

February 2020

# **NORTHWEST COLLEGE**

## **Powell, WYOMING**

### **Housing Master Plan Summary**



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## **I. Executive Summary**

There have been several campus master plan and residential housing reports written in recent years for Northwest College, ranging from 2008 – 2019. These reports have documented the condition of Northwest’s on-campus housing inventory, reviewed projected enrollment trends, and recommended residence hall maintenance, improvements, and alterations. This housing plan summary consolidates the information listed in the previous reports in a concise and useful manner, creating a road map for the College to follow over the short, medium, and long term.

Creating a plan that is both forward-looking and functional is critical to Northwest College. During our work on this project, time was spent thinking about the Campus 20+ years into the future. Balancing residential student living and academic needs were considered as part of the flow and needs of the College. Consideration of current building conditions and deferred maintenance needs also played a critical role in creating recommendations. The committee analyzed existing residential and academic utilization and facility needs, as well as existing building conditions to develop options for various rates of campus growth and funding availability. Building on the most recent 2019 Scion report, we modified the most conservative Scenario III (“Forward-Thinking Conservative”) and overlaid it onto a 20-year timeline, lining up project milestones with their impacts on bed capacity, unit mix, and occupancy rates. Since Scion’s report was issued, we have received current occupancy counts from 2018 and 2019 that indicate a significant decrease in occupancy rates. We have adjusted the occupancy counts, and we have analyzed a range of more conservative growth rates, including 0%, 1%, and up to 2%. We have also indicated a 10% occupancy buffer above and below each trendline, allowing for fluctuations in enrollment with the business cycle or during a recession. Our findings show that short-term and mid-term project milestones are consistent between 0% and 2% occupancy growth (please see the following pages for details and graphs).

In the short term, we make the following recommendations. In all cases, we recommend a continued commitment to Simpson Hall as the newest building. Completion of the Trapper Main renovation is also key to maintaining onsite apartment-style units in the Short and Mid-term. Completing a review of inventory mix, location, existing infrastructure, and affordability factors pointed to a continued investment in the refresh of Ashley Hall. In contrast, historical, current and future projections point to divesting in Trapper West. Although it contributes apartments into the unit mix and serves as employee housing, the current overall campus occupancy rate of 66% is too low to be sustainable. Likewise, historical occupancy, coupled with recent strong declines, suggests Cody, Colter and Lewis & Clark should be reviewed for elimination or repurposing.

In reviewing past reports and completing the analysis for long term planning, HCM utilized the expertise of cost estimator, Cumming, cost per square foot data from local contractors,

along with cost estimators from the Big Horn Basin. Previous cost estimates have been escalated to today's dollars to align project proposals with current costs. As always, formal cost estimates would need to be completed as part of project planning closer to the start date of a project.

When considering the recent investments made over the past five years, coupled with enrollment declines and limited reserves, divesting in Trapper West could provide funds to make immediate improvements to the existing housing inventory. Utilization of some reserves should be considered to jump-start projects while assets are divested.

In our analysis, the extensive level of water damage to Cody Hall, coupled with strong enrollment declines, suggests an investment in Cody Hall would be costly to renovate to meet current building codes and meet student housing preferences. Instead of renovation, we recommend demolition, and new landscaping in its place in the campus core at a cost range of about **\$180K – \$350K**. Meanwhile, improvements to Ashley Hall, estimated at **\$1.3M**, would attract cost-conscious traditional students. The combination of demolishing Cody and selling Trapper West helps raise the occupancy rate above 73%. An optimal occupancy rate identified by Scion approaches 95%; however, for this study, we have targeted a short-term occupancy rate of 80% and a mid- to the long-term target of **90%**. This ultimate goal of 90% occupancy is lower than Scion's 95% recommendation to allow for a 10% buffer that can absorb fluctuations of increased enrollment over the business cycle or during a recession.

In the mid-term, to align with student housing preferences, we recommend rebalancing the unit mix with more apartments located on campus that would offer greater appeal to non-traditional students. As current enrollment projections indicate, non-traditional student numbers are expected to increase while traditional student numbers are expected to remain flat or decline. To achieve this rebalancing of the unit mix, we suggest renovating Lewis & Clark Hall (L&C) into apartments for about **\$7.0M**. L&C offers a floor plate width that can support double-loaded apartments. We also investigated converting L&C to academic space. Please see Appendix B for more information. Due to the L&C renovation, Colter Hall would need to be brought back online temporarily to serve as swing space, and at that time, it could be refreshed for about **\$150K**. After L&C construction is complete, Colter could be maintained as administrative swing space for another **\$3.5M** (please see Section IV "Fixing Deferred Maintenance" for details). At that time, the total capacity would be **442 beds** and the **unit mix would be balanced** between double rooms, suite singles, and apartments at about one-third each.

The longer-term outlook beyond 2030 is less clear. Depending on actual occupancy growth, we concur with Scion that building new apartments may be appropriate on campus. If growth rates are at least 1%, then the first phase of new apartments could be built on campus with 72 beds around 2030 for about **\$11.0M**. If growth rates approach 2%, then a larger, second phase of new apartments could be built on campus around 2035 to increase housing capacity further or to replace structures that have aged beyond their useful life. If no occupancy growth occurs, then no new apartments would need to be built. Given the uncertainty around these

scenarios, we advise that enrollment and occupancy growth rate projections be assessed regularly to help track the timing and scale of any additional campus housing in the future.

The following Summary Overview, Capacity/Occupancy graph, and Upgrades/Maintenance timeline summarize the plan over the next twenty years:

### **Summary Overview:**

**Short-term(0-4 years):** The goal is to “right-size” bed counts while refreshing existing residential buildings to achieve average occupancy rates of at least 80% during the short term:

- ◆ 1 = **Renovate** Trapper Main Apartments
- ◆ 2 = **Divest** of Trapper Village West
- ◆ 3 = **Refresh** Ashley Hall
- ◆ 4 = **Demolish** Cody Hall

**Mid-term(5-9 years):** The goal is to rebalance the unit mix with more apartments located on-campus that will offer greater appeal to non-traditional students. Maintain 80% occupancy and shift to 90%:

- ◆ 5 = **Transition** Colter Hall as temporary residential swing space
- ◆ 6 = **Convert** Lewis & Clark Hall (L&C) into apartments
- ◆ 7 = **Transition** Colter Hall to administrative swing space

**Long-term(10+ years):** The goal is to accommodate occupancy growth by adding capacity for non-traditional students. Occupancy goal is 90%:

- ◆ 8 = **Evaluate to build** Phase 1 new student apartments with ~72 beds if at least 1% occupancy growth
- ◆ 9 = **Evaluate to build** Phase 2 new student apartments with another ~72 beds if at least 2% occupancy growth

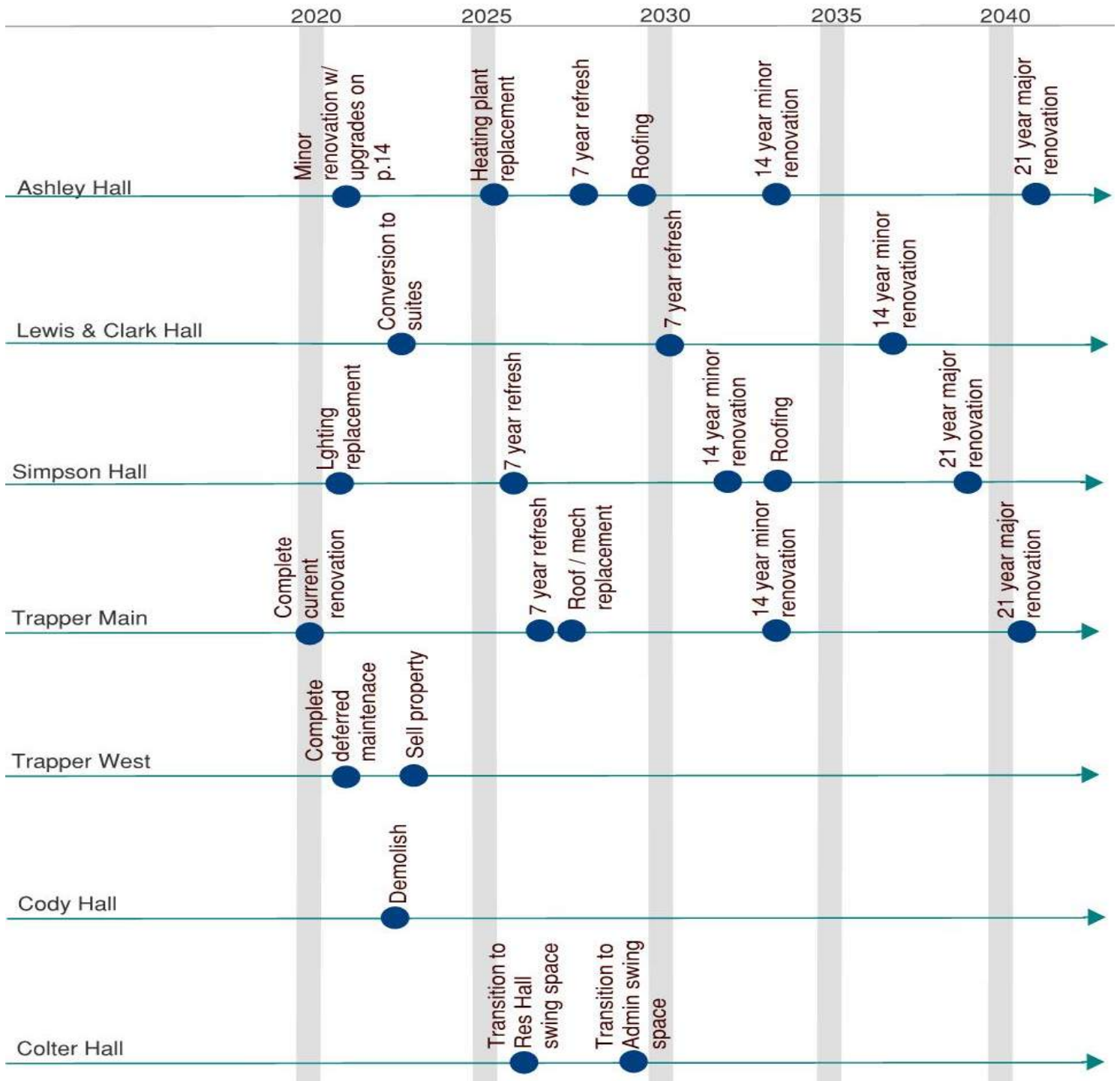


### Bed Capacity with Unit Mix vs. Range of Occupancy Growth Rates



## Residence Hall Upgrade / Maintenance Timeline

Upgrades listed on the previous page and the standard maintenance schedule for existing inventory is reflected below:



*Note – Although Trapper Village West, Colter, Cody are recommended to be removed from the long-term building stock, they will still require some short-term costs. For Trapper Village West, this may include completing deferred maintenance items to prepare the building for sale; for Colter Hall, this may involve completing deferred maintenance items to extend its lifespan for another 10 years so that it can function as a swing space; and for Cody Hall, these costs include demolition and site replacement costs.*

## **General Note on Accessibility Upgrades during Renovations**

Most campuses aim to increase the accessibility of their facilities over time, especially in the context of campus housing and student life. While the building codes do not try to discourage renovations by creating onerous requirements for accessibility, upgrades are mandated beyond a certain threshold of the project scope. Depending on whether or not these upgrades are technically feasible (or structurally possible), the current building codes require that when making an alteration greater than 50% of the building area, that the building in question receive the currently required clearances within typical “Type B” units. This includes sleeping rooms, bathrooms, kitchens, and other living areas that are affected by the remodel. This also includes a requirement to provide the required quantity of accessible or “Type A” units. If possible and cost-effective, during major renovations, we suggest also providing elevator access for residential buildings.

## **Demographic Trends and Preferences in Student Housing**

As a backdrop to the specific recommendations proposed in this Housing Summary, we offer the following broader context. In recent years, we have seen a few key trends emerge in traditional vs. non-traditional student demographics and their preferences, which we highlight below.

First, a large demographic shift in the **traditional student population** is underway due to delayed family creation by Millennials during the Great Recession of 2008. We expect this decrease in the traditional-student aged population (18 to 20 year-olds) to hit the higher ed sector by 2025, constraining overall enrollment growth in traditional students. Because of this macro-demographic trend, other institutions we work with have been forecasting more conservative growth projections of about **1%** over the coming years. For this study, we have, therefore, assumed a range of **0% to 2%**, centered around this **1%** benchmark for growth.

Second, we expect growth to continue among **non-traditional students**. This is especially true during economic recessions when the unemployment rate is higher, and workers head back to school to gain new skills, earn a degree, or increase their marketability. Because of this trend, we are seeing a shift in student housing preferences away from traditional dormitory-style living and more toward more privacy and independent living in apartments with kitchens and bathrooms. These apartments can be smaller; however, even “micro studios,” as Millennials and GenZ students demand less space in the digital age. In general, these smaller spaces are attractive when located close to jobs or urban centers. In the case of student housing, **apartments located on-campus** are highly desirable.

Third, even though private apartments can be more compact, both Millennials and GenZ are expressing greater preferences for **shared amenities**, including laundry facilities, floor lounges, and study space. These preferences were reiterated by the 2014 Housing Master Plan Update. When renovating existing buildings, careful attention should be paid to programming for and enhancing these shared amenities when possible.



Finally, when bathrooms are shared in the traditional dormitory setting, both generations are more accepting of **gender-neutral options**. Gender-neutral baths can be provided in a couple of different ways. For common spaces, a pair of unisex restrooms accomplishes this aim. For residential spaces, compartmentalized private bathrooms offer more privacy but require more space and cost more to install. Another option is to reassign the traditional “men’s” and “women’s” shared bathroom facilities as “all-gender.” But this approach also entails some renovation to the baths, because the normal stall partitions are not acceptable. Within the larger room, we suggest creating compartmentalized stalls for toilets and showers with hard walls, each with its own a door, lighting and ventilation.

## II. Summary of Past Reports

The past facility assessments and master plan reports summarized on the following pages include:

2003 State Facility Assessment

2008 Campus Master Plan

2014 Campus Master Plan Update

2016 Housing Plan [Current Facilities Assessment]

2018 Housing Plan Update [Comprehensive Analysis]

2019 Campus Housing Findings [Demographic and Financial Analysis]

### **2003 State Facility Assessment**

CTA Architects performed a comprehensive facility assessment of the buildings on the Northwest College campus for the State of Wyoming in 2003. This report documented all factors about the buildings, such as a master deficiency list, an energy audit report, building condition and compliance narratives, replacement cost assumptions, and mechanical and lighting inventories. The residence halls included in this report are Ashley Hall, Cody Hall, Bridger Hall, Colter Hall and Lewis & Clark Hall. The information included in this report is still useful for square footage and building code facts.

### **2008 Campus Master Plan**

Gould Evans completed a Facilities Master Plan in 2008 for Northwest College which analyzed the overall campus infrastructure to make recommendations for future areas of growth and development, and strategies for existing facilities.

The Master Plan proposed creating a residential district at the north part of campus. Within this residential district the plan recommended the following housing improvements:

- Provide an addition to Simpson Hall to add 72 beds
- Renovate Trapper Main,
- Develop a new residential hall at the northwest corner of campus to add 160 beds

The residential neighborhood would be supported by a series of interconnected quadrangles to provide recreational areas surrounding the residential buildings.

### **2014 Campus Master Plan Update**

The campus planning team made up of Point Architects, A&E Architects, Engineering Associates, and Brailsford & Dunlavey updated the prior 2008 Campus Master Plan. This update reviewed the recommendations included in the 2008 report and compared them against 2014 enrollment trends.

Their report stated that a new residence hall:

***“was listed as a priority in the 2008 Master Plan but no timeframe was established. Having evaluated the occupancy numbers and the enrollment projections for the college, we see no immediate justification for this project. We do, however, concur with the recommendation that space be preserved in the northwest corner of the campus for a future residence hall to be built when demand increases or Colter Hall is demolished or repurposed.”***

Instead of new construction, Brailsford & Dunlavey recommended that FF&E, finish refreshes, and building system replacements occur on the following schedule:

- 1) FF&E replacement on a five (5) year cycle,***
- 2) Finish refreshes for residence halls on a ten (10) year cycle, and***
- 3) Building systems replacement on a twenty (20) to thirty (30) year cycle.***

To fund the above schedule, they recommended that several financial reserves be created to cover:

- 1) Working capital reserves for operations and FF&E replacement in the residence halls on a regular basis,***
- 2) A capital development fund reserve to allocate towards future project costs,***
- 3) Renewal and replacement transfers for large maintenance and repair projects, and***
- 4) A catastrophic event fund.***

### **2016 Housing Plan**

In 2016, Point Architects took a deeper dive into the condition of each residence hall. Their report included suggestions on necessary maintenance, as well as aesthetic and accessibility improvements. Design ideas were also included to improve these factors, with a focus on improving building entrances.

The report reiterated the need for an overarching maintenance schedule of FF&E replacement on a five-year (5) cycle, and residence hall refreshes on a ten-year (10) cycle and building systems replacement on a twenty (20) to thirty (30) year cycle.

### **2018 Housing Plan Update**

The team of MOA Architects, The Scion Group, and Saunders Construction revisited the housing plan once more in 2018. This report included useful survey feedback from the students. They indicated a preference for more diversity in unit types (including more suites), greater privacy, ADA improvements, more reliable laundry facilities, gender-neutral spaces, and improved lounge and common kitchen spaces.

Example floor plans of suite layouts preferred by the students were included. The 2018 Housing Plan Update does NOT recommend building new space, but rather suggests renovating existing residence hall spaces to provide a more varied dorm room inventory. Recommendations for appropriate rental rates were also included.

### **2019 Housing Update**

Most recently, the Scion Group returned to campus in early 2019 to summarize their findings from a prior 2018 Housing Plan Update. This time they proposed a few different development scenarios, suggesting that new apartment-style housing could be built in the future after Cody Hall is taken offline, Trapper West is sold, and Colter Hall is maintained as housing or repurposed as administrative space.

To justify these proposals for new apartments, Scion highlighted that students tend to prefer housing with more privacy, larger rooms, and better ADA compliance. By taking the other halls offline that are underperforming in terms of occupancy rates, these new apartments would also diversify the unit mix and help attract student residents, raising the overall occupancy rate. An occupancy rate of 95% was asserted by Scion as a goal for student housing on Northwest's campus.

To fund the new apartments, Scion stated that proceeds from the sale of Trapper West, combined with potential loan funding, could create viable financing for the future project. The P3 public-private partnership model was also presented as an alternative source of financing, although less control of the process and outcome would be retained by the College in this scenario.

### III. Road Map of Next Steps

Building on the 2019 Scion report, we extend Scenario III (the “Forward-Thinking Conservative” scenario shown on page 19 of their report) onto a concise timeline, lining up project milestones with their impacts on bed count, unit mix, and occupancy rates. The intent here is to synthesize the prior reports and create a useful road map for the College to follow over the short, medium, and long term. We have also adjusted for current occupancy rates and provided a range of long-term options depending on future growth rates.



#### Short Term Milestones – 2020 to 2024

The goal of the **short-term** milestones is to “right-size” bed counts while refreshing existing residential buildings to achieve average occupancy rates of at least 80%.

◆ 1 = **Renovate** Trapper Main Apartments

Complete renovation of Trapper Main apartments. Based on high long term occupancy rates and convenience, retention of apartment style housing is important to housing mix.

◆ 2 = **Divest** of Trapper Village West.

Selling Trapper West reduces the proportion of apartments in the overall housing mix. While increasing the variety of unit types to include more apartments is a long-term goal, Trapper West is away from campus. The sale may provide the working capital needed to demolish Cody Hall and refresh Ashley Hall.

◆ 3 = **Refresh** Ashley Hall, fixing deferred maintenance and increasing attractiveness.

Some of the proceeds from the sale of Trapper West could also be used to refresh Ashley Hall, including new carpet, flooring, lighting, restroom/kitchen finishes, and furniture. *For a more detailed cost and schedule of the deferred and ongoing maintenance items, please see Section IV, “Fixing Deferred Maintenance.”*

◆ 4 = **Demolish** Cody Hall with proceeds from the sale of Trapper Village West or reserves.

The water damage to Cody Hall requires significant investment to repair, and the building requires costly renovations to bring up to current codes. Therefore, the recommendation is to demolish the building. However, this action still incurs some cost, not only for the demolition itself but also to provide the landscaping in place of the building.

## **Medium-Term Milestones – 2025 to 2029**

The goal of **medium-term** milestones is to rebalance the unit mix with more apartments located on campus that will offer greater appeal to non-traditional students.

- ◆ 5 = **Transition** Colter Hall into residential swing space for upcoming L&C renovations.  
Colter Hall has been identified as an ideal candidate for other campus functions, including flexible administrative office space, but it can serve as swing space until then. Due to the L&C remodel, Colter Hall would need to be brought back online temporarily to serve as swing space.
- ◆ 6 = **Convert** Lewis & Clark Hall (L&C) from traditional double rooms into apartments.  
L&C offers a floor plate width that can support double-loaded apartments. The exact layout would need to be designed, but we estimate that 136 traditional double rooms could be converted into 48 apartments. Additional analysis was done and available in Appendix B.
- ◆ 7 = **Transition** Colter Hall to administrative swing space after Lewis & Clark renovation.  
Actual growth rate projections and student living preferences would need to be considered at that time.

## **Long Term Milestones – 2030 to 2040**

The goal of **long-term** milestones is to accommodate future occupancy growth by increasing housing capacity, if actual future growth rates warrant doing so:

- ◆ 8 = **Evaluate to build** Phase 1 new student apartments with ~72 beds if at least 1% occupancy growth.  
Depending on actual occupancy growth rates, building new apartments may be appropriate on campus. If growth rates are at least 1%, then the first phase of new apartments could be built on campus around 2030. We agree with the assertion in the 2014 Master Plan Update that space on campus should be allocated for future housing growth.
- ◆ 9 = **Evaluate to build** Phase 2 new student apartments with another ~72 beds if at least 2% occupancy growth.  
If growth rates approach 2%, then a larger, second phase of new apartments could be built on campus around 2035. If no occupancy growth occurs, then no new apartments would need to be built. Given the uncertainty around these scenarios, however, we advise that enrollment and occupancy growth rate projections be assessed on a regular basis to help track the timing and scale of any additional campus housing in the future.

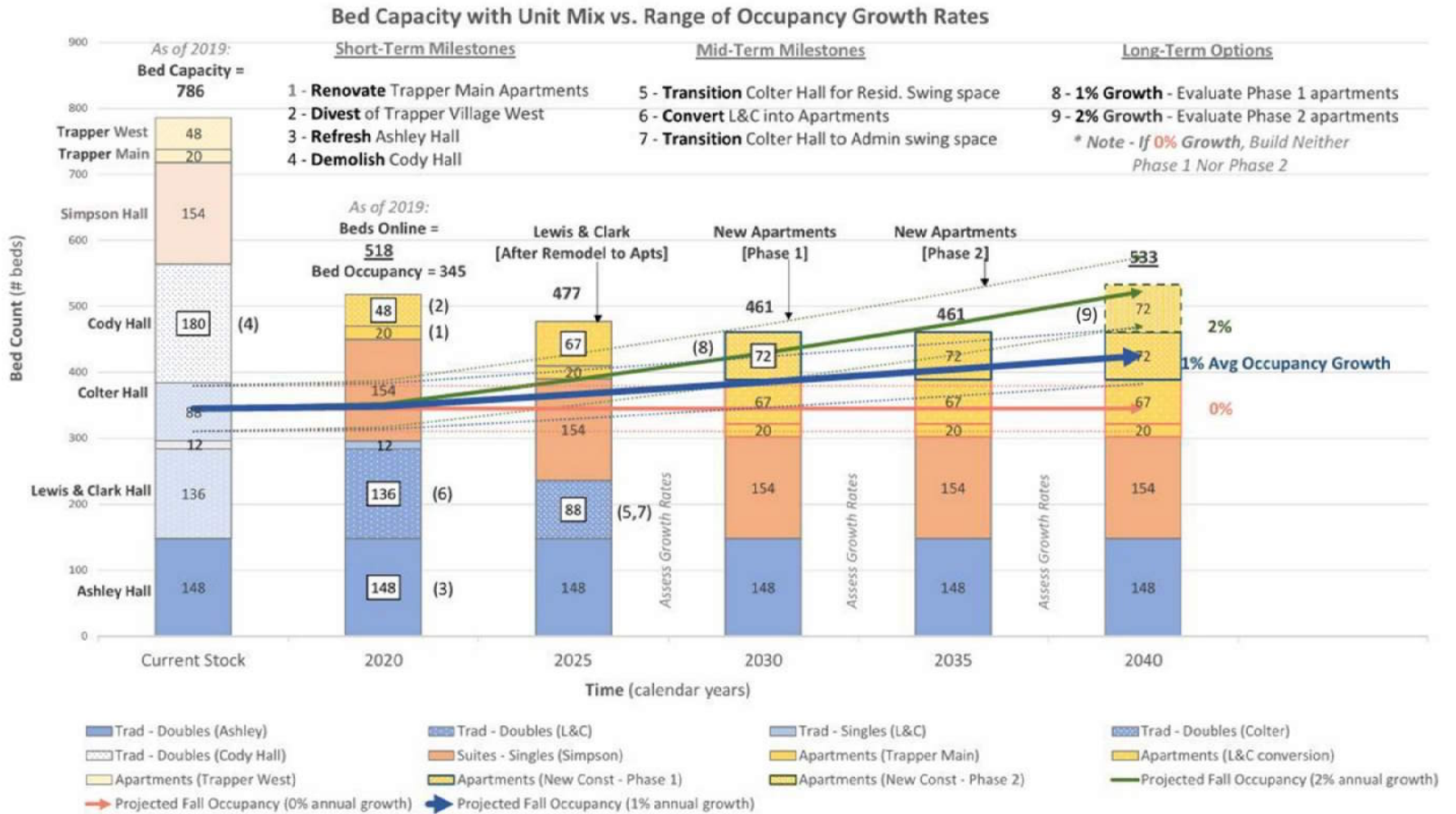
## **Discussion on Bed Capacity, Unit Mix, and Occupancy Growth Rates**

As the adjacent chart shows, in the short- and mid-term project milestones a total bed count is reduced down to **442 beds** by 2030. The result is to “right-size” bed counts, coinciding with the blue and green trend lines below. These trend lines suggest a reasonable range of occupancy growth rates of 1% and 2% respectively. At 1% growth, by 2025, projected occupancy rates have stabilized above 80%, increasing from there to exceed 85% by 2030 with the construction of new apartments. At that time, the unit mix has balanced between traditional double rooms, suite singles, and apartments, at about one-third each.

Just as the bold color trend lines indicate potential average annual growth rates, the corresponding color-coded dotted lines above and below them signify a 10% occupancy buffer. This buffer allows for fluctuations in enrollment with the business cycle and potentially higher enrollment rates during a recession. This flexibility to absorb future demand also suggests a preferred occupancy rate that is slightly lower than 95%; perhaps a goal of 90% occupancy might be more appropriate.

The longer-term outlook beyond 2030 is less clear. Depending on actual occupancy growth rates, we concur with Scion that building new apartments may be appropriate on campus to accommodate future occupancy growth. If growth rates are at least 1%, then the first phase of new apartments could be built on campus around 2030. If growth rates approach 2%, then a larger, second phase of new apartments could be built on campus around 2035, raising the total capacity to 515 beds with over 41% apartments.

Note - If no occupancy growth occurs, then no new apartments would need to be built. Enrollment and occupancy growth rate projections should be assessed regularly to help track the timing and scale of any additional campus housing in the future





## IV. Fixing Deferred Maintenance

### Cody Hall

As part of this report, the decision to renovate Cody Hall or to demolish it was analyzed. Cody Hall was closed to students in 2017 after significant water damage was discovered in the building. Irrigated sod directly up against the brick façade of the building was the cause of this damage. This water was absorbed by the wall studs and drywall, eventually developing mold. A major mold remediation plan was put into place in 2018. But the cost of this repair, plus bringing the building up to current codes, was estimated at around 2 million dollars.

This water infiltration repair, plus the larger need for mechanical systems replacement and interior finish replacement, requires an approximate investment of 10 million dollars to bring Cody Hall back online as a residence hall for students. The building's load-bearing structural system and floor plate width limit the ability to reconfigure the room layout too much more than its traditional double-loaded corridor floor plan. This configuration lends itself only to traditional single or double rooms, but not apartments – which is what we recommend to re-balance the future campus housing unit mix and appeal more to non-traditional students. **Thus we recommend keeping Cody Hall offline and demolishing it as soon as possible.**

For reference, the following chart is a more detailed list of current deferred maintenance projects in Cody, Colter and Trapper West:

Trapper West			
New LED lighting throughout	1	30,000	<b>SELL</b>
New VCT flooring in rooms and hallways	2	25,000	

Cody Hall			
Repair exterior wall, re-grade, landscape, etc	0	1,000,000	<b>DEMO</b>
Mechanical upgrades: convector unit replacement	0	90,000	
Mechanical upgrades: replace main circulator	0	20,000	
Mechanical upgrades: add DDC controls	0	?	
Electrical upgrade: new LED lighting	0	150,000	
Mechanical upgrades: boiler / AHU replacement	0	300,000	
Update restrooms / kitchens	0	200,000	
Paint	0	200,000	
New VCT flooring in rooms and hallways	0	200,000	
New carpet flooring in lounges	0	40,000	
New furniture in lobby and lounges	0	80,000	

Colter Hall			
New LED lighting throughout	1	150,000	<b>REPURPOSE</b>
New VCT flooring rooms and hallways	2	175,000	
New carpet in lounges	2	40,000	
Update restrooms / kitchens	2	150,000	
New furniture in lobby and lounges	3	50,000	

## RESIDENCE HALL UPGRADES

TIMELINE

COST \*

NOTES:

Ashley Hall			
mechanical upgrades: boiler/AHU replace	2025	350,000	
mech upgrade: DDC controls	2025	100,000	
mech upgrade: replace radiant heat in rooms	2025	42,000	
new VCT flooring rooms and hallways	2020-21	200,000	
new carpet in lounges	2020-21	60,000	
update restrooms / kitchens	2020-21	200,000	
new furniture for common spaces	2020-21	100,000	
new LED lighting throughout	2020-21	130,000	
add elevator cab to existing hoistway	2020-21	150,000	
<b>TOTAL:</b>		<b>1,332,000</b>	

Lewis & Clark Hall			
mechanical upgrade: boiler/AHU replace	2023	350,000	
mech upgrade: DDC controls	2023	100,000	
mech upgrade: replace radiant heat in rooms	2023	45,000	
update restrooms / kitchens	2023	225,000	
new furniture in lobby and lounges	2023	100,000	
new LED lighting throughout	2023	150,000	
replace windows	2023	75,000	
electrical upgrade: arc flash safing	2023	40,000	
<b>TOTAL:</b>		<b>1,085,000</b>	
<b>CONVERSION TO APARTMENTS</b>		<b>7,000,000</b>	

Simpson Hall			
Repair holes in exterior EIFS	2018	200,000	<b>COMPLETED</b>
lighting retrofit for bad surface fixtures	2020-21	15,000	
<b>TOTAL:</b>		<b>15,000</b>	

Trapper Main			
complete unit renovation	2020		<b>SOON TO BE COMPLETED</b>

Colter Hall - re-purpose as swing space			
ADA upgrades interior & exterior	2022	50,000	
restroom upgrades	2022	75,000	
kitchenette upgrade	2022	25,000	
<b>TOTAL:</b>		<b>150,000</b>	

COST \* : initial estimate to be verified by cost estimator.

### Lewis & Clark Hall – Conversion to Apartments

One of the most cost-effective and sustainable ways to create apartments on campus would be to renovate Lewis & Clark Hall. The structure and floor plate width of Lewis and Clark Hall could accommodate apartments. Since the building needs a major renovation anyway, we recommend this renovation project to create desirable apartment-style units that non-traditional students are seeking. Lewis & Clark Hall has an ideal centralized location close to other residence halls, student center, and academic buildings, making this a smart investment.

## **Ongoing Maintenance Schedule**

The 2014 Campus Master Plan Update advised an ongoing maintenance schedule of five (5) years for FF&E replacements, ten (10) years for finish refreshes, and 20 to 30 years for building system replacements. However, due to the high cost that such a tight interval would require, we are suggesting a less aggressive maintenance schedule here with a larger interval between refreshes, minor, and major renovations. A standard facility management approach to ongoing maintenance suggests a staggered seven **(7) year refresh, 14-year minor renovation, and a 21-year major renovation** cycle for existing buildings. This maintenance schedule is listed below and detailed on the following pages:

### **7-Year Refresh:**

- Paint
- Carpet (if necessary)
- Replace furniture as needed

### **14-Year Minor Renovation:**

*Items included in the 7-year list, plus the following:*

- Carpet (if not replaced at 7 year)
- MEP system parts replacement (if necessary)
- Roof patching
- Resilient flooring (if needed)
- Kitchen appliances (if necessary)
- Mattresses (for the res halls)
- Replace furniture as needed

### **21-Year Major Renovation:**

*Items included in the 7-year and 14-year list, plus the following:*

- HVAC / MEP system replacement (air handlers, boilers, etc)
- Lighting replacement
- Roofing replacement
- Restroom renovation
- Tile replacement (if not replaced at 14 year)
- Resilient flooring replacement (if not replaced at 14 year)
- Kitchen appliances (if not replaced at 14 year)
- Replace furniture as needed

## **Residence Hall Upgrade / Maintenance Timeline**

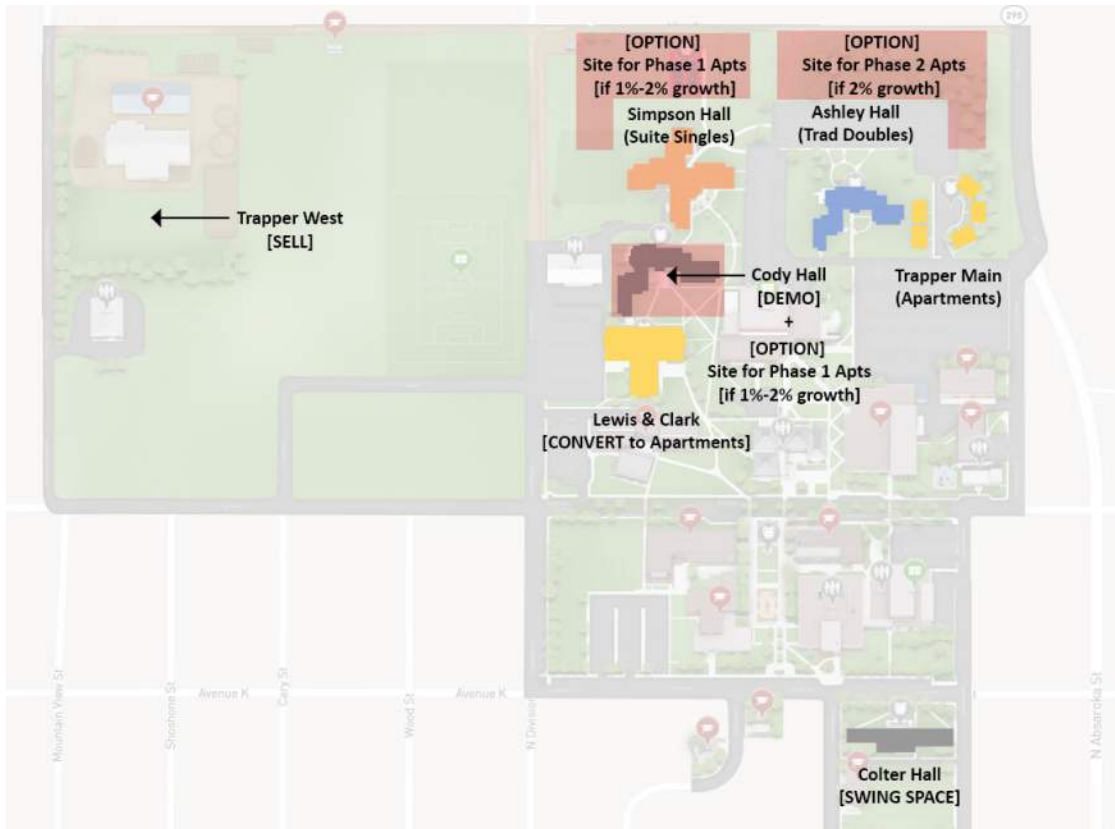
Upgrades listed on the previous page have been scheduled out with the proposed upgrades and can be seen in the Executive Summary.

## V. Conclusion

- ➔ **TRACK** housing occupancy growth rate. For this housing summary, it is assumed to be 0%-2%.
- ➔ **"RIGHT SIZE"** bed capacity to coincide with the occupancy growth rates by 2025 or 2030.
- ➔ **REINVEST** proceeds from the sale of Trapper West to refresh and remodel selected housing stock.
- ➔ **REBALANCE** the unit mix so that the housing mix appeals to non-traditional students. At least 33% of inventory should consist of apartment-style housing.
- ➔ **RELOCATE** all housing back on campus in a closer-knit neighborhood.
- ➔ **BUILD** new apartments starting around 2028 or 2030 taking enrollment growth and funding availability into account

The residence halls below are proposed to be retained, renovated, or built. New apartments may be part of the mix with a bed count below that is consistent with 1%-2% growth, clustered in a campus neighborhood.

<b>Simpson Hall</b>	154 beds	Suites (all singles)
<b>Ashley Hall</b>	148 beds	Traditional residence hall (all double rooms)
<b>Lewis &amp; Clark Hall</b>	<del>448 beds</del> 12 singles)	Traditional residence hall (136 double rooms +
→ Renovate as:	48 beds	Apartments (lowest cost conversion option)
<b>Trapper Main</b>	20 beds	Apartments
→ Build New Apts	72 beds	Apartments
<i>Total Beds</i>	<b><u>442 beds</u></b>	<b><u>Unit Mix: 1/3 each</u></b> trad. dbls, ste singles, & Apts.



**Summary of Key Findings and Recommendations:**

There have been some consistent recommendations made in the previous housing plans for the College, which support the short, medium, and long-term goals for the road map stated in this Housing Summary.

**Short-term:**

**Track** enrollment and occupancy growth rates regularly to inform decision making.

**“Right-Size”** bed counts by 2030 while refreshing existing residential building stock, raising average occupancy rates between 75% and 85% depending on growth rates between 0% and 2%, with an average benchmark of 80% occupancy with 1% growth. Start by selling Trapper West and demolishing Cody Hall.

**Reinvest** proceeds from the sale of Trapper West back into existing on-campus housing inventory by refreshing Ashley Hall, fixing deferred maintenance, and increasing attractiveness to traditional students. Also, implement a predictable maintenance schedule going forward for the remaining buildings.

**Mid-Term:**

**Rebalance** the unit mix during this period of “right-sizing” capacity by renovating Lewis & Clark Hall from traditional double rooms into about 48 on-campus apartments. This move **relocates** the beds from Trapper West back to the campus core, where they will be more

attractive to non-traditional students in a closer-knit neighborhood. Bring Colter Hall back online temporarily as swing space for students during construction, then temporarily repurpose it to be administrative space after construction is complete (depending on growth rate projections at that time). This raises the ratio of on-campus apartments to be about 19% by 2025, with occupancy rates approaching the target of 90% by 2030.

### **Long Term:**

**Build** new apartments if growth rates approach 1% or more starting around 2028 or 2030. Add one unit of approximately 72 beds (depending on growth rate projections at that time). This new housing could infill the central campus site of Cody's demolished footprint. If growth rates approach 2%, additional phases of new apartments could be built around 2035 on the site north of Ashley Hall and Trapper Main Apartments.

The deferred maintenance problem has gotten simpler by taking Cody Hall and Colter Hall offline as residence hall space. The recommended sale of the Trapper West property also helps. This leaves Ashley Hall, Lewis & Clark Hall, Simpson Hall, and Trapper Main as the remaining existing residence halls, reducing bed counts to 442 beds (including new apartment construction, if necessary).

Since the major renovation is almost complete at Trapper Main, and Simpson Hall now only requires some minor lighting replacements, this leaves Ashley Hall and Lewis & Clark as the buildings that require major investment to refresh and renovate, respectively. The \$1.3M refresh of Ashley Hall would take care of existing deferred maintenance and bring it up to a fresh finish level that would be competitive with Northwest's peer institutions and be more attractive to traditional students. The \$7.0M renovation of L&C Hall rebalances the unit with more apartments on campus and be more attractive to non-traditional students. A more detailed maintenance schedule has also been established in Section IV.

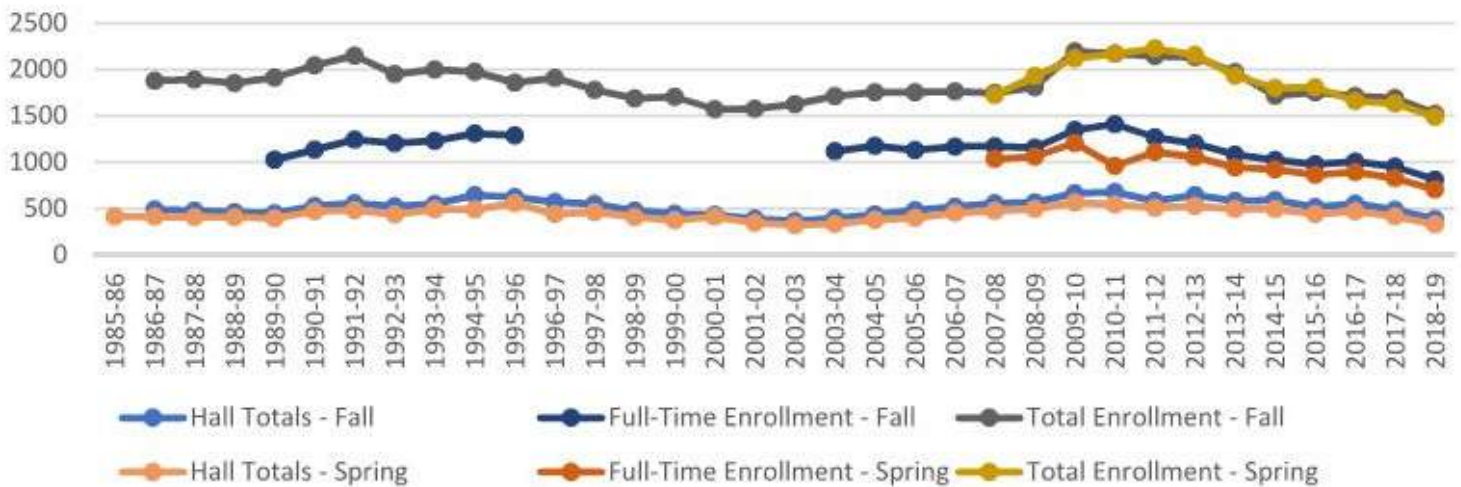
### **Next Steps:**

1. **Confirm** road map with desired budget and timeline for refresh and renovation projects;
2. **Request** estimates for this work from cost estimator and/or general contractor;
3. **Obtain** available funding, aided by the sale of Trapper West; and
4. **Begin** the design process.

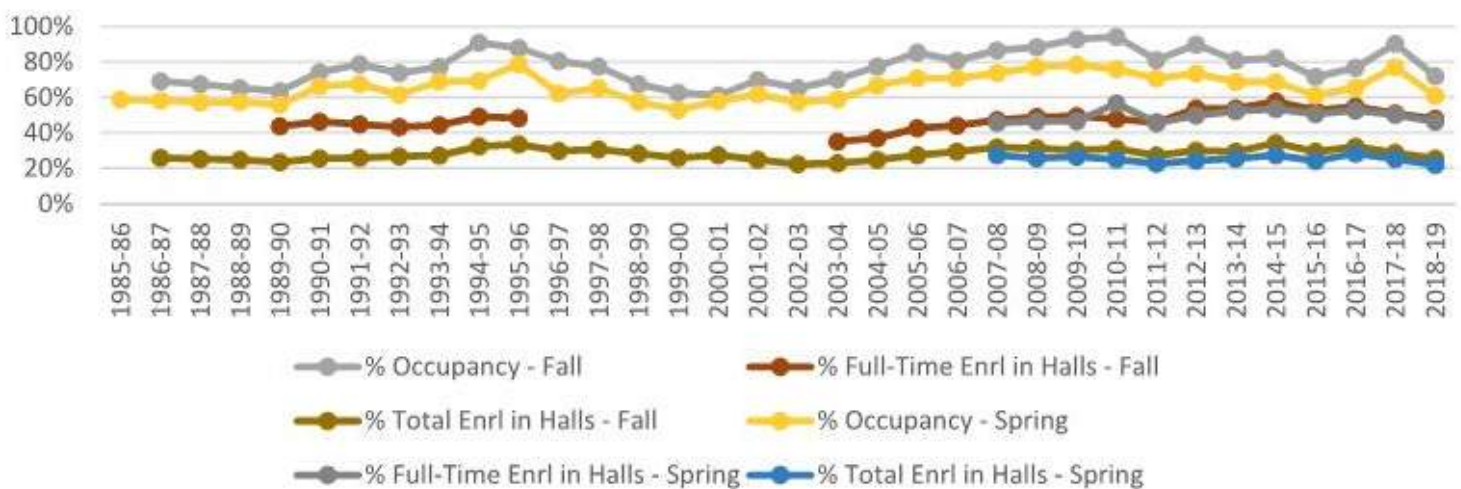
## Appendix A: Historical Data on Housing Capacity and Occupancy Rates

Northwest College has compiled historical data on enrollment, housing capacity, and occupancy rates. These are shown below for reference given the 90% occupancy rate and 10% occupancy buffer recommended as targets for Northwest College in this Housing Summary.

### Housing and Enrollment Numbers



### % Housing Capacity and Enrollment



Academic Year	Halls				Apartment #					Full-Time Enrollment - Fall	% Full-Time Enrl in Halls - Fall	Total Enrollment - Fall	% Total Enrl in Halls - Fall	Notes
	Hall Totals - Fall	Capacity (Beds)	# Halls Open	% Occupancy - Fall	TV	TWV	Apt Totals	Capacity	% Occupancy					
1988-89	462	708	5	65%	44		44	35	126%			1856	25%	
1989-90	450	708	5	64%	41		41	35	117%	1028	44%	1915	23%	
1990-91	526	708	5	74%	34		34	35	97%	1134	46%	2047	26%	
1991-92	558	708	5	79%	38		38	35	109%	1245	45%	2149	26%	
1992-93	522	708	5	74%	36		36	35	103%	1206	43%	1949	27%	
1993-94	547	708	5	77%	37		37	35	106%	1232	44%	2001	27%	
1994-95	644	708	5	91%	44		44	35	126%	1308	49%	1976	33%	
1995-96	623	708	5	88%	39		39	35	111%	1291	48%	1861	33%	
1996-97	570	708	5	81%	41	72	113	94	120%			1910	30%	Trapper Village West opened
1997-98	548	708	5	77%	28	70	98	94	104%			1780	31%	Stopped Theme Houses
1998-99	478	708	5	68%	25	68	93	94	99%			1687	28%	
1999-00	444	708	5	63%	22	57	79	94	84%			1706	26%	
2000-01	433	708	5	61%	20	73	93	94	99%			1572	28%	
2001-02	391	560	4	70%	18	73	91	94	97%			1576	25%	LC closed for renovation
2002-03	366	560	4	65%	17	67	84	94	89%			1625	23%	LC closed for renovation
2003-04	394	560	4	70%	17	67	84	94	89%	1120	35%	1715	23%	LC closed for renovation
2004-05	437	564	4	77%	21	50	71	94	76%	1176	37%	1755	25%	LC reopened; Bridger closed
2005-06	481	564	4	85%	31	60	91	94	97%	1129	43%	1754	27%	
2006-07	518	641	4.5	81%	27	58	85	94	90%	1170	44%	1763	29%	Simpson phase 1 opened
2007-08	555	641	4.5	87%	26	60	86	94	91%	1172	47%	1747	32%	
2008-09	567	641	4.5	88%	23	54	77	94	82%	1158	49%	1810	31%	
2009-10	667	718	5	93%	33	55	88	94	94%	1348	49%	2198	30%	Simpson phase 2 opened
2010-11	677	718	5	94%	29	55	84	94	89%	1411	48%	2173	31%	
2011-12	583	718	5	81%	26	50	76	94	81%	1268	46%	2145	27%	
2012-13	645	718	5	90%	23	43	66	94	70%	1201	54%	2136	30%	
2013-14	581	718	5	81%	17	39	56	94	60%	1080	54%	1973	29%	
2014-15	590	718	5	82%	20	37	57	94	61%	1022	58%	1719	34%	
2015-16	515	718	5	72%	19	40	59	94	63%	976	53%	1754	29%	
2016-17	552	718	5	77%	23	41	64	94	68%	1006	55%	1715	32%	
2017-18	486	538	4	90%	16	31	47	94	50%	953	51%	1693	29%	Cody closed
2018-19	388	538	4	72%	14	35	49	94	52%	811	48%	1524	25%	
2019-20	287	450	3	64%	23	37	60	94	64%	760	38%	1461	20%	Colter closed; preliminary fall enrl
Overall Ave	513.3	665.3	4.7	77%	####	53.8	66.4	76.6	87%	1133.5	45%	1835.9	28%	
10-Year Ave	530.4	655.2	4.7	81%	####	40.8	61.8	94.0	66%	1048.8	51%	1829.3	29%	

Table of Fall Occupancy Data for Chart Below:



SPRING															
YEAR	SEMESTER	Halls				Apartment #					Full-Time Enrollment - Spring	% Full-Time Enrl in Halls - Spring	Total Enrollment - Spring	% Total Enrl in Halls - Spring	Notes
		Hall Totals - Spring	Capacity (Beds)	# Halls Open	% Occupancy - Spring	TV	TVW	Apt Totals	Capacity	% Occupancy					
1986	SPRING	417	708	5	59%	?		?	35						Grey cell: hall closed or not yet built
1987	SPRING	413	708	5	58%	56		56	35	160%					
1988	SPRING	405	708	5	57%	44		44	35	126%					
1989	SPRING	407	708	5	57%	41		41	35	117%					
1990	SPRING	396	708	5	56%	40		40	35	114%					
1991	SPRING	470	708	5	66%	?		?	35						
1992	SPRING	480	708	5	68%	37		37	35	106%					
1993	SPRING	437	708	5	62%	39		39	35	111%					
1994	SPRING	489	708	5	69%	35		35	35	100%					
1995	SPRING	492	708	5	69%	39		39	35	111%					
1996	SPRING	558	708	5	79%	38		38	35	109%					
1997	SPRING	441	708	5	62%	39	77	116	94	123%					
1998	SPRING	463	708	5	65%	27	71	98	94	104%					
1999	SPRING	407	708	5	57%	25	71	96	94	102%					
2000	SPRING	375	708	5	53%	20	64	84	94	89%					*Unable to locate WK6 - using Wk3
2001	SPRING	410	708	5	58%	22	65	87	94	93%					
2002	SPRING	346	560	4	62%	19	69	88	94	94%					LC closed for renovation
2003	SPRING	321	560	4	57%	21	73	94	94	100%					LC closed for renovation
2004	SPRING	331	560	4	59%	20	63	83	94	88%					LC closed for renovation
2005	SPRING	377	564	4	67%	20	54	74	94	79%					
2006	SPRING	400	564	4	71%	27	60	87	94	93%					
2007	SPRING	453	641	4.5	71%	26	58	84	94	89%					
2008	SPRING	473	641	4.5	74%	24	60	84	94	89%	1035	46%	1727	27%	
2009	SPRING	496	641	4.5	77%	28	54	82	94	87%	1062	47%	1931	26%	
2010	SPRING	564	718	5	79%	26	54	80	94	85%	1208	47%	2120	27%	
2011	SPRING	545	718	5	76%	27	53	80	94	85%	962	57%	2170	25%	
2012	SPRING	508	718	5	71%	22	49	71	94	76%	1112	46%	2228	23%	
2013	SPRING	528	718	5	74%	22	46	68	94	72%	1057	50%	2157	24%	
2014	SPRING	494	718	5	69%	17	39	56	94	60%	945	52%	1936	26%	
2015	SPRING	494	718	5	69%	18	35	53	94	56%	921	54%	1801	27%	
2016	SPRING	439	718	5	61%	17	37	54	94	57%	865	51%	1809	24%	
2017	SPRING	471	718	5	66%	21	40	61	94	65%	895	53%	1658	28%	
2018	SPRING	415	538	4	77%	20	35	55	94	59%	826	50%	1633	25%	
2019	SPRING	328	538	4	61%	14	39	53	94	56%	706	46%	1488	22%	*Unable to locate WK6 - using Wk3

<b>Overall Ave</b>	<b>442.4</b>	<b>672.9</b>	<b>4.8</b>	<b>66%</b>	<b>27.8</b>	<b>55.0</b>	<b>67.4</b>	<b>74.9</b>	<b>90%</b>	<b>966.2</b>	<b>46%</b>	<b>1888.2</b>	<b>23%</b>
<b>10-Year Ave</b>	<b>478.6</b>	<b>682.0</b>	<b>4.7</b>	<b>70%</b>	<b>20.4</b>	<b>42.7</b>	<b>63.1</b>	<b>94.0</b>	<b>67%</b>	<b>949.7</b>	<b>50%</b>	<b>1900.0</b>	<b>25%</b>

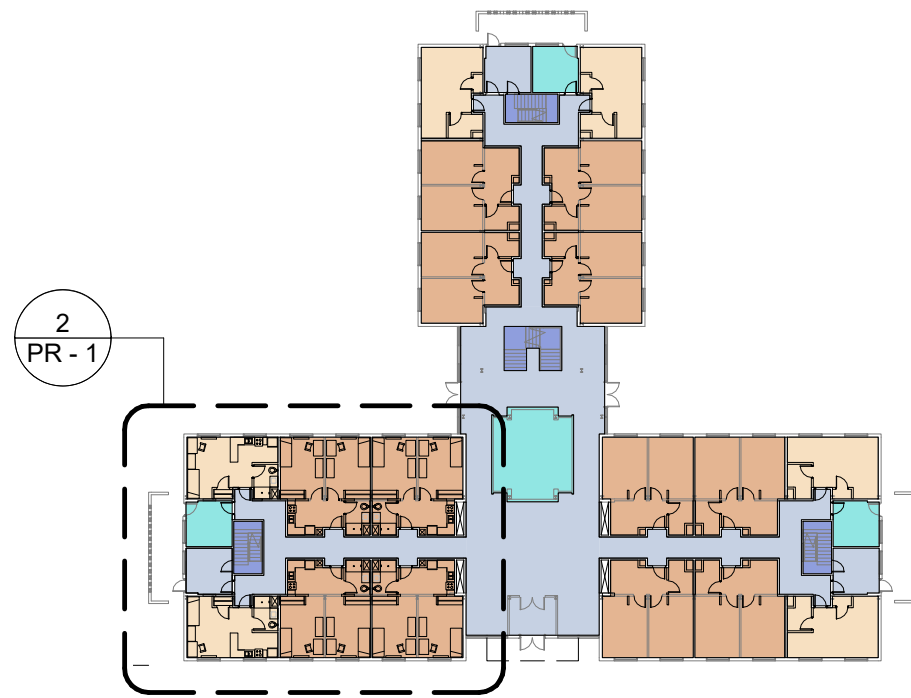
Table of Spring Occupancy Data for Chart Below:

Year	Semester	Hall #								%	Apartment #				Enrollment		%	Enrollment	%	Notes
		ASHLE	BRIDGE	CODY	COLTER	LC	SMP	Hall Totals	Capacity (Beds)		Occupancy	TV	TVw	Apt Totals	Capacity	% Occupancy				
1986	SPRING	98	74	115	33	97		417	708	59%	?	?	35			#DIV/0!		#DIV/0!		
1986	FALL	117	91	137	36	109		490	708	69%	#	43	35	123%		#DIV/0!	1882	26%		
1987	SPRING	114	69	123	20	81		413	708	58%	#	56	35	160%		#DIV/0!		#DIV/0!		
1987	FALL	114	93	148	24	99		478	708	68%	#	49	35	140%		#DIV/0!	1892	25%		
1988	SPRING	96	89	111	27	82		405	708	57%	#	44	35	126%		#DIV/0!		#DIV/0!		
1988	FALL	120	83	153	21	85		462	708	65%	#	44	35	126%		#DIV/0!	1856	25%		
1989	SPRING	106	75	133	22	71		407	708	57%	41	41	35	117%		#DIV/0!		#DIV/0!		
1989	FALL	115	98	141	17	79		450	708	64%	41	41	35	117%	1028	44%	1915	23%		
1990	SPRING	104	70	127	22	73		396	708	56%	#	40	35	114%		#DIV/0!		#DIV/0!		
1990	FALL	115	114	139	40	118		526	708	74%	#	34	35	97%	1134	46%	2047	26%		
1991	SPRING	110	89	133	37	101		470	708	66%	?	?	35			#DIV/0!		#DIV/0!		
1991	FALL	126	113	153	40	126		558	708	79%	#	38	35	109%	1245	45%	2149	26%		
1992	SPRING	115	92	133	41	99		480	708	68%	#	37	35	106%		#DIV/0!		#DIV/0!		
1992	FALL	125	98	144	38	117		522	708	74%	#	36	35	103%	1206	43%	1949	27%		
1993	SPRING	105	84	119	34	95		437	708	62%	#	39	35	111%		#DIV/0!		#DIV/0!		
1993	FALL	125	101	143	40	132		547	708	77%	#	37	35	106%	1232	44%	2001	27%		
1994	SPRING	111	85	141	36	116		489	708	69%	#	35	35	100%		#DIV/0!		#DIV/0!		
1994	FALL	137	131	160	72	144		644	708	91%	#	44	35	126%	1308	49%	1976	33%		
1995	SPRING	110	91	128	53	110		492	708	69%	#	39	35	111%		#DIV/0!		#DIV/0!		
1995	FALL	136	126	153	70	138		623	708	88%	#	39	35	111%	1291	48%	1861	33%		
1996	SPRING	123	118	139	59	119		558	708	79%	#	38	35	109%		#DIV/0!		#DIV/0!		
1996	FALL	117	138	148	57	110		570	708	81%	41	72	113	94	120%		#DIV/0!	1910	30%	Trapper Village West opened
1997	SPRING	67	116	124	55	79		441	708	62%	#	77	116	94	123%		#DIV/0!		#DIV/0!	
1997	FALL	124	124	147	63	90		548	708	77%	#	70	98	94	104%		#DIV/0!	1780	31%	Stopped Theme Houses
1998	SPRING	94	98	127	64	80		463	708	65%	#	71	98	94	104%		#DIV/0!		#DIV/0!	
1998	FALL	104	101	119	59	95		478	708	68%	#	68	93	94	99%		#DIV/0!	1687	28%	
1999	SPRING	82	87	102	53	83		407	708	57%	#	71	96	94	102%		#DIV/0!		#DIV/0!	
1999	FALL	105	67	144	61	67		444	708	63%	#	57	79	94	84%		#DIV/0!	1706	26%	
2000	SPRING	84	58	124	56	53		375	708	53%	#	64	84	94	89%		#DIV/0!		#DIV/0!	*Unable to locate WK6 - using wk3
2000	FALL	110	94	123	58	48		433	708	61%	#	73	93	94	99%		#DIV/0!	1572	28%	
2001	SPRING	105	91	116	51	47		410	708	58%	#	65	87	94	93%		#DIV/0!		#DIV/0!	
2001	FALL	118	79	124	70	0		391	560	70%	18	73	91	94	97%		#DIV/0!	1576	25%	LC closed for renovation
2002	SPRING	108	70	107	61			346	560	62%	19	69	88	94	94%		#DIV/0!		#DIV/0!	LC closed for renovation
2002	FALL	107	66	127	66			366	560	65%	17	67	84	94	89%		#DIV/0!	1625	23%	LC closed for renovation
2003	SPRING	100	48	113	60			321	560	57%	21	73	94	94	100%		#DIV/0!		#DIV/0!	LC closed for renovation
2003	FALL	97	122	126	49			394	560	70%	17	67	84	94	89%	1120	35%	1715	23%	LC closed for renovation
2004	SPRING	80	101	106	44	0	0	331	560	59%	#	63	83	94	88%		#DIV/0!		#DIV/0!	LC closed for renovation
2004	FALL	125	0	142	51	119	0	437	564	77%	21	50	71	94	76%	1176	37%	1755	25%	LC opened after renovation; Bridger closed
2005	SPRING	113	0	111	46	107	0	377	564	67%	#	54	74	94	79%		#DIV/0!		#DIV/0!	
2005	FALL	128	0	154	71	128	0	481	564	85%	31	60	91	94	97%	1129	43%	1754	27%	
2006	SPRING	104	0	120	59	117	0	400	564	71%	#	60	87	94	93%		#DIV/0!		#DIV/0!	
2006	FALL	118	0	147	59	116	78	518	641	81%	#	58	85	94	90%	1170	44%	1763	29%	Simpson phase 1 opened
2007	SPRING	108	0	114	59	100	72	453	641	71%	#	58	84	94	89%		#DIV/0!		#DIV/0!	
2007	FALL	124	0	160	67	127	77	555	641	87%	#	60	86	94	91%	1172	47%	1747	32%	
2008	SPRING	110	0	122	56	113	72	473	641	74%	#	60	84	94	89%	1035	46%	1727	27%	
2008	FALL	131	0	156	76	130	74	567	641	88%	#	54	77	94	82%	1158	49%	1810	31%	
2009	SPRING	117	0	133	50	122	74	496	641	77%	#	54	82	94	87%	1062	47%	1931	26%	
2009	FALL	132	0	168	79	136	152	667	718	93%	#	55	88	94	94%	1348	49%	2198	30%	Simpson phase 2 opened

Table of Housing Capacity and Occupancy Rates by Building for Chart Below:

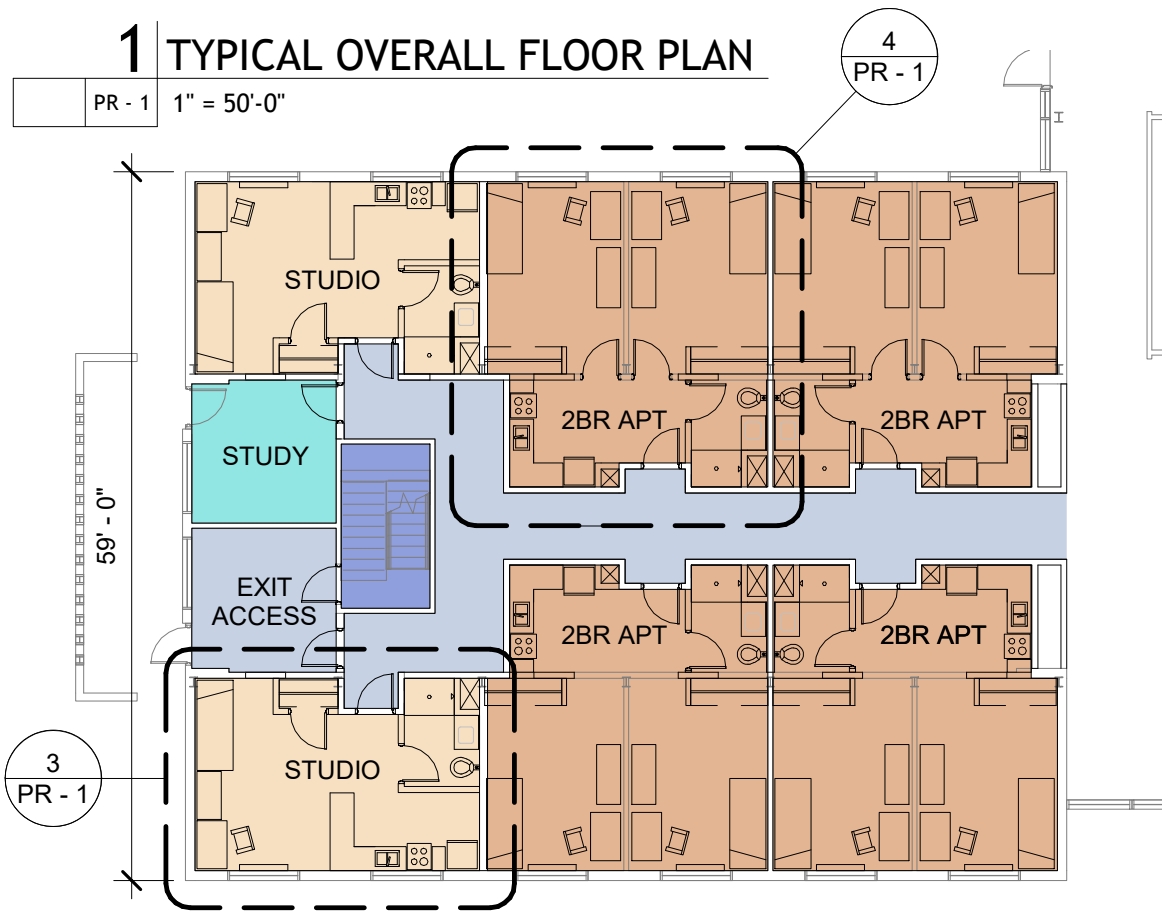
2010	SPRING	115	0	135	44	127	143	564	718	79%	#	54	80	94	85%	1208	47%	2120	27%	
2010	FALL	138	0	165	83	137	154	677	718	94%	#	55	84	94	89%	1411	48%	2173	31%	
2011	SPRING	116	0	116	64	118	131	545	718	76%	#	53	80	94	85%	962	57%	2170	25%	
2011	FALL	113	0	125	82	115	148	583	718	81%	#	50	76	94	81%	1268	46%	2145	27%	
2012	SPRING	89	0	109	70	103	137	508	718	71%	#	49	71	94	76%	1112	46%	2228	23%	
2012	FALL	131	0	164	78	119	153	645	718	90%	#	43	66	94	70%	1201	54%	2136	30%	
2013	SPRING	106	0	115	62	107	138	528	718	74%	#	46	68	94	72%	1057	50%	2157	24%	
2013	FALL	117	0	133	74	118	139	581	718	81%	17	39	56	94	60%	1080	54%	1973	29%	
2014	SPRING	90	0	120	57	104	123	494	718	69%	17	39	56	94	60%	945	52%	1936	26%	
2014	FALL	117	0	141	67	115	150	590	718	82%	#	37	57	94	61%	1022	58%	1719	34%	
2015	SPRING	88	0	116	56	95	139	494	718	69%	18	35	53	94	56%	921	54%	1801	27%	
2015	FALL	83	0	133	57	107	135	515	718	72%	19	40	59	94	63%	976	53%	1754	29%	
2016	SPRING	76	0	117	41	88	117	439	718	61%	17	37	54	94	57%	865	51%	1809	24%	
2016	FALL	109	0	135	56	105	147	552	718	77%	#	41	64	94	68%	1006	55%	1715	32%	
2017	SPRING	78	0	121	50	107	115	471	718	66%	21	40	61	94	65%	895	53%	1658	28%	
2017	FALL	125	0	0	77	134	150	486	538	90%	16	31	47	94	50%	953	51%	1693	29%	Cody closed
2018	SPRING	114	0	0	62	119	120	415	538	77%	#	35	55	94	59%	826	50%	1633	25%	
2018	FALL	100	0	0	53	94	141	388	538	72%	14	35	49	94	52%	811	48%	1524	25%	
2019	SPRING	75	0	0	47	84	122	328	538	61%	14	39	53	94	56%	706	46%	1488	22%	
2019	FALL	69	0	0	0	86	132	287	450	64%	#	37	60	94	64%	460	62%	1461	20%	Colter closed; Preliminary fall enrollment

**Appendix B: Study of converting Lewis and Clark Hall to either Apartments or Academic Space**



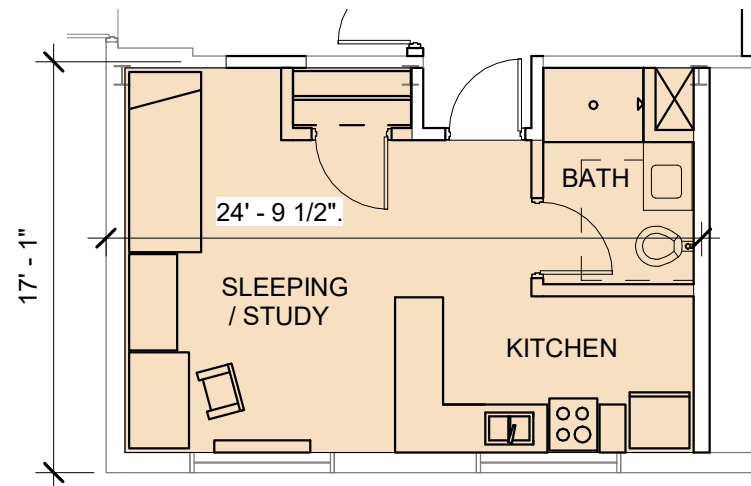
**1** TYPICAL OVERALL FLOOR PLAN

PR - 1 1" = 50'-0"



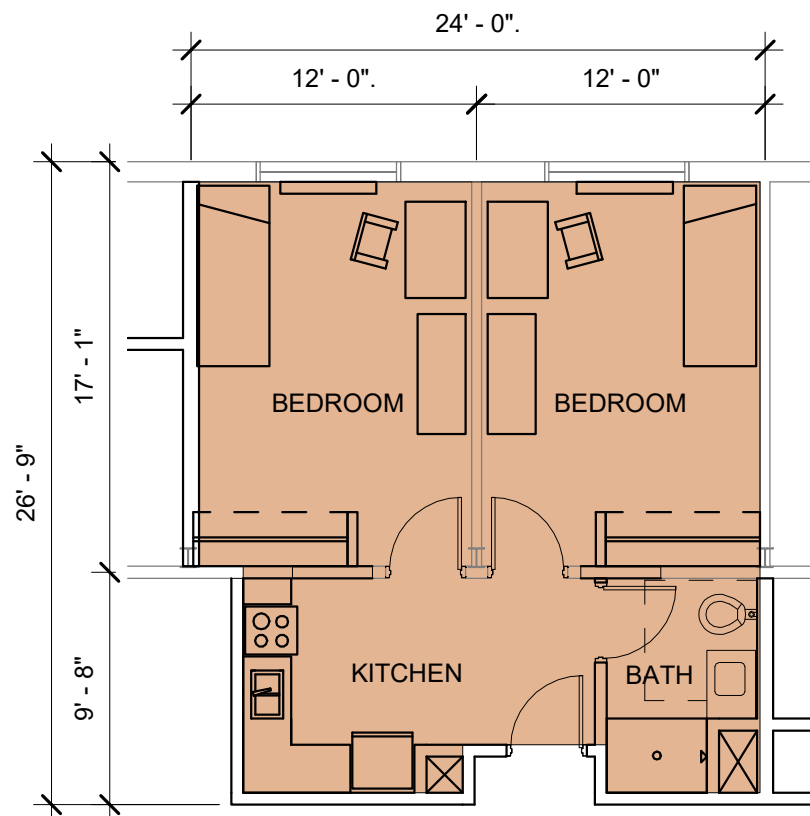
**2** TYPICAL RESIDENTIAL WING

PR - 1 PR - 1 1/16" = 1'-0"



**3** TYPICAL STUDIO APARTMENT

PR - 1 PR - 1 1/8" = 1'-0"



**4** TYPICAL 2BR APARTMENT

PR - 1 PR - 1 1/8" = 1'-0"

**YIELD STUDY NOTES -**

CONVERSION FROM TRADITIONAL DOUBLES (148 BEDS) TO A MIX OF 2BR APARTMENTS AND STUDIOS YIELDS:

24 2BR APARTMENTS @ 620 SF EA  
 13 STUDIO APARTMENTS @ 400 SF EA  
 37 TOTAL UNITS

48 BEDS AS 2BR APTS @ 79% OF BEDS  
 13 BEDS AS STUDIO APTS @ 21% OF BEDS  
 61 TOTAL BEDS (SINGLE OCCUPANCY ROOMS)

INCLUDES OPTION FOR DOUBLE OCCUPANCY ROOMS IF DESIRED, BUT WE RECOMMEND SINGLE OCCUPANCY ROOMS TO ATTRACT NON-TRADITIONAL STUDNETS WHO VALUE PRIVACY AND INDEPENDENCE.

**ACCESSIBILITY NOTES -**

ALL UNITS ARE DESIGNED TO COMPLY WITH CURRENT ACCESSIBLTY STANDARDS SINCE OVER 50% OF THE BUILDING AREA IS BEING REMODELED. TO COMPLY, ALL UNITS SHALL BE EITHER TYPICAL TYPE B UNITS OR TYPE A UNITS. AT LEAST 1 STUDIO APARTMENT AND 1 2BR APARTMENT ON THE GROUND FLOOR SHALL BE TYPE A FOR GREATER ACCESSIBILITY. IF AN ELEVATOR IS PROVIDED (WHICH IS RECOMMENDED BUT NOT REQUIRED), THEN 1 STUDIO APARTMENT AND 1 2BR APARTMENT ON EACH FLOOR (STACKED) SHALL BE TYPE A.

**EGRESS NOTES -**

EXIT ACCESS FROM 1-HR RATED STAIRS MUST BE BROUGHT UP TO CURRENT LIFE SAFETY CODE. IN R-2 OCCUPANCIES, STAIRS CANNOT EXIT BACK INTO CORRIDORS OF LESSER RATING. INSTEAD, THEY MAY EXIT INTO LOBBIES (50%), EXIT ENCLOSURES, OR DIRECTLY TO THE OUTSIDE. EXIT ENCLOSURES ARE SHOWN HERE NEXT TO THE STUDY ROOMS TO PROVIDE THIS EXIT ACCESS.

**COST ANALYSIS: LEWIS & CLARK CONVERSION TO APARTMENTS**

THIS REMODEL APPEARS TO BE EFFICIENT IN TERMS OF PRESERVING WALLS FOR SLEEPING ROOMS, WITH MODERATE REVISIONS TO PLUMBING AND HVAC. WE ARE PROVIDING A ROM ESTIMATE OF THIS CONSTRUCTION COST AT \$200 PER SF, FOR A TOTAL ESTIMATED COST OF \$6.42 MILLION.

**DEFERRED MAINTENANCE ITEMS:**

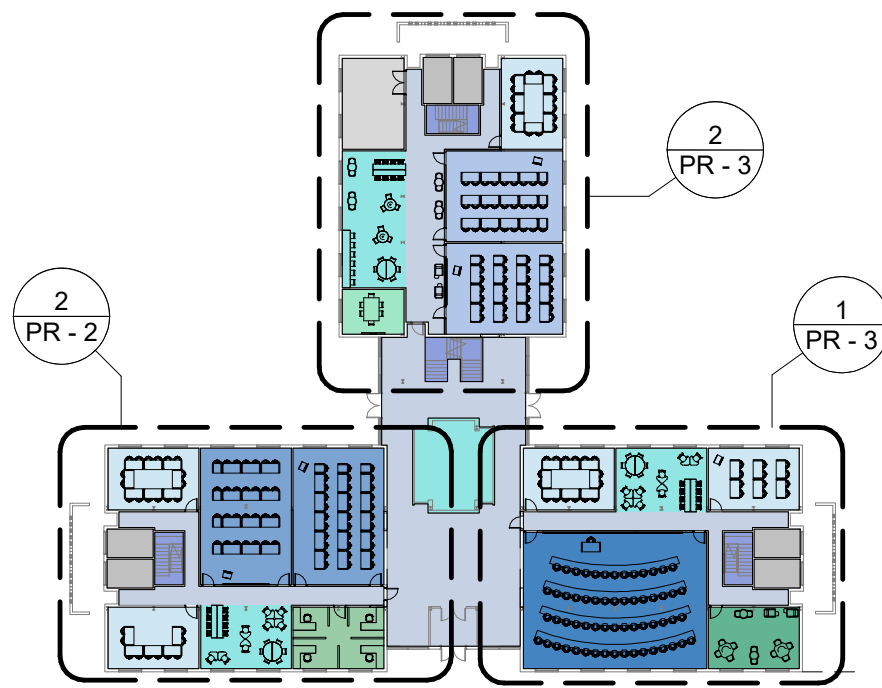
BOILER / HVAC REPLACEMENT	\$350,000
DDC HVAC CONTROLS	\$100,000
RADIANT HEATERS IN ROOMS	\$ 75,000
WINDOW REPLACEMENT	\$ 75,000
ROOF REPLACEMENT	\$300,000
LED LIGHTING CONVERSION	\$150,000
ELECTRICAL UPGRADES	\$ 40,000
INSULATE EXTERIOR WALLS	\$ 30,000
ADD ELEVATOR (OPTIONAL)	(\$175,000)*

TOTAL: \$1,120,000

PLUS APT CONVERSION: \$5,300,600  
 (DEMOLITION, FRAMING, DRYWALL, CEILINGS, FLOORING, KITCHEN / BATHROOMS, ETC.) **\$6,420,600**

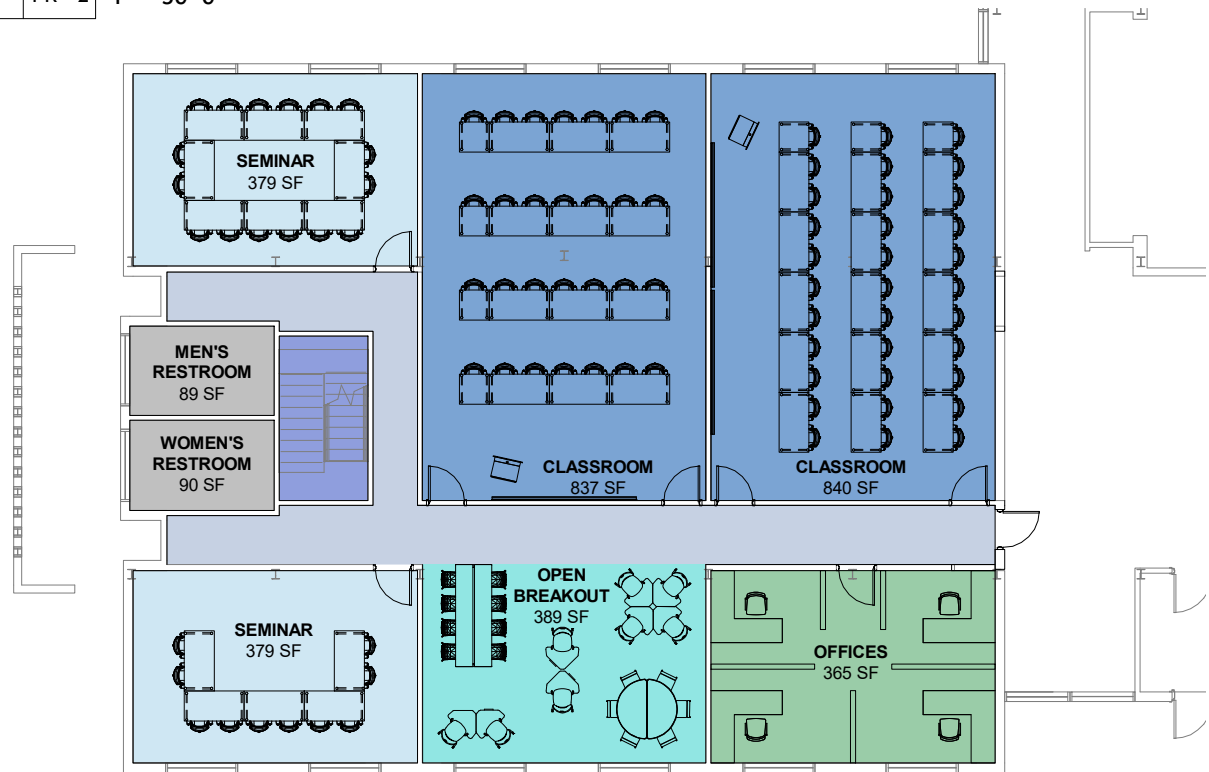
WITH ELEVATOR OPTION: \$6,595,600\*

**APARTMENT CONVERSION - 37 UNITS / 61 BEDS**



### 1 TYPICAL OVERALL FLOORPLAN

PR - 2 1" = 50'-0"



### 2 COMBINATION A

PR - 2 1/16" = 1'-0"

### CLASSROOM BUILDING CONVERSION:

FROM A FUTURE CAMPUS PLANNING PERSPECTIVE, CONVERTING LEWIS & CLARK HALL TO A CLASSROOM BUILDING PROVES BENEFICIAL, BECAUSE OF THE BUILDING'S CLOSE PROXIMITY TO THE RESIDENCE HALLS, THE STUDENT CENTER AND THE ACADEMIC CORE. THE BUILDING'S STEEL STRUCTURE ALLOWS FOR A RELATIVELY EASY RECONFIGURATION OF THE PARTITION WALLS, CHANGING THEM FROM DORM ROOMS TO CLASSROOM AND SUPPORT SPACES. HOWEVER, THE LOW FLOOR-TO-FLOOR HEIGHT OF THE BUILDING (10'-8") WILL CAUSE CEILINGS TO BE LOW IN THE CLASSROOMS, OR REQUIRE OPEN TO STRUCTURE SPACES IN ORDER TO MAKE THE ROOMS SEEM VISUALLY TALLER.

THE FLOOR PLANS SHOWN ARE POSSIBLE COMBINATIONS OF CLASSROOM AND SUPPORT SPACES, CHOSEN TO MAXIMIZE CLASSROOM CAPACITIES. PROGRAM BLOCKS SHOWN IN THE LEGEND COULD BE SWITCHED OUT AS DESIRED.

- PROS:**
- 1) SIMPLE RECONFIGURATION OF PARTITION WALLS FROM DORM ROOMS TO CLASSROOMS
  - 2) REPETITIVE WINDOW PATTERN ALLOWS FOR DAYLIGHT INTO CLASSROOMS AND SUPPORT SPACES
  - 3) EXISTING CENTRAL LOBBY SPACE WORKS WELL FOR A CLASSROOM BUILDING
  - 4) BUILDING IS GOOD FOR SMALL (12 STUDENTS) AND MEDIUM (24 STUDENTS) SIZE CLASSROOMS.

- CONS:**
- 1) LOW FLOOR-TO-FLOOR HEIGHT MAKES FOR LOW CLASSROOM CEILINGS, PROBABLY 8'-6" TO 9'-0" HIGH.
  - 2) DUCT WORK MAY NEED TO BE EXPOSED TO VISUALLY HEIGHTEN THE CLASSROOM SPACES.
  - 3) NOT IDEAL FOR LARGE CLASSROOMS (37 STUDENTS), BECAUSE DELETING THE NECESSARY COLUMNS WILL INCREASE OVERHEAD STEEL BEAM SIZES.
  - 4) MORE DELETED COLUMNS INCREASES COST BECAUSE OF REQUIRED ADDED OVERHEAD STEEL.
  - 5) AN ELEVATOR IS NOT REQUIRED, BUT INSTALLING ONE WOULD INCREASE ACCESSIBILITY AND EMERGENCY ACCESS TO THE SECOND FLOOR.

### LEGEND OF PROGRAM BLOCKS

PROGRAM BLOCK	AREA / CAPACITY	BUILDING TOTALS
LECTURE HALL	1690 SF 60 STUDENTS	(2)
LARGE CLASSROOM	840 SF 28 - 33 STUDENTS	(4)
MEDIUM CLASSROOM	720 SF 27 - 28 STUDENTS	(4)
SMALL CLASSROOM/ SEMINAR	380 SF 10 - 16 STUDENTS	(10)
OFFICES	120 SF	(8)
FACULTY LOUNGE	380 SF	(2)
COLLABORATION	190 SF 6 PEOPLE	(2)
BREAKOUT SPACE	390 SF	(4)
COMMONS	590 SF	(2)
LOUNGE	480 SF	(1)
MECHANICAL ROOM	720 SF	(2)
RESTROOMS: WOMEN	90 SF	(6)
RESTROOMS: MEN	90 SF	(6)

**COST ANALYSIS: LEWIS & CLARK  
CONVERSION TO CLASSROOMS**

DEFERRED MAINTENANCE ITEMS:

BOILER / HVAC REPLACEMENT	\$450,000
DDC HVAC CONTROLS	\$100,000
WINDOW REPLACEMENT	\$ 75,000
ROOF REPLACEMENT	\$375,000
LED LIGHTING CONVERSION	\$150,000
ELECTRICAL UPGRADES	\$ 65,000
INSULATE EXTERIOR WALLS	\$ 50,000
ADD ELEVATOR (OPTIONAL)	(\$175,000)*

TOTAL: \$1,265,000

ADDITIONAL CONVERSION  
TO APARTMENTS:  
(DEMOLITION, FRAMING, DRYWALL,  
CEILINGS, FLOORING,  
KITCHEN / BATHROOMS, ETC.) **\$6,215,000**

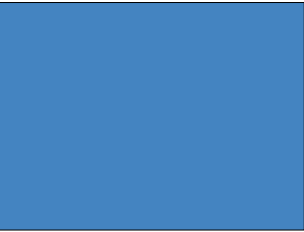









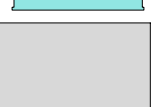

WITH ELEVATOR OPTION: \$6,390,000\*

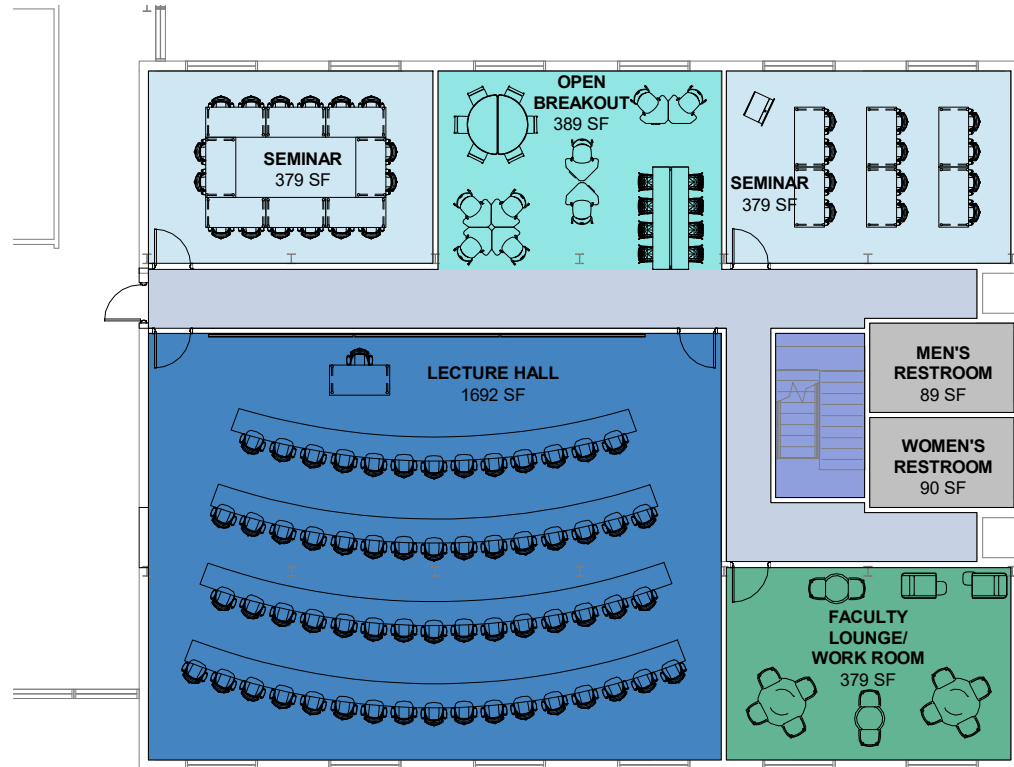
CLASSROOM FURNITURE	\$269,500
ADDITIONAL FURNITURE	\$200,000
AUDIO/VISUAL EQUIPMENT	<u>\$125,000</u>

TOTAL FF&E: \$594,500

CONVERSION + FF&E: **\$6,984,000**

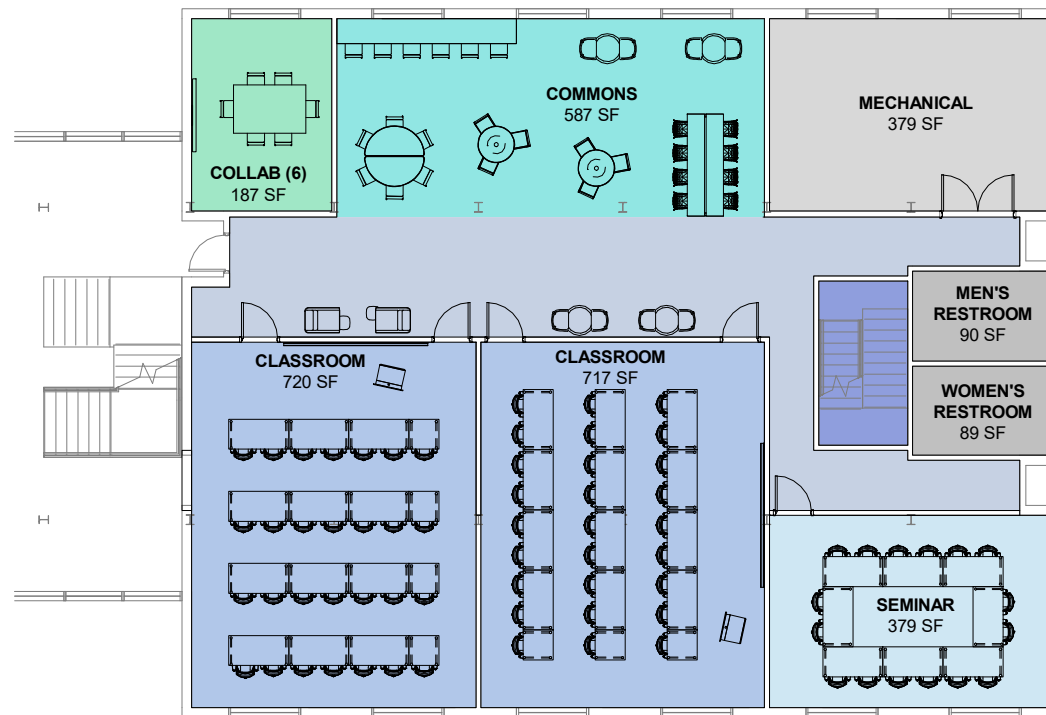
**LEGEND OF PROGRAM BLOCKS**

		BUILDING TOTALS
	LECTURE HALL 1690 SF 60 STUDENTS	(2)
	LARGE CLASSROOM 840 SF 28 - 33 STUDENTS	(4)
	MEDIUM CLASSROOM 720 SF 27 - 28 STUDENTS	(4)
	SMALL CLASSROOM/ SEMINAR 380 SF 10 - 16 STUDENTS	(10)
	OFFICES 120 SF	(8)
	FACULTY LOUNGE 380 SF	(2)
	COLLABORATION 190 SF 6 PEOPLE	(2)
	BREAKOUT SPACE 390 SF	(4)
	COMMONS 590 SF	(2)
	LOUNGE 480 SF	(1)
	MECHANICAL ROOM 720 SF	(2)
	RESTROOMS: WOMEN 90 SF	(6)
	MEN	(6)



**1** COMBINATION B

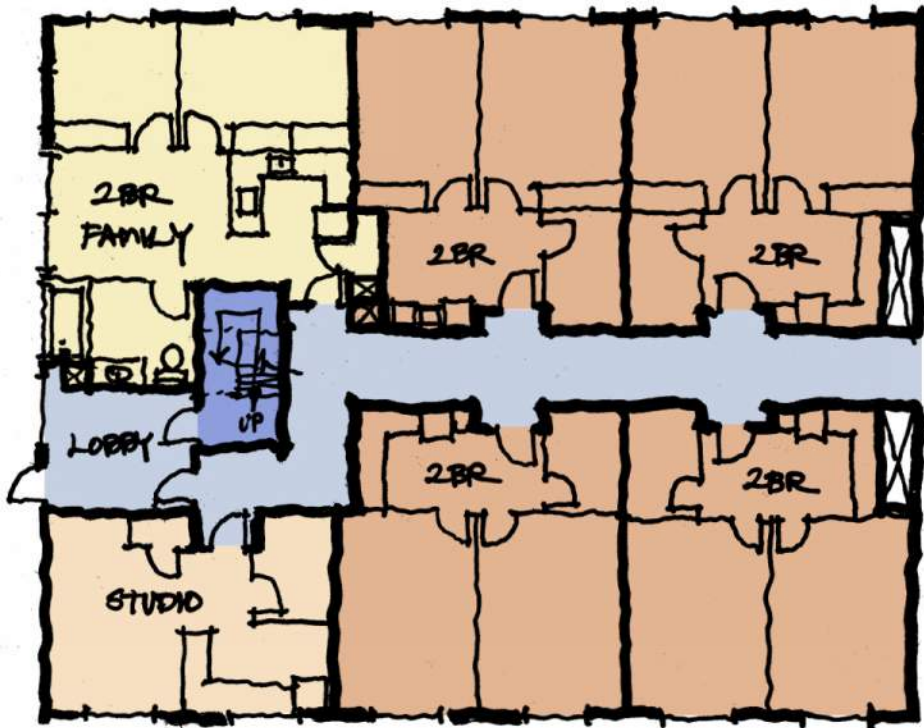
PR - 2 PR - 3 1/16" = 1'-0"



**2** COMBINATION C

PR - 2 PR - 3 1/16" = 1'-0"

**CLASSROOM CONVERSION - SHEET 2 OF 2**



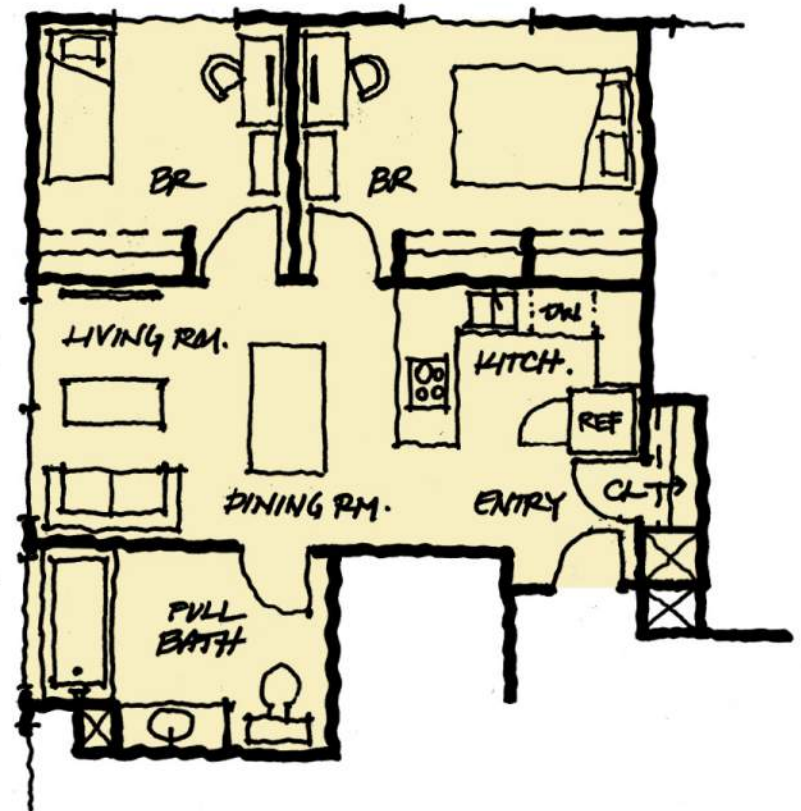
TYPICAL WING W/ CORNER FAMILY APT

Yield Study for Entire Bldg given Typical Wing Above:

24 2BR Apartments	@	620 SF ea	=	48 Beds
7 Studio Apartments	@	400 SF ea	=	7 Beds
6 Family Apartments	@	720 SF ea	=	12 Beds

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37 Apartments Total = 67 Beds Total



2 BR FAMILY APARTMENT

720 SF | Approx. overall dimensions 26' x 30'-6"  
 1/8" = 1'-0" | North page down





**hord | coplan | macht**

