### Residence Hall Survey – Results Summary

Survey Period: February 24, 2017 to March 19, 2017

Complete Responses: 581 Wake Forest students, 557 of whom were on-campus residents

## I. ENERGY USE – PLUG LOAD

## Which of the following electronics do you have in your residence hall room?

	•	
Laptop charger	552 of 557	99%
Phone charger	551 of 557	99%
Lamp(s)	452 of 557	81%
Printer	325 of 557	58%
Personal fan	270 of 557	49%
Christmas / string lights	261 of 557	47%
TV	245 of 557	44%
Stereo / speakers	178 of 557	32%
Video game system	93 of 557	17%
Air purifier or dehumidifier	82 of 557	15%
DVD / Blu-Ray player	34 of 557	6%
Space heater	4 of 557	1%

## How often do you unplug the following electronics when not in use?

- There is an even distribution of how often residents unplug their laptop charger
  - o Upperclass students seem to be more likely to unplug their laptop charger
    - Students are more likely to unplug laptop chargers in: <u>Collins</u>, <u>Davis</u>, <u>Dogwood</u>, <u>Efird</u>, <u>Magnolia</u>, <u>North Campus Apartments</u>, <u>Polo</u>, <u>Poteat</u>, <u>Student Apartments</u>, <u>Taylor</u>
    - Students are less likely to unplug laptop chargers in: Babcock, Bostwick, Johnson, South
- 65% (355 of 551) NEVER or RARELY unplug their **phone charger**
- 80% (360 of 452) NEVER or RARELY unplug their lamp(s)
- 75% (245 of 325) NEVER or RARELY unplug their printer
- 65% (176 of 270) NEVER or RARELY unplug their personal fan
- 60% (156 of 261) ALWAYS or MOST OF THE TIME unplug their Christmas/string lights
- 92% (225 of 245) NEVER or RARELY unplug their TV
- 52% (92 of 178) ALWAYS or MOST OF THE TIME unplug their stereo/speakers

No reliable data for: Angelou, Huffman, Kitchin, Martin, Palmer, Piccolo, Road Houses

### Recommendations:

Although there is a high percentage of residents who leave their electronics and charging cords plugged in, the potential energy saved from a behavior change is minimal.

## **II. ENERGY USE - LIGHTING**

### **Bedrooms**

## When you are the last person to leave your room, how often do you turn off the overhead light?

- 88% (490 of 557) ALWAYS or MOST OF THE TIME turn off the overhead light; only 4% (21 of 557)
   NEVER or RARELY do
  - o The lowest-performing residence halls are:
    - Poteat 75% (6 of 8)
    - Polo 80% (4 of 5)
    - Dogwood 81% (17 of 21)
    - Babcock 84% (26 of 31)
    - Johnson 84% (42 of 50)
    - Luter 84% (91 of 108)
    - NCA 85% (35 of 41)
    - South 86% (51 of 59)
- Bedrooms with occupancy sensors: 86% (85 of 99) ALWAYS or MOST OF THE TIME turn off the overhead light; 8% (8 of 99) NEVER or RARELY do
- Bedrooms without occupancy sensors: 88% (405 of 458) ALWAYS or MOST OF THE TIME turn off the overhead light; only 3% (13 of 458) NEVER or RARELY do

No reliable data for: Angelou, Huffman, Kitchin, Martin, Palmer, Piccolo, Road Houses

# What is your primary reason for leaving the overhead light on when you are the last person to leave your room? (This question was only asked of residents who do not always turn off their light.)

- Bedrooms with occupancy sensors:
  - o 69% (25 of 36) said the light is on a timer and will go off automatically.
  - o The next most popular reason was forgetting at only 11% (4 of 36).
- Bedrooms without occupancy sensors:
  - o 62% (103 of 166) said they forget.
  - o 13% (22 of 166) said they don't care if the light stays on or not
  - o 13% (21 of 166) said it's inconvenient to turn their light off
  - o 12% (20 of 166) said "other," with no reason being prevalent

No reliable data for: Angelou, Efird, Huffman, Kitchin, Magnolia, Martin, Palmer, Piccolo, Road Houses, Poteat

### **Bathrooms**

## When you are the last person to leave the bathroom, how often do you turn off the overhead light?

- There is an even distribution of how often residents turn off the bathroom light, with type of bathroom (shared/suite) having the greatest impact.
- Shared hall vs. suite bathrooms:
  - Shared hall bathrooms: 15% (39 of 268) NEVER or RARELY turn off the light
  - Suite bathrooms: 70% (203 of 289) of residents with suite bathrooms ALWAYS or MOST
     OF THE TIME turn off the light
    - The exception is <u>Taylor</u>, where <u>20%</u> (12 of 61) ALWAYS or MOST OF THE TIME turn off the light

- Bathroom with vs. without occupancy sensors:
  - Bathrooms with occupancy sensors: 20% (12 of 130) ALWAYS or MOST OF THE TIME turn off the light
  - Bathrooms without occupancy sensors: 50% (213 of 427) ALWAYS or MOST OF THE TIME turn off the light, versus 43% (185 of 427) who NEVER or RARELY do

No reliable data for: Angelou, Huffman, Kitchin, Martin, Palmer, Piccolo, Road Houses

What is your primary reason for leaving the bathroom light on when you are the last person to leave the bathroom? (This question was only asked of residents who do not always turn off their light.)

- Shared hall bathrooms vs. suite bathrooms:
  - Shared hall bathrooms:
    - 19% (46 of 238) said the light is on a timer and will go off automatically; this represents 51% (46 of 90) of students to whom this option applied
    - 17% (41 of 238) said they forget
    - 14% (34 of 238) wrote-in that the lights are automatic and/or don't turn off
    - 13% (31 of 238) wrote-in that it is a communal bathroom
    - 13% (31 of 238) said they don't care if the lights stay on or not
    - 11% (26 of 238) said it's inconvenient to turn them off
    - 5% (12 of 238) wrote-in that they didn't realize they could or didn't think to
  - o Suite bathrooms:
    - 40% (51 of 128) said they forget
    - 13% (16 of 128) said the light is on a timer and will go off automatically; this represents 73% (16 of 22) of students to whom this option applied
    - 13% (16 of 128) said they don't care if the lights stay on or not
    - 12% (15 of 128) said it's inconvenient to turn them off
    - 10% (13 of 128) wrote-in that they leave the light on to light the hall or for safety
    - 6% (8 of 128) wrote-in that they leave the light on for the convenience of others
- Bathrooms with vs. without occupancy sensors:
  - Bathrooms with occupancy sensors:
    - 55% (62 of 112) said the light is on a timer and will go off automatically
    - 17% (19 of 112) said they forget
    - 9% (10 of 112) said they don't care if the lights stay on or not
    - 6% (7 of 112) wrote-in that it's a communal bathroom
    - 6% (7 of 112) said it's inconvenient to turn them off
  - o Bathrooms without occupancy sensors:
    - 29% (73 of 254) said they forget
    - 15% (37 of 254) said they don't care if the lights stay on or not
    - 13% (34 of 254) wrote-in that the lights are automatic and/or don't turn off
    - 13% (34 of 254) said it's inconvenient to turn them off
    - 10% (25 of 254) wrote-in that it's a communal bathroom
    - 5% (13 of 254) wrote-in that they use the light to light the hall or for safety
    - 5% (12 of 254) wrote-in that they didn't realize they could or didn't think to

No reliable data for: Angelou, Huffman, Kitchin, Magnolia, Martin, Palmer, Piccolo, Polo, Road Houses, Poteat, Student Apartments

### Recommendations:

The vast majority of residents turn off their bedroom lights before leaving the room. However, leaving bathroom lights on is a significant problem and one that merits inclusion in our campaign through education and prompts.

## **III. WATER USE**

# When appropriate, how often do you use the low-flush option on the residence hall toilets (pulling the handle up)?

- 66% (298 of 453) said they ALWAYS or MOST OF THE TIME use the low-flush option when appropriate
  - o The lowest-performing residence halls are:
    - Dogwood 48% (10 of 21)
    - South 56% (33 of 59)
    - Collins 59% (37 of 63)
    - Luter 59% (64 of 108)
    - Poteat 63% (5 of 8)
    - Student Apartments 64% (9 of 14)
- Only 6% (27 of 453) did not know or were unaware of a dual-flush option

This question does not apply to: Davis, Efird, Polo, Road Houses, Taylor No reliable data for: Angelou, Huffman, Kitchin, Martin, Palmer, Piccolo

## **Recommendations:**

Two-thirds of residents report using the dual flush toilets appropriately on a consistent basis. Behavior change intervention is recommended in residence halls with a rate below this threshold.

## **IV. WASTE GENERATION**

In a typical week, how many disposable bottles of water (bottled water only) do you consume in your residence hall?

- 84% (469 of 557) consume 0-3 bottles per week
- Only 3% (18 of 557) consume 11 or more bottles per week
- The lowest-performing residence halls are:
  - Student Apartments: 50% (7 of 14) consume 4 or more bottle per week
  - o Magnolia: 43% (3 of 7) consume 4 or more bottle per week
  - o Polo: 40% (2 of 5) consume 4 or more bottle per week
  - o Poteat: 25% (2 of 8) consume 4 or more bottle per week
  - o Johnson: 24% (12 of 50) consume 4 or more bottle per week
  - o Davis: 24% (5 of 21) consume 4 or more bottles per week

No reliable data for: Angelou, Huffman, Kitchin, Martin, Palmer, Piccolo, Road Houses

## Please select the primary reason you consume bottled water instead of refilling a reusable water bottle.

- 27% (24 of 88) said they don't own a reusable bottle
- 21% (18 of 88) said they prefer the taste of bottled water
- 16% (14 of 88) said there is no filling station near their room
  - o Babcock: 60% (3 of 5)
  - o NCA: 50% (2 of 4)
  - o Taylor: 50% (2 of 4)
  - o Polo: 50% (1 of 2)
  - o Poteat: 50% (1 of 2)
  - o Bostwick: 33% (2 of 6)
  - o Student Apartments: 29% (2 of 7)
  - o Davis: 20% (1 of 5)
- 10% (9 of 88) said they believe bottled water is of higher quality
- 26% (23 of 88) selected "other"
  - o 15% (13 of 88) cited convenience or said they were too lazy to wash a bottle

No reliable data for: Angelou, Efird, Huffman, Kitchin, Magnolia, Martin, Palmer, Piccolo, Polo, Road Houses, Poteat

### **Recommendations:**

There is significant room for improvement in the residence halls listed above, but the barriers identified by respondents were inconsistent, making it difficult to adequately address the issue. This problem is better tackled through our Choose to Reuse campaign.

### **V. BUILDING OPERATIONS**

## How often is your heating/air conditioning unit covered or blocked (either the top or the bottom of the unit)?

- 68% (256 of 378) NEVER or RARELY have their unit covered or blocked
- 9% (34 of 378) ALWAYS OR MOST OF THE TIME have their unit covered or blocked
- 6% (22 of 378) were not sure
- The lowest-performing residence halls are:
  - o Poteat: 50% (4 of 8) never or rarely have their unit covered or blocked
  - Collins: 60% (38 of 63) never or rarely have their unit covered or blocked
  - o Bostwick: 65% (30 of 46) never or rarely have their unit covered or blocked
  - Luter: 67% (72 of 108) never or rarely have their unit covered or blocked
  - o Davis: 67% (14 of 21) never or rarely have their unit covered or blocked

This question does not apply to: Angelou, Babcock, Dogwood, Magnolia, NCA, Polo, Road Houses, South, Student Apartments

No reliable data for: Huffman, Kitchin, Martin, Palmer, Piccolo

### **Recommendations:**

Blocking or covering the fan coils is a significant concern, as it can greatly increase energy consumption and lead to resident discomfort. Education and prompts are key in the buildings identified above.

If you notice a problem in your residence hall related to temperature, air flow, dampness, or leaks, how often do you report it by calling extension HALL (4255) or emailing hall@wfu.edu?

- Of those who have noticed a problem:
  - o 46% (171 of 369) NEVER or RARELY report it appropriately
  - o 31% (113 of 369) ALWAYS or MOST OF THE TIME report it appropriately, although an additional 5% (17 of 369) wrote in a response that was also acceptable
  - 4% (16 of 369) wrote in that they tell or text their RA

No reliable data for: Angelou, Huffman, Kitchin, Martin, Palmer, Piccolo, Polo, Road Houses

### **Recommendations:**

This is the most prevalent issue uncovered in the survey. Less than a third of residents always or usually contact facilities when they notice a problem in their building. We will target this behavior in our campaign through education of both residents and RAs.

If you notice that an exterior door to your residence hall is propped open and nobody appears to be using it, how often do you close it?

- Of those who have noticed an exterior door propped open, there is a fairly even distribution of how often they close it
- Residents in Magnolia (100%, 4 of 4), Babcock (58%, 7 of 12), and Efird (57%, 4 of 7) NEVER or RARELY close the door
- Residents in NCA (62%, 16 of 26), South (62%, 13 of 21), Dogwood (57%, 4 of 7), Student Apartments (56%, 5 of 9), Johnson (53%, 10 of 19), Taylor (49%, 17 of 35), Collins (47%, 9 of 19), and Davis (33%, 4 of 12), ALWAYS or MOST OF THE TIME close the door

No reliable data for: Angelou, Huffman, Kitchin, Martin, Palmer, Piccolo, Polo, Poteat, Road Houses

### Recommendations:

Exterior doors being propped open does not seem to be a major issue, but when they are, students should know to close them. For the sake of convenience, these recommendations should not be enforced during move-in and move-out.

Under what conditions do you open your residence hall room window(s)? Select all that apply.

- 67% (372 of 557) open their window
  - o 72% (267 of 372) open their windows to get fresh air
  - o 67% (251 of 372) open their window to make their room cooler
  - o 23% (87 of 372) open their windows to make their room warmer
- In North Campus Apartments, 10% (4 of 41) open their windows when cooking

• Where residents are most likely to open windows:

Efird: 94% (15 of 16)
Collins: 90% (57 of 63)
Bostwick: 89% (41 of 46)
Polo: 80% (4 of 5)

o Student Apts: 79% (11 of 14)

Poteat: 75% (6 of 8)
Luter: 72% (78 of 108)
Johnson: 68% (34 of 50)
Taylor: 67% (41 of 61)
NCA: 59% (24 of 41)
South: 51% (30 of 59)

No reliable data for: Angelou, Huffman, Kitchin, Martin, Palmer, Piccolo, Road Houses

#### Recommendations:

This is a difficult issue to address, as recommendations for when to avoid opening windows can be confusing. In general, residents should feel free to open their windows to get fresh air when their heating/cooling unit is off, they are in the room, it is not humid outside, and the temperature outside is comfortable. They should avoid opening the windows for temperature control while their unit is on, they are leaving for an extended period of time, there is high humidity, or it is very cold or hot outside.

## **IV. ADDITIONAL COMMENTS**

- 8% (5 of 63) of residents in Collins wrote that the rooms are uncomfortably hot throughout the cooler months
- See spreadsheet for other comments