calls for a new development on the site directly adjacent to the Lemon and Hardy Residence Halls at the corner of Landrum Drive and Jamestown Road, and a two-phased redevelopment of the existing Yates Hall and Randolph Complex sites, including the construction of 1,100 new beds and a 50,000sf dining hall to replace the existing Commons Dining Hall. The redevelopment of this site (coined "the first major domino" in the plan), will allow the University to make a series of strategic investments that will bring the remainder of its housing and dining offerings in alignment with its newly renovated and constructed facilities. A detailed outline of the recommended phasing plan is provided below:

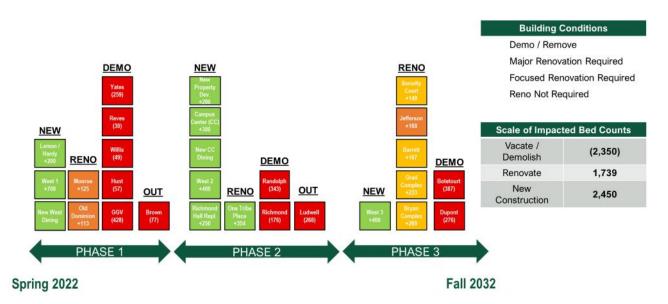


Figure 1: Short- and Mid-term Phasing Plan (Spring 2022 – Fall 2032)

SHORT-TERM (PHASE 1)

- 1. Renovation of historic residence halls in need of immediate systems replacements
 - a. Monroe Hall
 - b. Old Dominion Hall
- 2. New Construction at the Lemon-Hardy Site
- 3. Redevelopment of the Yates Hall Site
- 4. Demolition of Green and Gold Village (GGV) and Commons Dining Hall
- 5. Clear the Campus Center Site to prepare for redevelopment, including the demolition of:
 - a. Campus Center
 - b. Reves Hall
 - c. Willis Hall
- 6. Repurpose residence halls/sites to a higher and better use (e.g., administrative)
 - a. Brown Hall (no longer to be part of W&M housing inventory)
- 7. Expansion of fast-casual dining offerings in the Sadler Center

MID-TERM (PHASE 2)

- 1. Redevelopment of the Campus Center Site
- 2. Redevelopment of the Randolph Complex Site
- 3. Redevelopment of Richmond Hall and New Off-Campus Development
- 4. Repurpose residence halls/sites to a higher and better use
 - a. Ludwell Apartments ((no longer to be part of W&M housing inventory beyond 2028)
- 5. Renovation of One Tribe Place

LONG-TERM (PHASE 3)

- 1. Demolish Botetourt Complex
- 2. Develop "West 3": housing (at GGV or another site yet to be determined)
- 3. Renovate residence halls in need of system replacements and upgrades
 - a. Barrett Hall
 - b. Jefferson Hall
 - c. Bryan Complex
 - d. Graduate Complex
 - e. Sorority Court, house-by-house as funds become available
- 4. Demolish DuPont Hall

The resulting preliminary financial analysis indicated a total project cost of \$680-780M, broken down into the following:

Phase 1: \$234M

Phase 2: \$350M

Phase 3: \$100-200M

Neither the housing nor dining auxiliaries could carry the cost of this plan assuming their operating conditions and financial positions, especially after COVID. After the detailed financial proformas were shared with university leadership, it became apparent the Plan would require a combination of financial levers to ensure overall feasibility and keep the cost of attendance at a reasonable level. The Team identified the following levers as key components for implementation:

- Increase revenue (e.g., rental rate increases, meal plan pricing, etc.)
- Decrease expenses (e.g., labor, departmental transfers, etc.)
- Incorporate alternative financing strategies (e.g., public-private partnerships, partnerships with the William & Mary Real Estate Foundation, historic tax credits, state support for campus infrastructure improvements, fundraising, leveraging dining operator capital, etc.)

NEXT STEPS

William & Mary has a long legacy of fostering a strong residential experience. Students value their time on campus and often credit their experience to their sense of belonging, academic success, and personal and professional development. Unfortunately, the physical limitations of the existing housing and dining facilities have started to impact that experience. William & Mary must act quickly to maintain its legacy as a premier residential campus and institution.

- As of the date of this report, the renovations to Monroe and Old Dominion Halls are currently in design, and construction is scheduled to be completed for the Fall 2024 and Fall 2025 terms, respectively.
- 2. A solicitation process was initiated in May 2022 to develop the Lemon-Hardy and West 1 projects through a public-private-partnership ("P3"). The solicitation is expected to continue throughout the summer of 2022, with the selection of a preferred development team in September 2022. Both projects are anticipated to be completed for the Fall 2025 term, with a potential for Lemon-Hardy to be accelerated and delivered for the start of the Fall 2024 term.
- 3. In parallel with the P3 solicitation above, the University will continue advancing site planning, design, and due diligence at the Campus Center site in partnership with the William & Mary Real Estate Foundation ("WMREF").
- 4. It is anticipated that the redevelopment of the Randolph site / West 2 project will also be completed through a public-private-partnership at a later point.

University Context

Despite the continued enrollment growth over the past ten years, there have not been many opportunities to undertake a comprehensive recalibration of the University's housing and dining programs. With enrollment growth projected to continue in the coming years, William & Mary must elevate its housing and dining offerings to deliver on a high-quality student experience and remain competitive with the off-campus market and amongst its peers.

DEMOGRAPHIC PROFILE

In Fall 2021, despite the ongoing impacts of the COVID-19 pandemic, William & Mary served over 6,500 undergraduate students, 2,900 graduate and professional students, and 2,600 faculty, staff, and employees on its main Williamsburg campus.

While William & Mary's full-time undergraduate student population experienced moderate growth over the past ten years (5% between Fall 2010 and Fall 2020), the total population increased by nearly 12% over the same period due primarily to graduate and professional student growth. The University's undergraduate enrollment projections from April 2021 planned for the addition of 150 more students to the first-year class over the next few years against a Fall 2019 baseline, bringing the first-year class size from approximately 1,530 in Fall 2019 to 1,680 by Fall 2022. It is anticipated that the undergraduate population will stabilize at approximately 6,400 students by Fall 2025, representing nearly the same scale of undergraduate growth in the next four years that the campus experienced over the last ten years. Therefore, in order to maintain a capture rate of approximately 70% of undergraduate students, William & Mary must build up to approximately 4,500 beds, accounting for dedensification, renovations, and new construction.

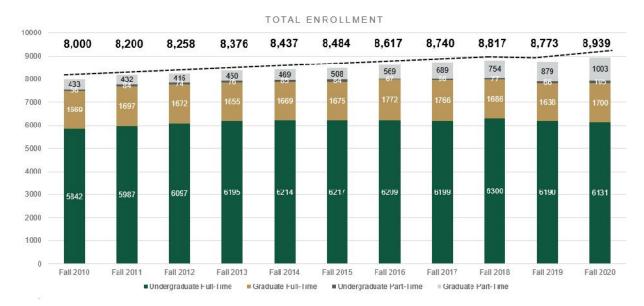


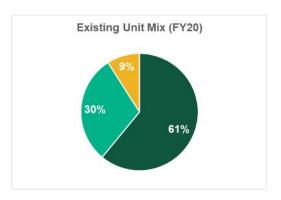
Figure 2: Historical Enrollment, Fall 2010 - Fall 2020

Along with enrollment increases, the University is continuing to attract a high-caliber student population, demonstrating the institution's need to ensure a high-quality student experience to compete with some of the nation's premier colleges and universities. Eighty-six percent (86%) of the incoming Fall 2021 first-year class had a high school GPA of 4.0 or above, eighty-two percent (82%) graduated in the top ten percent (10%) of their class, and the average SAT score was over 1400. William & Mary maintains a rough overall balance of sixty-five percent (65%) in-state and thirty-five percent (35%) out-of-state students in its undergraduate population, with the highest represented out-of-state populations drawing from regional neighbors Maryland, Pennsylvania, and New Jersey. Over the past ten years, the international undergraduate population has nearly tripled, with the majority of international students (62%) coming from China. While the full-time undergraduate population has increased slightly over the past ten years, the gender breakdown has hovered between 55-60% female and 40-45% male. Out-of-region students (international and domestic), female students, and high-achieving academic students all have a high propensity to live on campus, increasing the need for William & Mary to provide a high-quality, comprehensive, and integrated housing and dining program to maintain its competitive market position outside of the academic realm.

EXISTING CONDITIONS

Existing Housing Portfolio

The William & Mary housing portfolio consists of approximately 5,080 beds across 50 halls with communities ranging in size from 40 to 400 residents. The undergraduate bed count makes up the majority of the campus inventory (4,847 beds), with 233 beds set aside for graduate students in the Graduate Housing Complex. While most of the total inventory (61%) is comprised of traditional units, there are four primary unit types on campus. the remainder of this report, the unit types will be defined as follows:



- Traditional hall configurations have double or single occupancy bedrooms that open directly onto a corridor. Residents utilize shared bathrooms and communal lounge areas for social interaction outside of their bedrooms.
- **Semi-suite** units are similar to traditional style units, except that bathrooms are located within the unit and shared between rooms. There are no private living areas within these units, so residents still utilize common gathering spaces for social interaction.
- Full-suite units incorporate both a bathroom and living area within a unit shared by several
 residents in single or double occupancy bedrooms. This unit type is distinguished from an
 apartment-style unit due to the lack of a full in-unit kitchen.
- Apartments include a full kitchen, living area, and a variety of bedroom options, ranging from an
 efficiency studio apartment to a multi-bedroom and/or multi-occupancy layout.

The unit types and class housing assignments are intentionally distributed across campus, creating mixed neighborhoods of first-year and upperclassmen residents. In Fall 2019, William & Mary instituted a two-year on-campus residency requirement for first- and second-year students and continued to maintain strong voluntary junior and senior capture rates, 53% and 49%, respectively, for Fall 2019. In any given year, the overall undergraduate capture rate falls between 70% and 75%, designating William & Mary as a strong residential campus.

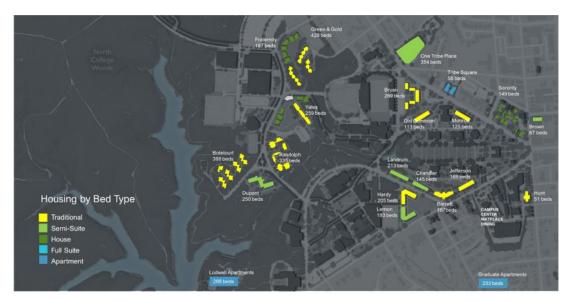


Figure 3: Map of Halls by Unit Type

William & Mary's diverse housing inventory, consisting of individual halls and complexes, spans all eras of the 20th and into the 21st century. As a means of categorizing and organizing the halls for assessment purposes, the Project Team developed the following chronological classifications:



Figure 4: Residential Facilities Categorization by Construction Era

Housing Building Assessment

To better understand the physical challenges within the housing system, the Project Team developed building observations on the design efficiency, ventilation needs, outstanding deferred maintenance, allocated amenity space, and general accessibility of William & Mary's residence halls. A tiered system was created to categorize the residential facilities into the following categories:

- A) recommended demolition / replacement;
- B) major renovation required;
- C) focused renovation required; and
- D) renovation not required.

As summarized in the chart and explained below, there is a demonstrated need to renovate or replace 80% of the existing housing inventory. This substantial need presents financial and logistical challenges, as the major historic renovations are likely to incur a premium given the small scale and large scope of the work, and the phasing of the renovations/replacements must be ordered in a way that does not displace students in the midst of an enrollment growth period.

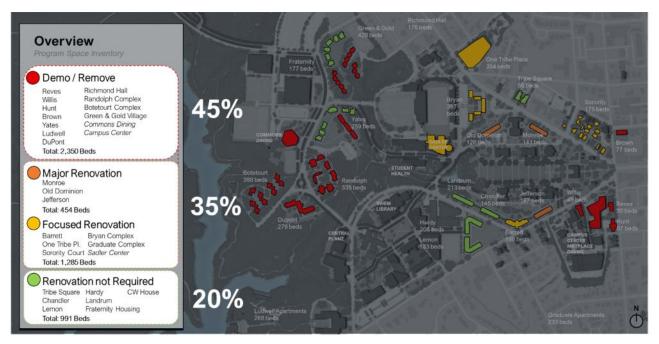


Figure 5: Residential Facilities Categorization by Investment Need

Renovation / Replacement Categories

Demolition or Removal. Given the condition of Green & Gold Village, Botetourt Complex, Randolph Complex, Yates Hall, DuPont Hall, and the Ludwell Apartments, the Project Team recommends that these

buildings are demolished and replaced. The issues at Randolph, Botetourt, and Green & Gold Village are similar; their existing systems are at the end of their useful lives, and both buildings have envelope and/or water infiltration issues that would be expensive to repair. Students are very concerned with the lack of air conditioning and ventilation, and the general design and layout of both buildings are not conducive to an engaged and inclusive living environment. Reves, Willis, and Hunt lack shared amenity spaces and present accessibility challenges for students with accessibility needs. The demolition of these facilities would allow William & Mary to redevelop the site(s) to increase bed density on campus and create a much more compelling campus place. It is recommended that Richmond Hall be demolished and replaced, and Brown Hall decommissioned as a residence hall and reallocated to another University space need.



Figure 6: Sample images from residence halls recommended for demolition and replacement (Botetourt and Green & Gold Village)

Major Renovation. With a few exceptions, William & Mary's historic buildings are in need of major renovations, with indoor air quality being the primary driver for this work. In general, the mechanical, electrical, plumbing, fire, and life safety systems of these buildings are beyond their useful life, and the interior finishes and aesthetics are outdated. Furthermore, these buildings lack the kind of shared amenity spaces (study rooms, lounge areas, music practice rooms, etc.) that are needed to support opportunities for student interaction and engagement, and present accessibility issues. Major renovation of these buildings should include MEP/FS systems replacement, upgrade of interior finishes, the reconfiguration needed to create better social and academic space and addressing ADA (Americans with Disabilities Act) compliance in a more inviting and equitable way. It is anticipated that the major renovations of these facilities would not be able to be completed over a summer timeline and would therefore involve taking the buildings completely offline for an entire academic year while the work is being completed.



Figure 7: Sample images of residence halls needing major renovation

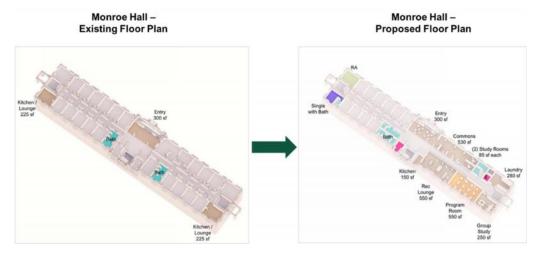


Figure 8: Existing layout and public spaces of Monroe Hall (left); Proposed Monroe Hall renovation layout (right)

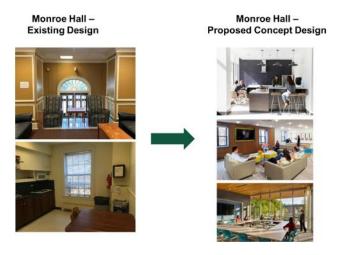


Figure 9: Existing conditions of Monroe Hall (left); Precedent images / proposed concept design for Monroe Hall

Focused Renovation. In general, the Project Team recommends a disciplined approach to residence hall renovations, avoiding piecemeal renovations and systems replacement projects. Consolidating this work into large-scale renovation projects offers efficiency in project costs and the ability to achieve multiple goals in a single project. However, given the history of renovation of the buildings in this category, partial renovation is the approach needed to capitalize on renovation investments already made and to elevate the condition of each of these buildings to align with the buildings that are recommended to be fully renovated or replaced. The specific needs for each of these projects varies by building (see Facilities Observations and Recommendations).



Figure 10: Sample images from Bryan Complex, which has received several focused renovations to building systems but requires focused renovation to improve public spaces

Renovation not Required. The buildings in this category were either recently constructed or experienced a complete renovation in the recent past. The Project Team performed a cursory walk-through of these buildings to observe their spaces and general condition. W&M is currently planning for full-scale renovations of these buildings to occur after the completion of this Plan.



Figure 11: Sample images of residence halls in excellent condition

Indoor Air Quality Concerns: Air Conditioning and Ventilation

Indoor air quality was a major source of concern for students in both the online survey and in focus group discussions. There are over 1,090 students living without air conditioning in Botetourt, Green and Gold Village, Monroe, Brown, and Hunt, and they reported extreme discomfort in the fall and spring when temperatures rise. However, concerns about the indoor environment were not limited to these halls and were further exacerbated given that these conversations with students were conducted during the COVID-19 pandemic, which brought an increased focus to ventilation and air quality issues given the airborne transmission of the virus.

Most of the existing historic and mid-century residence halls on campus were built with 2-pipe mechanical systems without ventilation and are currently operating with limited or no mechanical ventilation. Ideally, outdoor air should be tempered and delivered into the building for space heating and cooling, helping to pressurize the building. When a building's pressure is imbalanced when compared to the outside conditions, air and moisture infiltration or exfiltration can occur. In buildings without Direct Outdoor Air Supply (DOAS) systems, passive ventilation occurs through operable windows and porous envelopes, increasing moisture levels inside the building in Williamsburg's humid climate. Without the proper ventilation, indoor humidity levels can rise, putting buildings at risk for mold growth, which William & Mary has already experienced and addressed in several buildings.

In order to provide a healthy and equitable experience living on campus, the Project Team recommends that all residence halls be renovated to provide air conditioning and mechanical ventilation. Outdoor air should be tempered through an Energy Recovery Ventilator (ERV) to manage humidity and pre-heat or pre-cool the air before it is distributed through the building. Providing well ventilated living spaces is essential to providing a healthy environment that leads to better sleep and better student performance. Residence Hall projects should pursue LEED enhanced ventilation strategies which include monitoring CO2 levels in public spaces where people gather.

Sustainability Concerns

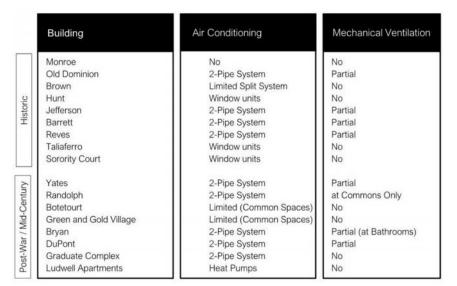


Figure 12: Status of air conditioning and mechanical ventilation at William & Mary's historic, post-war and mid-century residence halls

William & Mary students value authentic sustainability and the University has boldly committed to become a net carbon neutral campus by 2030. The 2021 Climate Action Plan details several strategies for how the campus community can meet their carbon commitment, while the 2019 Sustainability Plan outlines goals to reduce energy use and protect the campus and surrounding ecosystems. The construction projects identified in the Housing and Dining Master Plan provide an opportunity to demonstrate these values and to significantly improve the environmental performance of William & Mary's building stock. In addition to construction projects, programmatic changes can improve the day-to-day sustainable operations in Housing and Dining.

Renovating old residence halls and replacing outdated equipment will aid the University in achieving its campus-wide goal for an overall 20% reduction in buildings' energy and water consumption as identified in the draft Climate Action Plan. To contribute to this goal, Housing and Dining will need to use the opportunity of new construction to exceed that target and design high performance buildings with low Energy Use Intensity (EUI). This will require setting minimum performance criteria beyond LEED Silver certification prerequisites. Integrating renewable electricity production on campus will illustrate the university's climate commitment and photovoltaic panels should be considered on new and renovated projects located on West Campus and north of Richmond Road. All construction projects will need to reduce construction waste by seventy-five percent to meet the Climate Action Plan. Ongoing efforts by Dining to reduce waste by

procuring recyclable and compostable products, eliminating perishable surpluses, and providing receptacles for waste diversion should be expanded and integrated into Housing operations and throughout campus.

Housing Satisfaction

Despite the aging conditions and deferred maintenance issues, students expressed general satisfaction (78%) with the overall housing program. However, when compared to peer institutions, 45% of students indicated William & Mary's housing was worse than other housing offerings with which they were familiar, 30% thought it was on-par with other institutions, and only 8% indicated it was better than other Universities (17% reported they were unfamiliar with other University housing). As illustrated below, the Mid-Century residence hall complexes (e.g., Randolph, GGV, and Botetourt) had the lowest satisfaction, while the newer and recently renovated halls (e.g., Landrum, Lemon, and Hardy) had the highest reported satisfaction. Among the halls with high dissatisfaction, the most commonly reported reasons included temperature and air quality concerns, and lack of communal and study space.

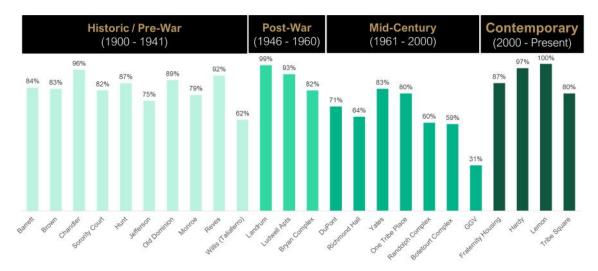


Figure 13: Survey Reported Housing Satisfaction by Hall

Additionally, when asked to indicate the most important building feature W&M should focus on for new or renovating housing, air quality and access to air conditioning was the most frequently cited amenity, followed by access to common space. As shown below, students emphasized the need to address basic infrastructure and building systems elements before delivering enhanced building features such as music practice rooms, classrooms, or building lounges.

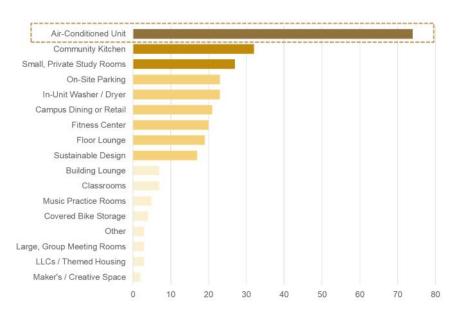


Figure 14: Survey Reported Most Important New Building Features

An analysis of the amount of common space per bed in each of William & Mary's residence halls compared with local peer averages demonstrates a large disparity between the student experience in the various halls. While William & Mary's average of 32 SF/bed across the system is aligned with the peer average of 35 SF/bed, there is a large standard deviation away from that average, ranging from less than 10 SF/bed at Barrett Hall and the Bryan Complex, to nearly 100 SF/bed at Tribe Square. When sorority and fraternity housing is excluded from the calculation, William & Mary's average drops to 26 SF/bed, which is far below the peer average.

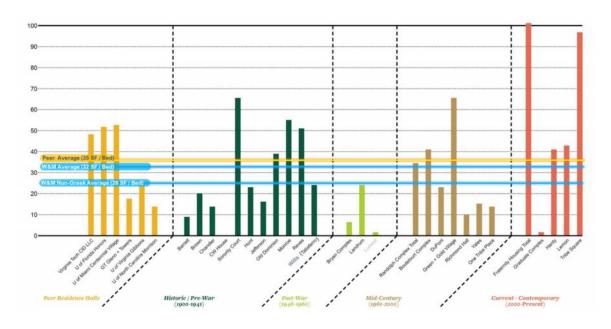
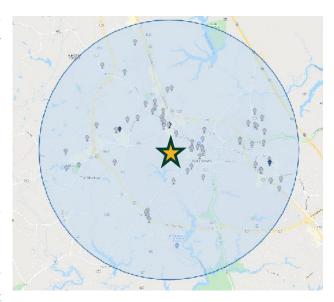


Figure 15: Common Space Per Bed - Peer Comparison

Off-Campus Housing Market

William & Mary has maintained a competitive advantage over the local student housing market for years, but William & Mary's aging on-campus offerings and the surrounding off-campus studentfocused rentals threaten that dynamic. As of the date of this report, there were 9,200 beds spread across 62 multi-family and student-focused properties within a 3mile radius of campus. Many of these properties, like the City Lofts of Williamsburg outlined below, were built in the 1970s, 1980s, and 1990s, and have undergone moderate renovations over the years. Many of them offer basic amenities (air conditioning, laundry, fitness center) and are priced at or below W&M's housing room rates. The Williamsburg market is experiencing extremely low vacancy rates (2.7%) and strong annual rental growth (10.8%), creating the strongest annual performance recorded in more than ten years.



Market data and map provided by CoStar, Inc.

Despite the COVID-19 pandemic, five properties (1,059 beds) have been delivered directly adjacent to campus between 2020 and 2022, including two luxury student-focused off-campus properties: Current Midtown and High Street View (Phase II). Richmond-based Devon USA developed Phase I of the High Street View apartments in 2019 with Norfolk-based Commonwealth Property Group (CPG) and delivered Phase II in October 2021. The two phases combined include 521 beds in one-, two-, and three-bedroom apartment configurations, and are managed by Greystar, one of the largest student housing developers and property managers in the United States. Current Midtown was developed by regional Maryland-based Broad Street Realty and was delivered in the Summer of 2021. The 620-bed property includes student-friendly amenities, furnished units, on-site parking, and a short commute to campus (approximately a 2-minute drive). Students reported a willingness to move off campus, regardless of increased price point, in order to have access to new, modern housing accommodations.

There are two additional properties of note that are in the development pipeline. Commonwealth Properties, a real estate developer based in Richmond that owns other apartments north of campus near Richmond Road, broke ground on a 38-unit, 82-bed property in March 2022, with an expected delivery date in late 2022. Castle Development Partners, a regional real estate investment firm based out of Charlottesville,

broke ground on a 162-unit, 224-bed development in May 2022, with an expected completion date in the Summer of 2023 in time for a Fall 2023 occupancy.

In addition to the multi-family housing stock available or under construction, the off-campus market has also demonstrated growth in the number of single-family homes being marketed as student rentals. Though most of the single-family offerings are of older stock, they provide students access to additional space and privacy at a much lower price point than new, luxury apartments. At the time of this analysis, there were 35 houses for rent and several homes on the market for sale near campus. Such properties were positioned as alternatives to on-campus housing for price sensitive students and / or students looking for additional space to live with a group of friends. Student focus groups and stakeholder interviews confirmed that many of these single-family homes are commonly purchased by students' parents while their children are enrolled at the University, and then later sold after the student graduates, or kept as investment properties.

These market dynamics outlined above represent an acknowledgement by the private market that there is an opportunity to capture student housing demand off campus, and William & Mary needs to respond accordingly to provide market-responsive on-campus housing options for upper-level students to maintain desired capture rates and levels of academic and social engagement that form the cornerstone of the University's mixed class-year residential experience.



Figure 16: Off-Campus Market Comparison, 3-mile Radius

Peer Comparison

Though students enroll at William & Mary due to its academic standing, campus housing and dining are increasingly becoming a competitive disadvantage. An analysis across some cross-applicant and regional peer institutions below shows that W&M housing is priced in the middle of its competition, but high

compared to its in-state competition and W&M's accommodations fall short of what other institutions are offering. For comparison, in-state peers such as the University of Virginia ("UVA") and Virginia Tech ("Tech"), have invested over \$200M in their respective residential programs since 2008 and have each authorized an additional \$280M-\$350M in capital construction through 2029. With the exception of living on the lawn at UVA, all housing is fully air-conditioned, and the majority of its stock has been renovated. If William & Mary intends to maintain its competitive advantage, it must invest in its residential offerings by first addressing the physical challenges of its facilities.

Institution	Campus Designation	Total Enrollment	Housing Requirement	Average Rate (per semester)	
Vanderbilt University	Suburban	13,130	4 years	\$5,770	
George Washington University	Urban	27,000	3 years	\$6,200	
Boston College	Urban	14,600	3 years	\$4,890	
University of Notre Dame	Suburban	12,600	3 years	\$4,950	
Wake Forest University	Suburban	8,000	3 years	\$5,560	
The College of William & Mary	Suburban	8,800	2 years	\$4,050	
Virginia Tech	Suburban	36,000	1 year	\$3,800	
University of Virginia	Suburban	24,000	1 year	\$3,700	
James Madison University	Suburban	21,000	1 year	\$3,000	

Figure 17: Peer Comparison – Average Housing Rates for FY20



Figure 18: Peer comparison – Recently renovated or constructed halls at in-state peer institutions (Virginia Tech, University of Virginia, and James Madison University)

Existing Dining Portfolio

The William & Mary dining program consists of residential dining, retail locations, convenience stores, and cafes, and has been operated by Sodexo under the current contract since 2014. The three primary dining halls include Commons ("The Caf"), a 740-seat all-you-care-to-eat ("AYCTE") operation on the western side of campus; Sadler, a centrally located 665-seat AYCTE dining operation; and Marketplace, a 300-seat a la carte / fast casual operation on the southeastern portion of campus. Commons and Sadler also include small convenience stores within the AYCTE facilities. In addition to the three major dining locations outlined above, Sodexo also operates a Qdoba, Cosi, six small cafes across campus in various academic buildings, and a Chick-fil-A on the ground level of the Tribe Square residence hall on the northern edge of campus along Richmond Road.

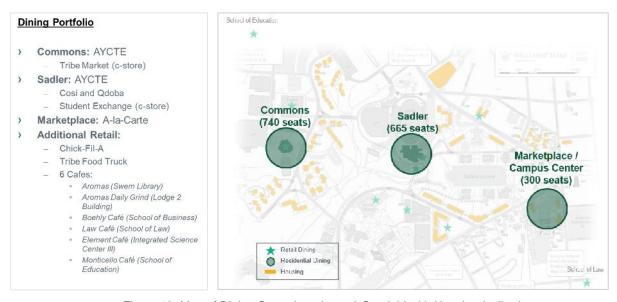


Figure 19: Map of Dining Operations (green) Overlaid with Housing (yellow)

Commons Dining Hall, built in 1967 and last renovated in 2005, primarily serves the first-year population given its proximity to first-year housing on the western edge of campus. In addition to its AYCTE residential dining offerings, Commons also hosts Tribe Market, a small Sodexo-operated convenience store where students can buy snacks and essentials. According to the 2019 Campus Center Systems Study conducted by Glave and Holmes, the structural, mechanical, electrical, plumbing, and fire safety systems are beyond their useful life. Stakeholder interviews with Sodexo's on-site operations team, as well as W&M dining and facilities personnel, indicated that leaks in the roof and kitchen floor are a common occurrence during moderate to heavy rain events, which negatively impacts students' perceptions of quality and cleanliness in the facility. In addition to the building systems concerns, outdated equipment, furnishings, and wayfinding/signage also contribute to student frustrations and value misalignment. Due to its location near residential housing buildings, the facility is often under-capacity at peak lunch times, while the more centrally located Sadler Dining Hall is overrun. The dynamic changes at dinner time, where Sadler is

operating under capacity after students have left the academic core of campus, and flood into Commons in the evenings.







Figure 20: Images of Commons Dining Hall - Lower Level, Service Area & Kitchen







Figure 21: Images of Commons Dining Hall – Servery and Seating Area

Sadler Dining Hall, built in 1994 and last renovated in 2013, operates as convenient dining operation for students, faculty, and staff in the heart of William & Mary's campus on the ground floor of the student center. Sadler combines AYCTE residential dining and retail options under one roof, with Cosi, Qdoba, and the Student Xchange (convenience store) also located in the building. The facility expanded its offering this past year with the development of Sadler Express, a fast casual dining option, to mitigate capacity concerns during the COVID-19 pandemic. Sadler Express was well received by students, and the University is considering making the offerings a permanent part of the Sadler operations after the pandemic. Despite the comprehensive 2013 renovation, the facility still has a few physical shortcomings including Sodexo-reported accessibility frustrations, as food storage rooms are located on a different level than the kitchen

and service elevators often break down, student-cited wayfinding and signage issues, and overall dining environment challenges. Due to its central location, the facility is often over-capacity at peak lunch times when the core academic part of campus is abuzz, while the more distant Commons Dining Hall on the western side of the campus is severely under capacity. As noted above, the dynamic changes at dinner time when students return to their Commons-adjacent residential buildings, causing Commons to operate over capacity while Sadler sits relatively empty. While Commons is not that much farther away from the campus core than Sadler, the topography and walking paths through the trees make it seem far away in students' eyes.













Figure 22: Images of Sadler Dining Hall - Servery and Seating Area

Marketplace, a 300-seat a la carte / fast casual operation in the Campus Center on the southeastern edge of campus, offers a more personalized dining experience with made-to-order options. Built in the 1960s and last renovated in the late 1980s, many of Marketplace's building systems experience similar issues as Commons, with kitchen equipment and mechanical, electrical, and plumbing systems beyond their useful lives. There is no air conditioning in the kitchens, which causes Sodexo dining staff discomfort during warmer months, and contributes to equipment failing (such as compressors freezing). In addition to the

MEP concerns, additional ADA limitations in this building impact the delivery of service and overall student experience.







Figure 23: Images of Marketplace (Campus Center) - Servery and Seating Area

In summary, Commons and Marketplace have been operating over the past ten to twenty years through small reactive renovations and focused repair projects. The major mechanical systems are well beyond their useful lives, and on the verge of a broad-reaching and expensive failure that could leave William & Mary scrambling to make more temporary fixes and repairs. With Sadler already facing capacity concerns during peak mealtimes, the dining program must develop new dining spaces to supplement the Sadler program, especially as first-year enrollment is projected to continue increasing over the next few years.

Dining Sustainability

From building performance and utility usage to diverting food waste and leveraging local sourcing contracts to cut down on the collective carbon footprint, dining facilities and operations contribute to a large part of the University's overall sustainability objectives. The dining program has made great strides in this area,

including but not limited to:

-) Composting and recycling efforts
- Elimination of single-use plastics in the dining halls
- Trayless dining to reduce food waste
- KelRae Farm Partnership and Student Sustainability Internship Program
- Hydroponics wall, growing fresh herbs on site
- On-campus beehives to produce local honey
- Shift towards plant-based dietary offerings
- Partnerships with the Food Recovery Network and Campus Food Pantry to reduce food waste and address food insecurity
- Green Restaurant Association certification



While the program components are well received by students and do contribute back to larger University objectives, the physical conditions of the dining halls present many of the same challenges and opportunities as the aging housing inventory. Renovating and potentially replacing the aging facilities and upgrading outdated kitchen equipment and building systems will aid the University in achieving its campus-wide goal for an overall 20% reduction in buildings' energy and water consumption as identified in the draft Climate Action Plan. As outlined above, Housing and Dining will need to set minimum performance criteria beyond LEED Silver certification prerequisites. Ongoing efforts by Dining to reduce waste, eliminate perishable surpluses, and provide receptacles for waste diversion should be continued and expanded.

Meal Plans and Policies

All residents living on-campus are required to have a dining meal plan. William & Mary currently offers a variety of meal plans that include a combination of meal swipes, dining dollars, and meal exchanges (use of an AYCTE swipe for a dollar value equivalent at a retail or al-la-carte location) that align with industry best practices for the student development continuum, allowing for more flexibility and independence as students matriculate. First-year and on-campus second-year students are required to select plans with high meal swipes and limited dining dollars to drive community engagement in the residential dining venues and ensure they have unlimited or nearly unlimited access to food, so dining does not become another stressor as they transition to life away from home and focus on their academic pursuits. Upper-level residents are extended the option to select plans with fewer meal swipes and more dining dollars, providing more options at retail venues and a customized dining experience.

	First-Year	Sophomore	Junior / Senior	Commuter / Graduate
Freedom (Unlimited \$100)	×	×	×	Optional
Gold 19 (19 Meals / week + \$225)	×	×	×	Optional
Block 175 (175 Meals / semester + \$400)	×	×	×	Optional
Block 125 (125 Meals / semester + \$400)		30	×	Optional
Block 100 (100 Meals / semester + \$500)		×	×	Optional
Commuter 50 (50 Meals / semester + \$560)		×	×	Optional
Commuter 25 (25 Meals / semester + \$550)		×	×	Optional

Figure 24: Meal Plan Options by Class-level

Though graduate and commuter students are not required to enroll in a meal plan, William & Mary has a high number of voluntary meal plan participants. Prior to the pandemic in Fall 2019, about 970 (18%) of its 5,470 meal plans were voluntary plans. An improved program highlights an opportunity to further increase voluntary participation upwards of 20-25%.

Meal Plan	Total Enrollment	Participation	
Freedom	1,865	55.6%	
Gold 19	299	64.1%	
Block 175	1,311	64.8%	
Block 125	491	68.4%	
Block 100	533	63.1%	
Commuter 25	427	65.4%	
Commuter 50	544	67.1%	
TOTAL	5,470	59.9%	

Figure 25: Fall 2019 Meal Plan Enrollment and Participation

Despite the flexibility of meal plan offerings, many upper-level residents elect to enroll in the plans with higher meal swipes, indicating students see value in the on-campus dining offerings and price points. However, William & Mary's meal plan participation rates (number of meals served as a percent of number of meals available) are slightly lower than expected, indicating a gap in perceived value because students are not utilizing all of the meals available to them as part of their plan. Nationwide best practices aim for participation rates in the high 60% range, and participation rates above 70% are indicative of a very strong residential program. The lower participation rate (55.6%) is tied to the plan with the highest enrollment (1,865). This means that of the nearly 1,900 students enrolled on the plan, they are only eating slightly

over half of the meals available to them in the on-campus dining halls. Only the Block 125 and Commuter plans have participation rates in the targeted zone. Since those plans are only open to juniors, seniors, and graduates, the data suggests that upper-level students choose to enroll in some of the lower-swipe plans, but use them more efficiently, while first- and second-year students are mandated into the high-swipe Freedom, Gold 19, and Block 175 plans, but do not utilize them to the same extent.

In contrast with national trends and the lower-swipe meal plan selections outlined above, William & Mary juniors and seniors indicated a relatively strong preference, 54% and 53%, respectively, for the option of accessing a traditional AYCTE residential dining venue on campus, indicating they do see a value in W&M's dining program versus relying mostly or solely on the off-campus or retail dining offerings.

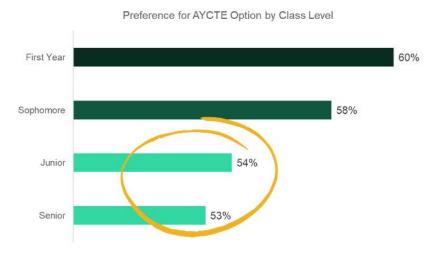


Figure 26: Meal Preference by Class-level

When compared to peer institutions of similar size and status, William & Mary is aligned on dining policies, meal plan offerings, and on the lower end of the pricing spectrum. Though regional peers like Virginia Tech ("Tech") and the University of Virginia ("UVA") offer a similar number of meal plans at a lower price point, the scale of their operations are much larger than William & Mary, allowing for economies of scale in their pricing models. While there is room in the pricing model for William & Mary to expand in the future, the price points must be aligned with program quality to create a value proposition for students, with an eye towards total cost of attendance for the University overall. Among this list of peer institutions, two of W&M's in-state neighbors, Virginia Tech and James Madison University, operate some of the highest-rated dining programs in the country.

Institution	Campus Designation	Total Enrollment	Housing Requirement	Dining Requirement	Number of Meal Plans	Meal Plan Structure	Average Meal Plan Price (semester)
Vanderbilt University	Suburban	13,130	4 years	On-Campus Residents	3	Weekly / Dining Dollars	\$2,600
George Washington University	Urban	27,000	3 years	On-Campus Residents	2	Declining Balance	\$4,000
Boston College	Urban	14,600	3 years	On-Campus Residents (w/o kitchens)	3	Semester / Dining Dollars	\$3,600
University of Notre Dame	Suburban	12,600	3 years	On-Campus Residents	6	Semester / Dining Dollars	\$3,200
Wake Forest University	Suburban	8,000	3 years	On-Campus Residents	8	Weekly / Dining Dollars	\$2,600
The College of William & Mary	Suburban	8,800	2 years	On-Campus Residents	5/7	Weekly / Semester / Dining Dollars	\$2,350
Virginia Tech	Suburban	36,000	1 year	On-Campus Residents	5	Declining Balance	\$1,800
University of Virginia	Suburban	24,000	1 year	On-Campus Residents	4 / 10	Semester / Dining Dollars / Meal Exchanges	\$1,700
James Madison University	Suburban	21,000	1 year	On-Campus Residents	4	Weekly / Dining Dollars	\$2,800

Figure 27: Dining Program Peer Comparison (FY20)

Dining Satisfaction

William & Mary offers a comprehensive dining program with a variety of service styles; however, the majority of students indicated low satisfaction (37%) with the overall dining program. when compared to peer institutions, 49% of students indicated William & Mary's dining was worse than other University dining programs with which they were familiar, 25% thought it was on-par with other institutions, and only 9% indicated it was better than other Universities (17% reported they were unfamiliar with other University dining). As demonstrated with housing as well, dining is not serving as an effective recruitment tool for W&M. While students do not attend William & Mary <u>because</u> of its dining program, dining offerings should not be a <u>deterrent</u> for students to enroll or continue living on-campus beyond the residency requirement.

Faculty and staff reported a more favorable impression of campus dining (69% satisfied), but also indicated an unawareness or disinterest with the dining options available to them. For instance, faculty and staff survey respondents felt that the AYCTE residential facilities were unwelcoming to them, others thought they were actually restricted to students only, and many were not aware of the discounted door rates offered to W&M employees at the on-campus dining venues. When examined comprehensively, the overall blended dining program satisfaction between students, faculty, and staff was 53%. By comparison, of participating institutions in the National Association of College & University Food Services ("NACUFS"), campus-wide dining program satisfaction was 71% in 2019.

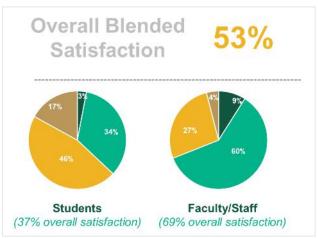


Figure 28: Survey Reported Dining Satisfaction

Students self-prioritized their top five most important factors when deciding where to eat on campus as: 1) food quality, 2) location convenience, 3) hours of operation, 4) menu variety, and 5) service quality. When satisfaction, broken down by major location, is overlaid onto the importance factors, the resulting story reflects and supports what was shared anecdotally in the focus groups and stakeholder interviews.

Students were generally satisfied with quality of service, location convenience, and hours of operation at all venues. Students reported that Sodexo is responsive to their feedback, and they emphasized how much they enjoyed their daily interactions and personal relationships with the front-line food service workers. A lack of menu variety and food quality were cited as contributing factors to low overall program satisfaction. Dissatisfaction with food quality was more prevalent at the residential dining facilities (i.e., Commons and Sadler) than at Marketplace, but the perceived lack of menu variety was identified for all dining venues.

Of those surveyed, 43% of students reported that they eat almost everything, 32% indicated that they generally prefer healthy options, and 22% reported that they follow a special medical or religious diet. Of students with special dietary restrictions or healthy-leaning preferences, 67% were satisfied with the menu options available to them.

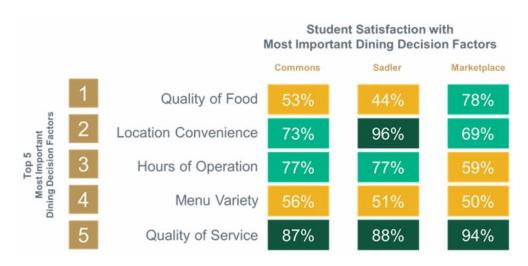


Figure 29: Satisfaction with Top Dining Decision Factors, by Dining Venue

Dissatisfaction with the on-campus offerings has led to most students (66%) turning to the off-campus market at least once per week. Of those respondents, 49% reported dining off-campus for weekday dinner and 23% for weekday lunch. Most students cited their preference for food in the off-campus market (58%) as their reason for dining off-campus during the week when on-campus options are available. Similarly, 63% of faculty and staff also indicated they dine off-campus at least once a week. Their frequencies were much higher than students for weekday lunch (83%) and weekday dinner (40%), with many faculty and staff members citing their lack of awareness or comfortability eating at the residential dining facilities.

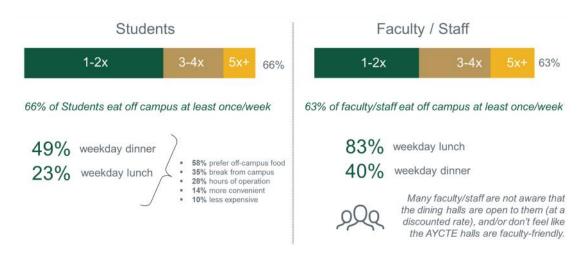


Figure 30: Survey Reported Off-Campus Dining Participation

When asked about their ideal future dining program, students reported a desire for more national brands on campus (89%), on-campus grocery / convenience stores (78%), and partnerships with off-campus national brands (77%). National brands are often associated with increased food quality due to their predictability and consistency and are often cited as a top desire among programs where food quality

satisfaction is low. The strong preference for access to an on-campus grocery / convenience store is also a strong indicator that students feel that they could prepare their own food at home better and cheaper than what is available in the on-campus program offerings. While the partnerships with off-campus brands could be an extension of the predictable quality dynamic outlined above, focus groups also highlighted students' desire to integrate with and experience the local off-campus Williamsburg market, and students saw the opportunity to support local businesses as both a personal and University obligation.

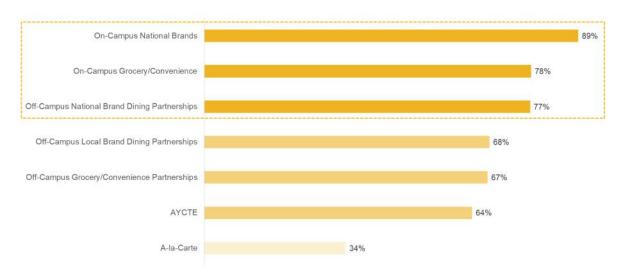


Figure 31: Student Survey Reported Dining Preferences

Vision and Strategic Framework

While the review of the existing inventories and input from the surveys, focus groups, and stakeholder interviews helped outline the current condition of housing and dining on campus, in order to develop recommendations that align with and support the University's broader institutional objectives, the Project Team needed to better understand the strategic value housing and dining could and should play moving forward. The Project Team conducted a Strategic Asset Value (SAV) work session with university stakeholders to establish decision-making criteria and define institutional priorities related to the future of housing and dining. The session resulted in the development of the following strategic drivers:

QUANTITY AND LOCATION OF FACILITIES

- Housing must provide market-responsive housing options that accommodate the 2-year live-on requirement and a portion of upper-level demand.
- Housing should explore opportunities for establishing neighborhoods to maintain the strong upper division experience while creating peer-to-peer mentoring.
- Dining facilities should accommodate demand by priority level: (1) on-campus residential students, (2) off-campus and commuter students, (3) faculty & staff, and (4) alumni & local community.
- Dining facilities should be cohesively integrated with quality-of-life facilities (housing, athletics, student center, etc.) where possible.

TARGET MARKET AND PROGRAMMATIC PRIORITIES

- First- and second-year students should remain the target market for on-campus housing, followed by upper-level students, and then graduate/professional students.
- Disciplined alignment between unit-types and the student housing development continuum is essential. Housing should foster opportunities for informal and formal personal and academic development.
- Housing and dining spaces should support not strain the strong sense of community and connection that is integral to the William & Mary experience.
- Dining should operate as a centralized gathering space for community building amongst students, faculty, and staff.
- Dining should support student development through active programming, policies, and employment opportunities.
- The dining program must adhere to the needs of the pragmatic W&M student by offering value through increased quality, variety, and flexibility.

FINANCIAL ACCESSIBILITY AND QUALITY

- Housing and dining should achieve financial accessibility through differential pricing and minimal annual rate increases.
- New construction and renovations should be of high construction quality
- Facilities and offerings should align with the off-campus market and peer institutions but should not go "over the top".

REQUIRED FINANCIAL PERFORMANCE AND INSTITUTIONAL WILL

- Balance sheet utilization and institutional equity are appropriate to achieve targeted quality level and programmatic outcomes for housing.
- Dining should maintain its own operations and not rely on the University for subsidies.
- Identify alternative funding and partnership strategies where possible to achieve institutional goals, while easing the financial burden of significant capital investments.
- Incorporate sustainability objectives into physical and programmatic solutions to support W&M's 2030 carbon neutrality goal.

Housing and Dining Demand

An assessment of the market was conducted to determine project feasibility, demand for on-campus housing and dining, and the state of the local off-campus market. To quantify demand for housing and dining, B&D developed and distributed an online-based survey to the campus community. The housing portion of the survey was only sent to students, while the dining portion was sent to the entire campus community. The survey achieved an extremely high response rate with more than 3,000 total responses: resulting in a statistically representative sample with a 1.8% and 3.8% margin of error for students and faculty/staff, respectively, assuming a 95% confidence interval. The statistical strength of the survey allowed for an in-depth analysis of preferences by demographic subpopulation.

HOUSING DEMAND METHODOLOGY

In order to quantify market demand for on-campus student housing at W&M, B&D utilized its proprietary demand-based programming model. The demand analysis is a combination of qualitative and quantitative methods that are used to inform total campus-wide demand. By utilizing unit-type (traditional, semi-suite, full-suite, or apartment) and occupancy (single or double room) preferences submitted by students as part of the electronic survey, the model projects demand through the extrapolation of these preferences onto W&M's entire undergraduate sub-population.

Survey Responses

Survey respondents were provided with a narrative description of potential on-campus housing units that included sample floor plans, along with their respective rental rates in 2020 dollars. Students were informed that the sample floor plans were for illustrative purposes only and were not drawn to scale. Survey rental rates were determined by assessing existing on-campus rates, rental rates in the off-campus market by unit type, and identifying rates required to support the potential cost of new construction or renovation. The unit types and respective rental rates included in the survey are outlined below. Following their review of the narrative, respondents were asked to indicate which unit-type and occupancy option they would have preferred for the current academic year. A response option was provided to allow students to indicate whether they would have preferred off-campus housing over the proposed unit-types.



Figure 32: Survey Tested Units & Rental Rates

Target Markets

To project realistic demand, B&D developed a specific target market consisting of survey respondents who would likely lease student housing on campus. A combination of survey data and B&D's expertise were used to develop the target market criteria, which included respondents that were:

PRIMARY MARKET

- Undergraduate;
- Enrolled Full-time;
- Traditionally-aged (17-24 years old);
- Single with no children or dependents;
- Currently living on campus, OR
- Renting off campus and paying more than \$500 per month, while not living with a spouse/partner or other family members

SECONDARY MARKET

- Graduate students;
- Enrolled Full-time;
- Single with no children or dependents;

- Currently living on campus, OR
- Renting off campus and paying more than \$500 per month, while not living with a spouse/partner or other family members

All students who did not meet the aforementioned criteria were excluded from the demand analysis. This target market demand provided baseline demand for additional filters such as the occupancy coverage ratio and policy overly (both outlined below) to be applied.

Policy Overlay

The Student Housing Continuum, outlined below, is not a prescriptive model that all universities must follow precisely, but is an industry standard that suggests students move along a spectrum of residential options throughout their tenure at an institution, gradually gaining more independence as they matriculate. While survey respondents were able to select from all of the unit types outlined above, B&D applied a policy overlay to support W&M's desire to better align with the student housing development continuum.

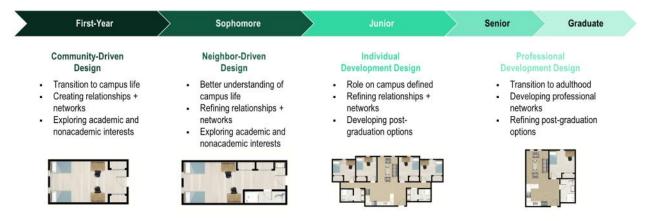


Figure 33: Student Housing Development Continuum

While W&M stakeholders acknowledged that it was unlikely that the University would be able to fully achieve alignment with this continuum given its existing heavily traditional housing inventory, a goal was established to move towards alignment as much as possible when considering renovations to existing halls and new/replacement projects. Accordingly, all first-year demand was redirected into traditional unit types, sophomores were split between traditional and semi-suite units, juniors were split between semi-suite and full-suite units, seniors were split between full-suite and apartment units, and graduates were allocated to apartment units only. This policy override is reflected in the final demand tables and recommendations in this report.

WILLIAM & MARY HOUSING & DINING MASTER PLAN

In addition to the development continuum, B&D also included a policy overlay for first- and second-year students, given the two-year residency requirement instituted by William & Mary. Although raw demand showed student interest below existing capture rates, the demand for these two class years was adjusted to reflect the current capture rates for first- and second-year students, 96% and 95%, respectively.

Occupancy Coverage Ratio

Once B&D identified demand for the likely target market, the Project Team applied an occupancy coverage ratio ("OCR") to target market demand to yield a market-responsive recommendation. OCR is a risk mitigation concept that allows the University to determine the appropriate amount of housing it should offer per market segment. OCRs are based on W&M's value of on-campus living and existing student population characteristics and are intended to make appropriate decisions about risk associated with a variety of factors. For example, a 1.0 OCR (1.0: 1.0 ratio) indicates that 100% occupancy can be achieved, but market factors or a modest decrease in enrollment will likely lead to immediate vacancy issues. An OCR of 1.2 means 120 units of demand is required to build 100 units of supply. Therefore, B&D recommends applying a unique Occupancy Coverage Ratio to each academic level, as each student classification brings an inherently different level of risk to a project or housing system.

Through B&D's understanding of the strategic priorities of the W&M housing system, the Project Team developed a set of criteria that outlined a W&M-responsive plan. The Project Team applied the following OCRs, by student classification, to mitigate risk associated with an increasingly competitive off-campus market and institutional risk tolerance.

First-years: 1.0Second-years: 1.0

Juniors: 1.05Seniors: 1.05

Graduate Students: 1.15

HOUSING DEMAND RESULTS

Utilizing target market, occupancy coverage ratio, and policy-influenced demand filters, B&D identified the following future demand for the 2024/2025 academic year, when the University enrollment projections are intended to stabilize. The resulting analysis indicated phasing up to 4,562 beds by Fall 2025 in alignment with the University's enrollment growth projections. Undergraduate capture assumptions were held around 70% varying by class year, to keep W&M within its historical on-campus housing capture rates.

	Fall 2021 (Projected)			Fall 2025 (Projected)		
	Enrollment	Demand	Capture	Enrollment	Demand	Capture
First-Year	1,686	1,683	96%	1,680	1,613	96%
Sophomore	1,509	1,541	95%	1,596	1,516	95%
Junior	1,423	778	54%	1,562	840	54%
Senior / Other	1,283	487	39%	1,529	593	39%
Undergraduate Subtotal	5,901	4,489	73%	6,367	4,562	72%
Existing Inventory	4,616			4,848		
Surplus (Shortfall)	127			286		
Graduate Subtotal	2,517	1,018	40%	2,517	1,018	40%
Existing Inventory	233		233			
Surplus (Shortfall)	(785)			(785)		

Figure 34: Housing Demand with Enrollment Growth Overlay

As outlined in the demographics section of this report, the University released updated undergraduate enrollment projections in April 2021, planning for the addition of 150 more students to the first-year class over the next few years against a Fall 2019 baseline. In the immediate years of the plan, there is a small surplus of beds, but that surplus quickly diminishes as the projected enrollment growth takes effect. With such little swing space available, this Plan presents an opportunity to address physical building challenges but will require balancing strategic improvement plans with accommodating demand year-over-year.

Graduate survey responses indicated some additional housing demand over time. The University currently offers 233 beds at the Lettie Pate Whitehead Evans Graduate Complex, although more recently, the school has provided most of those beds for undergraduate students as graduate demand has stayed relatively weak, with only about 100 graduate students living in this complex in recent years. This is partially due to the school's focus on trying to accommodate undergraduate housing but could change over time. Given the scope and scale of the undergraduate renovations and replacement projects outlined in the subsequent sections, and the critical mission alignment of the undergraduate student experience, the focus of the recommendations for this report will focus on the undergraduate student housing inventory. The Project

Team recommends William & Mary consider future opportunities to explore graduate housing options, whether through a self-development approach, through the William & Mary Real Estate Foundation, or in partnership with the private market (Public Private Partnerships) as they become available.

DINING DEMAND METHODOLOGY

B&D developed a dining demand model to project future dining needs and identify campus-wide demand. Similar to housing, B&D utilized its demand-based-programming ("DBP") model to extrapolate preferences collected from the student, faculty, and staff survey responses to determine dining demand. In the survey, respondents were asked to indicate how frequently (days/week) they would eat each meal (breakfast, lunch, dinner, and late night), where they would prefer to dine (campus zone), and the meal type preferred (grabn-go, fast casual, all-you-care-to-eat "AYCTE", and sit-down). Through survey responses, B&D was able to quantify peak demand by zone, type, mealtime, and frequency. The maximum hourly demand was then converted into the number of seats required to accommodate that demand and then eventually into an approximation for total dining square footage needs.

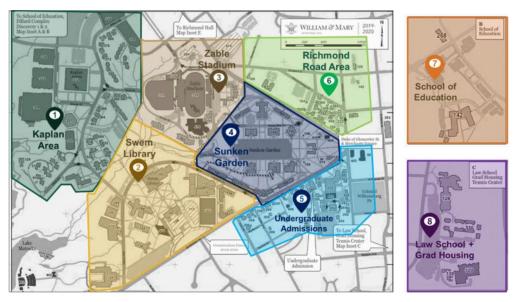


Figure 35: Survey Map of Campus Zones

DINING DEMAND RESULTS

Findings indicated the University's existing seat capacity can adequately accommodate campus-wide dining demand, however the distribution across campus locations and types of dining styles is misaligned with student preferences and patterns. As shown below, peak lunch and dinner demand shows a campus-wide need for 1,544 and 1,674 seats, respectively, to adequately serve the campus population. Between Commons, Sadler, and Marketplace, the existing 1,705 seats in the three primary venues accommodates that numerical demand with a very slight surplus.

	Peak (breakfast)	Peak (lunch)	Peak (dinner)	Peak (late night)
AYCTE Seat Demand	307	957	1,436	57
Fast Casual Seat Demand	293	587	238	47
	600	1,544	1,674	104
Commons Seat Capacity	740	740	740	740
Sadler Seat Capacity	665	665	665	665
Marketplace Seat Capacity	300	300	300	300
	1,705	1,705	1,705	1,705
Current Surplus / (Deficit)	1,105	161	31	1,601

Figure 36: Campus-wide Dining Demand with Enrollment Growth Overlay

However, this campus-wide approach does not account for where students are during the lunch and dinner hours, and what styles of dining options they are looking for. Through the focus groups, survey comments, and stakeholder interviews, students and administrators alike highlighted capacity issues at Sadler during peak lunch times and Commons during peak dinner times. When demand for these meal periods is filtered through reported locational preferences and preferred dining styles, the demand dynamic shifts.

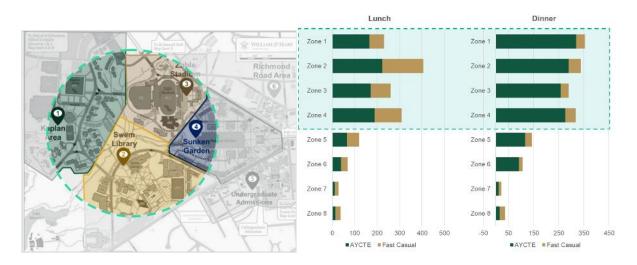


Figure 37: Lunch and Dinner Demand by Location and Dining Style

Dining demand across campus is focused in Zones 1-4 outlined above, concentrated on the central and western parts of campus where Commons and Sadler are located. Marketplace, with its 300 seats of capacity, sits outside of the highlighted circle in Zone 5. Lunch demand is more heavily concentrated in

Zones 2 and 4, closer to the academic core, and proximate to Sadler, which algins with the student and administrator feedback that Sadler is over capacity during peak lunch times. Similarly, dinner demand is more heavily concentrated in Zones 1 and 2, closer to the residence halls on the western edge of campus, and proximate to Commons, which again algins with the feedback that Commons is over capacity during peak dinner times.

In addition, the green and gold bars indicate a differentiated preference for an AYCTE dining style (green), and a fast casual option (gold). As demonstrated in the chart, there is a much higher demand for fast casual options during lunch time, when students are on the go and need to eat between classes and other commitments, while the dinner demand overwhelmingly favors an AYCTE style, when students have the time to sit down with friends and socialize or study throughout dinner. A rightsizing and redistribution of these locations and offerings will be an essential pillar in the dining recommendations outlined in the next section of this report.

Program & Concept Recommendations

Given the interconnectedness of housing and dining, the Project Team developed a comprehensive program and concept recommendation to strategically address reinvestment efforts and serve as a guide for improving the University's major student life assets and programs.

RECOMMENDED HOUSING PLAN

The Project Team explored program options that would simultaneously allow W&M to maintain the ability to house approximately 70% of the undergraduate population on campus, while tackling the necessary extensive building systems and facility upgrades, renovations, and replacements. The Project Team worked with the University to identify and develop project concepts to deliver on the programmatic and facility recommendations, organized into short-term, mid-term, and long-term opportunities.

Recommended Housing Plan			
Vacate / Demolish	(2,350)		
Renovate	1,739		
New Construction	2,450		

Given the scope and scale of the undergraduate renovations and replacement projects, the following recommendations focus exclusively on the undergraduate housing inventory. Until significant progress has been made on the undergraduate inventory, the Project Team recommends continuing to accommodate a limited amount of graduate housing demand at the existing Graduate Complex.

RECOMMENDED DINING PLAN

In conjunction with the housing bed program, the Project Team developed a dining seat program that balances enrollment growth, demand, and stakeholder feedback. B&D recommends a dining seat program of 1,700, with 1,200 seats of fast casual and 500 seats for AYCTE. This new program is approximately five seats below the existing seat count, but the redistribution of seats for desired meal types offers an opportunity to right-size dining capacity with the evolving dining need of the campus community.

Recommended Dining Plan						
	Existing Seats	Future AYCTE	Future Fast Casual	Future Total		
Commons	740	-	-	12		
Sadler	665	500	50	550		
Marketplace	300		350	350		
New Dining	-	700	100	800		
	1,705	1,200	500	1,700		

DEMO NEW RENO NEW (49) RENO **DEMO DEMO** (57)(343)OUT (387)OUT RENO **NEW** GGV (428)PHASE 3 Spring 2022 Fall 2032 **Building Conditions** Demo / Remove Major Renovation Required

RECOMMENDED PHASING PLAN

Figure 38: Phasing Plan (Spring 2022 – Fall 2032)

Focused Renovation Required Reno Not Required

SHORT-TERM (PHASE 1)

Renovation of historic residence halls in need of immediate systems replacements: Monroe and Old Dominion

The Project Team identified the residence halls with the most immediate renovation needs to be Monroe and Old Dominion, both historic/pre-war buildings with limited or no air conditioning or mechanical ventilation. In addition to the MEP/FS needs, it is anticipated that the scope of renovations would also include some program changes to de-densify triple occupancy rooms, and add student amenity and lounge space. It is not anticipated that the major renovations of these facilities would be able to be completed over a summer timeline and would therefore involve taking the buildings completely offline for an entire academic year while the work is being completed. As of the date of this report, design work for these halls is currently underway. Monroe Hall is scheduled for completion in time for a Fall 2024 reopening, and Old Dominion is scheduled for the following Fall of 2025.



Figure 39: Existing Ground Floor Level at Old Dominion



Figure 40: Concept Design for New Ground Floor Level at Old Dominion (VMDO)



Figure 41: Existing Attic Level at Old Dominion



Figure 42: Concept Design for New Attic Level at Old Dominion (VMDO)

2. Development of new housing adjacent to the existing Lemon and Hardy Halls

The scale of reinvestment and replacement housing necessitates the creation of net new beds early in the phasing plan to leverage as swing space as residence halls and complexes slated for demolition come offline. The existing Lemon and Hardy residence halls were completed in 2006 by Clark–Nexsen/Sasaki (design team) and W.M. Jordan (contractor) and were intentionally designed in the colonial style to ensure the new construction blended with the historic architectural aesthetic of the campus and surrounding neighborhood. Given the prominent location along Jamestown Road and site synergies with the adjacent halls, the plan anticipates that the new Lemon-Hardy Project will also contain approximately 200 student beds in a similar style to complete the third side of the triangle with the existing Lemon and Hardy Halls. It is anticipated that W&M will enter into a ground lease agreement with a development partner who will then complete the development and, potentially, operate / maintain the facility. At the conclusion of the ground lease term, the facility would revert back to William & Mary. W&M is currently considering a Fall 2025 occupancy for the Lemon-Hardy Project, but is exploring options to deliver the project for a Fall 2024 occupancy opening, potentially by leveraging the existing design drawings for Lemon and Hardy Halls.

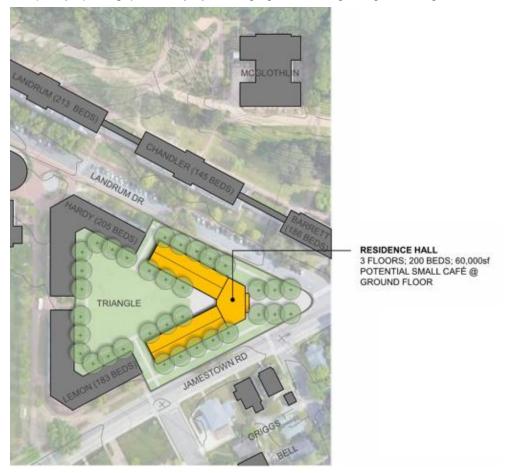


Figure 43: Conceptual Site Plan for New Lemon-Hardy Residence Hall (VMDO)

3. Redevelopment of the Yates Hall site to deliver on "West 1": new housing and dining

Following the prioritization of the historic halls and Lemon-Hardy project, the Project Team explored redevelopment options for the halls slated for demolition/replacement, and identified the Yates Hall and Randolph Complex sites, generally referred to as the West Woods, as the first logical focus area. The midcentury Yates and Randolph buildings were coined for demolition and replacement based on a few key factors: (1) while they have air conditioning, lack of proper ventilation systems has led to significant air quality concerns; (2) the renovations required would likely be more expensive and cumbersome than a full demolition and replacement; (3) the site lends itself to a higher density of housing, allowing for swing space to alleviate pressure on the rest of the system as enrollment grows and more halls are taken offline for renovations, and has natural synergies with other student life functions on campus. Because it borders Student Life, Historic, Academic, and Recreational campus use precincts, site development can strengthen linkages of these distinct precincts, while helping to establish the West Woods itself as a memorable campus center of activity.

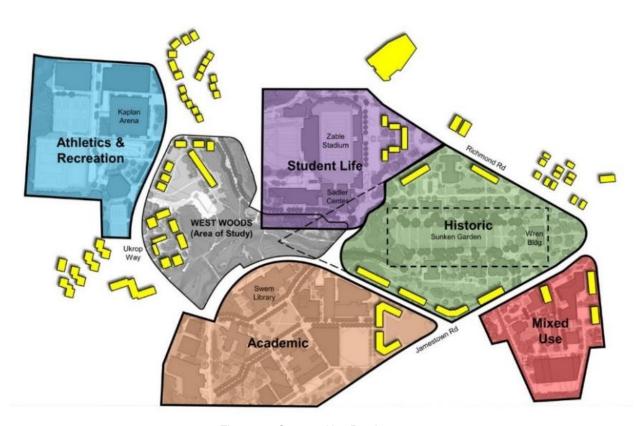
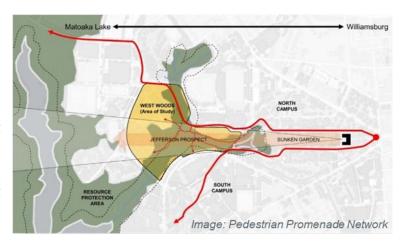
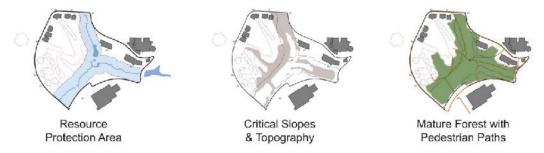


Figure 44: Campus Use Precincts

Recent campus improvements, informed by the Campus Master Plan, have prioritized two primary campus pedestrian promenades that extend westward from the historic Wren Building and Sunken Garden to connect the campus together. Forested trails through the West Woods area are popular student circulation routes that enjoy the unique landscape of the Resource Protection Area's seasonal



foliage, topography, ravine, and streams. The test fit study should carefully feature these naturalistic resources while ensuring their ongoing preservation and enhancement – avoiding critical slopes, trees, and honoring the 100' stream setback.



The test fit to replace Yates Hall and the Randolph Complex includes 1,100 beds and new 800 seat dining facility. A new two-story dining hall is proposed in the area of the existing Yates parking lot, along a forested edge. Part landform and part promontory, a lower level and eastern dining hall entrance faces the adjacent Student Heath Center, Wellness Center, and expanded Sadler Center. A pedestrian bridge connection across the ravine would aid accessibility between the dining hall and this Student Life center substantially. An upper level and western dining hall entrance faces Ukrop Way. Discrete yet convenient service access to the dining hall is provided from the north via Gooch Drive. The new dining hall is imagined to have a vibrant interior environment, characterized with transparent connections to the adjacent woods, and terraced theatre-like exterior dining opportunities. In the evening, the dining hall could serve as a soft lantern-like beacon for pathways through the West Woods.



Like a village, landscape and architecture are equally important. The architecture frames the landscape, and in turn, the landscape articulates the architecture. The new residence halls for the test fit are arranged into residential neighborhoods where a mix of age-classifications can be organized. While remaining flexible, the test fit includes a mix of traditional rooms, semisuites, and full suites, arranged to provide a balance of architectural order and variety. The buildings are each four-stories in height, and require careful integration with the topography to appropriately scale to campus.

Phasing for the project is imagined in three distinct phases, totaling 1,500 beds. Phase I requires demolition of Yates Hall and provides 700 beds as traditional and semi-suite units. Phase II requires demolition of the Randolph Complex to provide 400 beds as semi-suite and suite units. 1,100 beds total, for Phases I and II, are illustrated in the test fit. Phase III, to provide 400 beds of semi-suite and suite units, is imagined at either the Green & Gold Village site, Botetourt Complex site, or the Commons Dining site – three equally intriguing possible locations that provide flexibility for the campus' future programmatic needs.



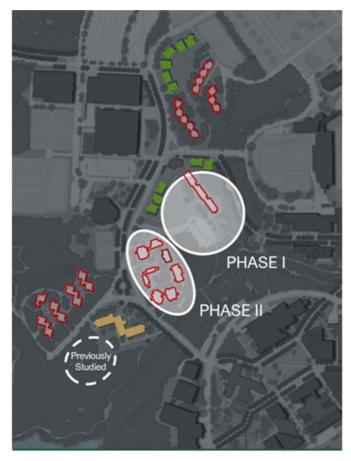


Figure 45: Recommended Housing Plan – Phased Strategy

The site identified for redevelopment requires demolition of Yates Hall and the Randolph Complex, while maintaining and including House 620, House 630, House 640, the Community Building, House 660, and House 670. Instead of a suburban character of isolated buildings within the landscape, new development of the site intends to bring an overall sense of organization where new buildings work together to create and frame new public landscape spaces, strengthening an overall campus cohesion along the continuum from the historic center to Matoaka Lake.

It is recommended that Yates be taken offline in Fall 2023, and accounting for two years of design and construction, new Phase I housing and dining could be delivered in time for the Fall 2025 term. In alignment with the new West 1 beds coming online in Fall 2025 (net addition of 476 beds), West 2 would then follow with the demolition of Randolph (343 bed loss) and the delivery of 400 semi- and full-suite units on the southern portion of site.

Phase I - Yates Hall and adjacent parking lot

Yates provides the least impact to the housing system inventory and offers the maximum replacement value. The demolition of Yates would remove 259 beds from the inventory but allows for up to 700 replacement beds in traditional and semi-suite unit configurations. Additionally, given its dependency on Randolph's utilities, it is imperative that Yates comes offline before Randolph to avoid spending unnecessary money on temporary utility connections.

As part of Phase I, the plan also includes the integration of a new 50,000-sf, 800-seat dining hall to replace the adjacent Commons Dining. Demand analysis for the three dining halls across campus shows that while the existing seating capacity meets the university's needs, Commons Dining is too distant from the core academic campus to adequately participate in peak lunch demand. A replacement dining facility, if located toward the eastern side of the area of site study, would be most effective in serving lunch and dinner alike.

Enhanced pedestrian connections to a new dining hall would improve physical, as well as perceived, proximity to the heart of campus.

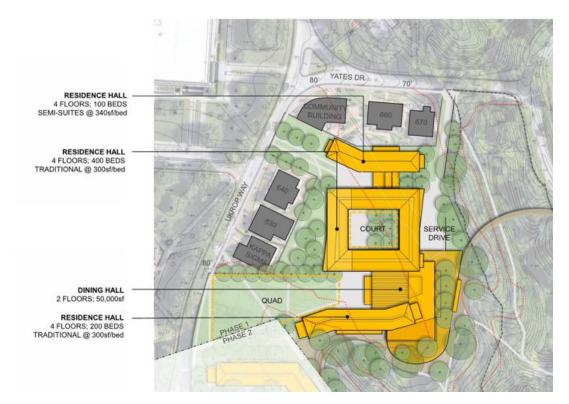


Figure 46: Conceptual Site Plan for New West 1 Housing and Dining (VMDO)

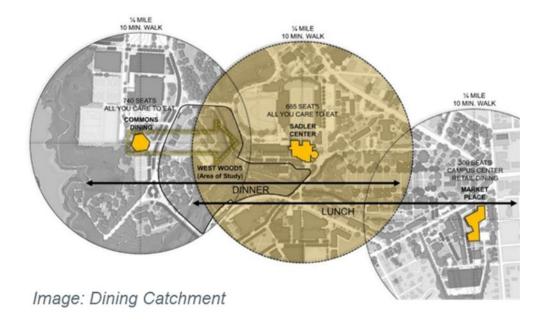


Figure 47: Dining Catchment

4. Demolition of Green and Gold Village and Commons Dining Hall

The holistic building systems and other space use renovation needs at Green & Gold Village make demolition and potential redevelopment, rather than renovation, the more logical option from a fiscal and programmatic standpoint. With the swing space capacity created by the new West 1 development, the University can demolish Green and Gold Village and the Commons Dining Hall, and repurpose the land for new uses, potentially as site(s) for new housing as part of West 3.

5. Clear Campus Center site for redevelopment

The Campus Center site, which sits at the prominent intersection of Richmond Road, Jamestown Road, and Boundary Street, is positioned as the gateway to W&M's campus from the adjacent Colonial Williamsburg. With many existing Campus Center tenants already moved or planning to move into the newly renovated Sadler Center, the building will be mostly vacated by the Summer of 2022, and the University saw a larger opportunity to reimagine the entire Campus Center Precinct and incorporate it into the Housing and Dining Master Plan effort. This scope includes the demolition of the Campus Center itself, as well as the adjacent Reves, Willis, and Hunt residence halls.

6. Repurpose residence halls/sites to a higher and better use: Brown Hall

With no central air conditioning or ventilation, the historic pre-war Brown Hall needs major renovations. Brown Hall is located on the far eastern edge of campus, across N. Boundary Street from the historic campus core, and after conversations with university administrators, as of the date of this report, Brown is being considered for a higher and better use as a University asset as administrative office space. Given the ongoing space use and campus planning initiatives underway, these assumptions are still subject to change.

7. Expansion of fast-casual dining offerings in the Sadler Center

While the new dining facility is still under development in the West 1 plan, there are some immediate changes that can be made at the Sadler Center to right size dining offerings at peak lunch times, and better position Sadler to remain desirable once the new dining facility comes online. Given Sadler's central location, and colocation with other administrative offices and student services in the student center, there is an opportunity to convert the existing AYCTE model into a hybrid AYCTE and fast casual operation. This will not only respond to student demand and help reduce overcrowding during lunch but has the potential to increase additional faculty and staff participation as well. W&M already expanded its offerings this past year with the development of Sadler Express, a fast casual dining option, to mitigate capacity concerns during the COVID-19 pandemic. Sadler Express was well received by students, and the Project Team recommends making the offerings a permanent part of the Sadler operations. In response to student demand for local off-campus partnerships and expanded branded retail offerings, enhanced programming

in the Sadler Dining Hall to include local restaurant pop-ups and guest chefs could also bring renewed excitement to the facility while accommodating the fast casual lunch preference. Adjusting meal plans to incorporate meal exchanges or use of "swipes" at the fast casual locations would provide additional value to students.

MID-TERM (PHASE 2)

1. Redevelop the Campus Center Site for new Housing, Dining, Bookstore, and Admissions

The Campus Center site, which includes the Campus Center itself, as well as the adjacent Reves, Willis, and Hunt residence halls, will be demolished and cleared as part of the Phase 1 efforts. The redevelopment proposed in this plan includes approximately 300 new beds, a 35,000 square foot dining hall, a student commons, new bookstore, and admissions space. These efforts will likely be closely coordinated with Colonial Williamsburg and the planned development across S. Boundary Street.

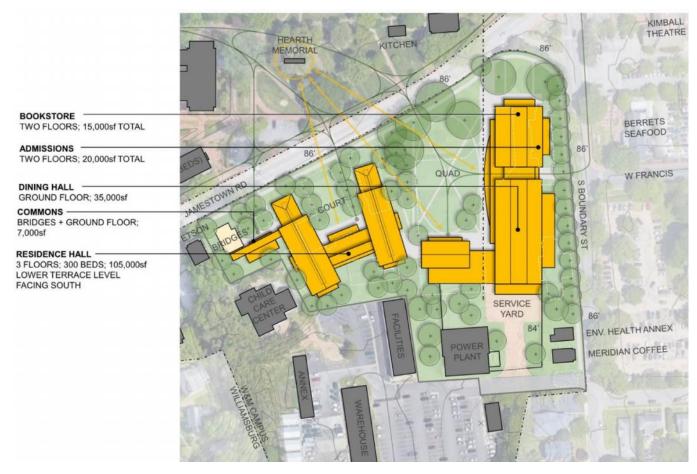


Figure 48: Conceptual Site Plan for Campus Center Redevelopment (VMDO)



Figure 49: Campus Center and Lemon-Hardy Adjacency Rendering (VMDO)

2. Redevelopment of the Randolph Complex Site to deliver on "West 2": new housing

Building on the concepts outlined in the West 1 plan above, West 2 is the second phase of the comprehensive West Woods redevelopment plan. Phase II includes the demolition and redevelopment of



Figure 50: Conceptual Site Plan for New West 2 Housing (VMDO)

the Randolph Complex. The existing Randolph Complex comprises of residential buildings, centered around a central Commons. Each of the buildings has extensive deferred maintenance and have been the subject of ventilation and air quality concerns. The Commons is the only building with proper ventilation and given the heightened focus on health and well-being during the COVID-19 pandemic, the Project Team determined the building systems were at the end of their useful lives and recommends demolition and redevelopment of the Complex. From a building energy and sustainability standpoint, the redevelopment plan reduces the total number of individual buildings, creating efficiencies with maintenance and housing operations. Following the development of West 1 at the former Yates site to the north, West 2 would include the demolition of Randolph (343 bed loss) and the delivery of 400 semi- and full-suite units on the southern portion of site.

3. Redevelopment of Richmond Hall and New Off-Campus Property

Richmond Hall, formerly a Days Inn hotel, was acquired by the William & Mary Real Estate Foundation ("WMREF") in 2017, and is operating as a residence hall under a special use permit from the City of Williamsburg through August 2027. The Real Estate Foundation leases the space Housing for the beneficial use of the 176 beds currently on the site. Given the condition of the building and the anticipated expiration of the special use permit, the Real Estate Foundation is currently exploring redevelopment options for the site and adjacent parcels after the Fall 2026 / Spring 2027 academic year. Redevelopment options include new apartment-style housing, with potential for upper division undergraduate and/or graduate students, to come online in Fall 2028 at the earliest.

In addition to Richmond Hall, the WMREF is exploring options to develop another off-campus property, though as of the date of this report, this plan remains in a conceptual phase. The phasing plan assumes the addition of 200 beds in the mid-term.

4. Repurpose residence halls/sites to a higher and better use: Ludwell Apartments

Given the location of Ludwell Apartments far from the campus core and center of the residential experienced, the Project Team recommends repurposing this asset/site for a higher and better use as another University asset, and decommissioning the Ludwell Apartments from the on-campus undergraduate inventory.

5. Renovation of One Tribe Place

One Tribe Place, formerly the Williamsburg Hospitality House hotel, was purchased by the University in 2013 and sits just north of campus along Richmond Road. The original building has been renovated and is occupied, but the 1984 addition is not able to accommodate student rooms due to its condition. William & Mary is currently evaluating a renovation to bring the original building up to current code and to potentially address concerns with the building façade. The University is also exploring the potential to redevelop the back portion of the site to add additional bed capacity. Given the ongoing space use and campus planning initiatives underway at the time of this report, these assumptions are still subject to change.

LONG-TERM (PHASE 3)

1. Demolish Botetourt Complex

For many of the same reasons as the recommended Randolph and Green & Gold Village demolitions, the holistic building systems and other space use renovation needs at the Botetourt Complex make it a prime candidate for demolition. While the site can be used as an option for redevelopment, given its location on the fall southwestern side of campus, the Botetourt Complex can be somewhat isolated from the rest of the housing areas, and far from core student services and academic buildings. For this reason, the Project Team recommends returning the land into an open green space or extension of the adjacent forest.

2. Develop "West 3": housing (at GGV or another site yet to be determined)

Following the phasing plan for the redevelopment of the Yates and Randolph sites, the Project Team explored redevelopment options for the other halls slated for demolition/replacement. Like Randolph, the holistic building systems and other space use renovation needs at Green & Gold Village make demolition and redevelopment the more logical option from a fiscal and programmatic standpoint. If GGV does not remain feasible as a campus housing location, the Botetourt or Commons Dining Hall sites are also possibilities.

Given the bed count loss from the dedensification of some halls, recommended demolition of most of the major complexes, and removal of other halls from the system to serve a higher and better University purpose, there remains a need for an additional 400 beds to meet campus demand. With the landscape topography, proximity to other campus amenities, and site capacity, the Project Team recommends the redevelopment of the GGV site to include 400 new beds of semi-suite and full-suite units for upper division undergraduates. In addition to accommodating bed demand, this unit type breakdown also adds suite units into the inventory to move the University into closer alignment with the development continuum.

3. Renovate residence halls in need of system replacements and upgrades: Barrett, Jefferson, Bryan, Sorority Complex, Graduate Complex

Spanning across the historic/pre-war, post-war, and mid-century eras, the long-term plan should focus on the residence halls in need of targeted renovations. Unlike the other historic / pre-war buildings that were prioritized as part of the short-term plan, Barrett and Jefferson have had air conditioning systems added, although they both still lack mechanical ventilation. Bryan Complex has also had some renovation work completed, and therefore the Project Team recommends a focused renovation for each to best leverage the investments that have already been made. In addition to facility and building systems upgrades, it is anticipated that the scope of renovations would also include some program changes to de-densify triple occupancy rooms, and add student amenity and lounge spaces. Given the scope of the renovations, it is

not anticipated that the major renovations of these facilities would be able to be completed over a summer timeline and would therefore involve taking the buildings completely offline for an entire academic year while the work is being completed.

The University's sorority housing needs a range of moderate to heavy upgrades and renovations, and because the timing of these renovations are largely dependent on donor contributions to offset some of the costs the University contributes to the projects, these projects should be completed on a house-by-house basis as funds become available. The phasing plan accounts for roughly \$30M of investment in the sorority houses from W&M over the next 10-15 years, but does not specifically account for phasing of the sorority houses coming on and offline as part of the system-wide capacity.

The Graduate Complex has had recent reinvestment, but needs additional work to address all outstanding deferred maintenance. While it is not a priority focus as of the date of this report, it is anticipated that the facility will require additional investment in the longer-term timeframe of this ten-year plan.

4. Demolish DuPont Hall

Given the outstanding deferred maintenance and building conditions at DuPont Hall, the Project Team recommends demolishing the building returning the land into an open green space or extension of the adjacent forest, aligned with the above recommendations for the Botetourt Complex.

Preliminary Financial Analysis

In order to ensure project feasibility, the Project Team initially developed a comprehensive, integrated financial model to test the performance of individual projects along with the existing William & Mary housing & dining systems. The model incorporated capital cost allocations, projected revenues, operating expenses, and debt payments. Individual variables were flexible to allow for testing of financial performance under multiple scenarios.

FEASIBILITY

As of the date of this report, the resulting preliminary financial analysis indicated a total project cost of \$684 - \$784M, broken down into the following project buckets:

Phase 1: \$234MPhase 2: \$350M

Phase 3: \$100-200M

Financial estimates were provided by VMDO Architects in collaboration with their subconsultant, Forella Group, LLC. Neither the housing nor dining auxiliaries could carry the cost of this plan assuming their operating conditions and financial positions. Note that these cost estimates are provided as of the date of this report, with inflation and supply chain backlogs facing constant market impacts and fluctuations. These estimates reflect an increase over the draft budgets modeled in the Project Team's comprehensive financial model shared with the University in the Summer of 2021, and are subject to change as market dynamics continue to shift.

After the detailed proformas were shared with University leadership, it became apparent the Plan would require a combination of financial levers to ensure feasibility. The Team identified the following levers as key components for implementation:

- Increase revenue: One way to ensure financial viability is to increase revenue across both systems (e.g., rental rates, meal plan pricing, etc.). In housing, this potentially includes annual rent rate increases, premiums for newly construction / renovated halls, and / or increasing non-rental revenue (e.g., application fees, summer camps, etc.). For dining, this could include increases to meal plan pricing and expansion of voluntary participation.
- <u>Decrease expenses</u>: Another way to obtain financial viability is to assess the current operating
 categories carried by each system and identify potential areas of savings (e.g., labor, departmental
 transfers, etc.).

• Incorporate alternative financing strategies: Implementing a variety of creative funding solutions can also ensure Plan feasibility. Such solutions can include taking advantage of historic tax credits, partnering with university foundations, implementing a campus-wide fundraising campaign, and / or receiving a contribution from the dining operation as a result of contract negotiations.

RECOMMENDED HOUSING SOLUTION

The Project Team outlined the following levers as potential solutions for ensuring financial feasibility of the housing plan:

- 1. Annual rental rate increase: The Plan will require higher rental rate increases in the beginning of the plan, which can taper off YOY through FY51 as the existing debt service expires (currently totaling approximately \$140M, with payback scheduled through FY40).
- 2. Premium for new housing: The Plan will also require the implementation of a rental rate premium for new/renovated halls, in addition to the annual rental rate increases. The Project Team recommends a 10-15% premium range but this will need further study as the school needs to develop a self-sustaining P3 project. For comparative context, the University currently employs an 11% premium on recently renovated halls like Hardy and Lemon.
- 3. Reduction / removal of departmental transfers: The Housing operating budget currently supports approximately 15 salaried positions that fall outside of the department, including but not limited to the first-year experience, student affairs, and the campus post office. These salaries total about \$820k annually.
- 4. Historic tax credits ("HTCs"): Given the University's legacy and proximity to historic districts, there is an opportunity to leverage historic tax credits to partially fund some of the renovations to older housing facilities. While Virginia state HTCs can fund up to 25% of qualifying project expenses, and Federal HTCs can fund up to 20% of qualifying project expenses (up to 45% of total qualifying costs). To qualify for Federal HTCs, the buildings will need to be listed on the national registry, or as a contributing building in a historic district, where as the qualification for the use of Virginia HTCs only requires that the property be deemed eligible for listing by the Virginia Department of Historic Resources (Virginia's state historic preservation office).
- 5. State campus infrastructure funding: Given the scope of the new Phase I, II, and III development on the current Yates, Randolph, and GGV sites, it is anticipated that the new projects would require changes and integration into existing campus pathways, walking, and driving routes. As such, there is a potential capital contribution from the Commonwealth of Virginia for the new projects to assist with campus infrastructure changes. Further, alternative funds to support green energy initiatives should also be explored as part of this plan.

6. Fundraising campaign: Capital campaigns are a great way to advance strategic initiatives of large magnitude. The Project Team recommends leveraging the Office of Advancement and Alumni Relations to develop a capital campaign for the reinvestment of the housing program.

RECOMMENDED DINING SOLUTION

The Project Team outlined the following levers as targeted solutions for ensuring financial feasibility of the dining plan:

- 1. Meal plan rate increase: As outlined earlier in this report, William & Mary has room in the pricing model to expand in the future and still remain aligned with its peer institutions, the price points must be aligned with program quality to create a value proposition for students. To offset some of these costs being passed directly to students, the University should also consider:
- 2. Reduction / removal of departmental transfers: The Dining operating budget currently supports multiple payments to student affairs to subsidize Sadler Center operations, including the continuation of an expired bond subsidy payment and a rental payment for the beneficial use of the Sadler Center Court dining program. The Project Team recommends William & Mary reconsider the allocation of these payments to allow the funds to remain within the dining program for reinvestment.
- 3. **Contractor capital contributions:** William & Mary's existing contract with Sodexo is on 1-year renewal cycles through June 2026. The University could open a solicitation to the market, and either reselect and renegotiate with Sodexo, or change to another dining operating partner. In either scenario, the ability of the University to leverage the contractor's balance sheet for capital contributions should be considered.
- 4. Utility cost savings: While not necessarily a strategy, it is anticipated that the replacement of the Commons Dining Hall with the new Phase I development will result in utility cost savings from transferring operations from a facility with inefficient building envelope and mechanical systems to a modern building designed with energy efficiency and sustainability in mind. These savings will be realized as part of the dining operating budget, and therefore will allow more funds to remain within the dining program for reinvestment.