



OSU BICYCLE PARKING UTILIZATION STUDY 2019

CAPITAL PLANNING AND DEVELOPMENT

MARCH 29, 2020

Executive Summary

- OSU conducts the Bicycle Parking Utilization Study every two years.
- In 2019, the campus wide bike parking capacity was 8,969 spaces; this was an increase of 27 spaces or 0.3 percent over the 2017 capacity.
- Between the hours of 10 am and 12 pm, campus wide bicycle parking utilization was 33 percent.
- On the days of the 2019 survey, Bike Parking Utilization was nine (9) percent lower than it was in 2017.
- Highest utilization rates exist at the residence halls and in the central area of campus.
- Twenty six (26) locations of 374, had utilization rates of 75 percent or greater.
- Campus Sectors D and G had the highest overall utilization rates, at 38 percent, while Sector H had the lowest utilization at two (2) percent. Sectors D and G are adjacent to the central area of campus, while Sector H is primarily athletic venues and a conference center and therefore experiences highest utilization during events.
- Forty-five (45) locations recorded abandoned bicycles.
- Eleven (11) locations recorded installation problems affecting capacity.
- Twenty-eight (28) locations recorded some degree of damage to the rack.
- One hundred twenty-five (125) locations recorded poor paint condition.

OSU Bicycle Parking Utilization Study

Overview

In the fall of 2019, Oregon State University (OSU) conducted a comprehensive bicycle parking survey. The survey recorded bicycle rack utilization and condition on Tuesday and Wednesday, October 22th and 23rd. The weather conditions on the days of the survey were good for biking. Tuesday, October 22th was approximately 68 degrees and partly sunny. Wednesday, October 23rd was approximately 61 degrees and mostly sunny. There were no rain showers either day.

The survey measured total capacity for on-campus bike parking at 8,969 bike parking spaces. Of these spaces, 3,313 (37%) are covered and 5,656 (63%) spaces are uncovered. These values reflect a 0.3 percent increase in overall capacity and a 0.9 percent increase in covered spaces over the previous survey conducted in 2017. The 2019 survey measured an average, campus wide bicycle parking utilization rate of 33 percent. This utilization rate is 9 percent lower than the utilization rate recorded in the fall 2017 survey. Areas where utilization exceeded capacity generally included residence halls and the more densely developed northeast portion of campus. This is consistent with utilization patterns observed in previous years.

Methodology

University Land Use Planning staff conducted the bike parking capacity count in October 2019. Planning staff walked through campus verifying the bike parking locations and recorded in GIS existing, new, and removed bike racks. Staff used maps containing the most recent campus GIS data for reference in the field. Staff also counted the functional bike parking spaces in each rack, recorded the hoop type and its status as covered or uncovered, and documented rack condition (damage and paint).

University Land Use Planning staff then generated survey forms and maps using data from the capacity inventory for use in the Utilization Survey. Utilization is measured by counting the number of bicycles in or adjacent to racks. The Utilization Survey divides campus into six (6) sections that can be easily surveyed by one or two people on foot, within the two-hour time frame allotted for the survey. Survey sections and parking locations are mapped in **Appendix A: Bicycle Survey Sections**. The bike parking sections are different from the Campus Master Plan (CMP) sectors; the bike parking sections divide campus into smaller areas.

The utilization survey was conducted between 10 a.m. and 12 p.m. on Tuesday, October 22th and Wednesday, October 23rd. Two mid-week days are used to produce an average utilization figure based on data collected on both a student lecture and a lab day. The number of students on campus differs on lab and lecture days, and similarly, building use differs between days. Therefore, utilization fluctuates from site to site, across campus, based on the day of the week. For this reason, it is necessary to survey on both a lab and lecture days to determine an average site and campus wide utilization. However, this utilization survey methodology will fail to capture highest utilization at sites serving athletic or conference facilities. Peak utilization at locations serving athletic and conference facilities will occur in conjunction with scheduled events such as practices and events.

To conduct the survey, faculty, staff and student volunteers walked through the bike parking sections counting parked bicycles. Surveyors recorded data on paper forms, using maps and tables generated from the capacity inventory. Volunteers recorded bikes both in and out of racks. Bikes locked to trees, railings, and otherwise out of racks were counted and entered into the utilization counts for the nearest adjacent rack. This process can create unusually high utilization percentages in areas where bike parking capacity is low but a great number of bikes are present, far exceeding the capacity of a given rack. Volunteers also

recorded abandoned bikes and damaged racks not already captured during the capacity inventory. University Land Use Planning staff then entered the collected utilization and condition data into Excel and ArcGIS as point feature attributes. Staff conducted capacity and utilization analysis in Excel and mapped results in ArcGIS. Staff used Excel to evaluate changes in capacity and utilization over previous years, as well as to determine the current trend of utilization and capacity across campus. Using ArcGIS it is possible to see the locations on campus that have damaged racks, rack installation problems, and abandoned bicycles. ArcGIS also makes it possible to illustrate which areas of campus have the highest capacity and experience high utilization.

Capacity Inventory

The bicycle parking capacity inventory quantifies the number of functional bike parking spaces on campus, the type of rack (e.g., hoop or non-hoop), as well as if the bike parking is covered or uncovered.

Damaged Racks and Abandoned Bikes

Bike parking capacity is the number of functional bike parking spaces available on campus. Hoop racks provide two (2) spaces per hoop when installed correctly. Incorrect rack installation, abandoned bikes, and damaged racks reduce available capacity. The capacity inventory indicates the number of bicycle parking spaces that are present within correctly installed and undamaged racks. Racks with damage and installation problems affecting capacity are recorded during the capacity inventory, while racks with abandoned bicycles are recorded within the utilization survey. Of the 374 locations on campus, the 2019 survey found forty-five (45) locations with abandoned bicycles. The survey found eleven (11) locations where rack installation problems affected capacity. The survey also identified twenty-eight (28) locations with some degree of damage, 12 locations with bikes out of racks, and 125 locations with fair to poor paint condition. **Appendix B: Condition Map and Report** provides detailed information on these locations.

Total Capacity

In 2008, the first year of the bike parking survey, there were 6,145 bike parking spaces on campus. OSU has increased bike parking capacity every year since the survey began, installing on average more than 300 new bike parking spaces each year. As of 2019, there were 8,969 bike parking spaces available on campus. This represents a 46 percent increase in total bike parking capacity over the 2008 capacity (**Table 1: Bike Parking Capacity**

Table 1: Bike Parking Capacity 2008-2019

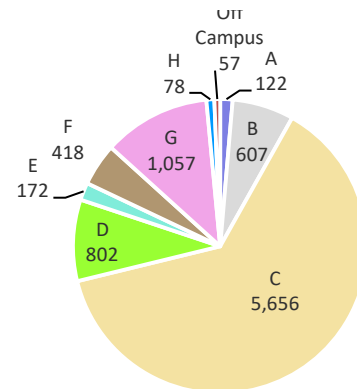
| Survey Year | Campus Wide Capacity |
|-------------|----------------------|
| 2008 | 6,145 |
| 2010 | 6,842 |
| 2012 | 7,491 |
| 2014 | 8,181 |
| 2015 | 8,855 |
| 2017 | 8,942 |
| 2019 | 8,969 |

2008-2019). OSU added 27 bike parking spaces to capacity between 2017 and 2019, representing a 0.3 percent increase in total capacity. This relatively small increase is due in part to the temporary removal of bike parking at Peavy Hall. In 2017, OSU demolished Peavy Hall and removed approximately 143 bike parking spaces. The university has constructed a new structure on the site, which will provide approximately 160 new bike parking spaces, exceeding the number removed through demolition. However at the date of this report, the construction project was not yet complete, and the racks were not available for use. At the new Advanced Wood Products building, OSU provided new bike parking with new construction. New bike racks were also added to the Gill Coliseum plaza.

CMP Sector Capacity

Figure 1: Bike Parking Capacity by Campus Sector illustrates the share of campus wide bike parking capacity provided within each campus sector. Due to the large difference in intensity of development, use, and size between campus sectors, the sector bike parking capacity varies greatly across sectors. Sector C represents the campus core and has the largest number of bike parking spaces (5,656 or 63 percent). It is the largest campus sector by area (158 acres), and it has the highest density of development and intensity of use. Sector A is the second largest campus sector by area (77 acres), but it has the second lowest bike parking capacity among campus sectors. Sector A is largely agricultural in use; therefore, it has fewer structures and a lower intensity of development, requiring fewer bike parking spaces. The difference in development and intensity of use between sectors has a large impact on the need and provision of bike parking spaces. Spaces are not distributed evenly across campus but are provided according to intensity of development and type of use. The majority of bike parking is located predominantly within Sector C, with large capacity racks located near residence halls, as illustrated in **Appendix C: Bicycle Parking Capacity**.

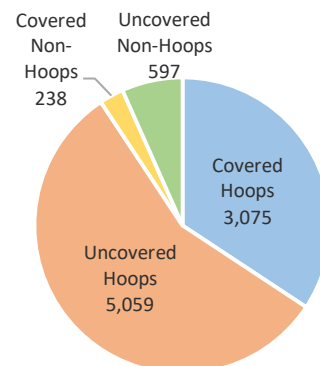
Figure 1: Campus Sector Bike Parking Capacity



Bike Parking Type Groups

On the OSU campus, bike parking can be organized into four groups for analysis: Covered Hoops, Covered Non-Hoops, Uncovered Hoops, and Uncovered Non-Hoops. In the past OSU provided various types of non-hoop racks. OSU's goal is to, over time, replace the non-standardized rack types with standard hoop racks, provided replacement racks do not conflict with pedestrian and ADA access. OSU provides covered bike parking with new development and, when possible, in other locations not associated with development. Over the years, OSU has provided an increasing share of covered bicycle parking on campus. **Figure 2: Campus Wide Bike Parking Capacity** illustrates the share of bike parking capacity represented by the four bike parking types, campus wide. Uncovered hoops provide most of the campus bike parking capacity with 5,059 spaces or 56 percent of total capacity. Covered hoops provide the second largest share of bike parking with 3,075 spaces or a 34 percent share of the total. Uncovered non-hoops provide only 597 parking spaces or seven (7) percent of the total. Covered non-hoops are the smallest share, with 238 spaces or three (3) percent of total bike parking capacity.

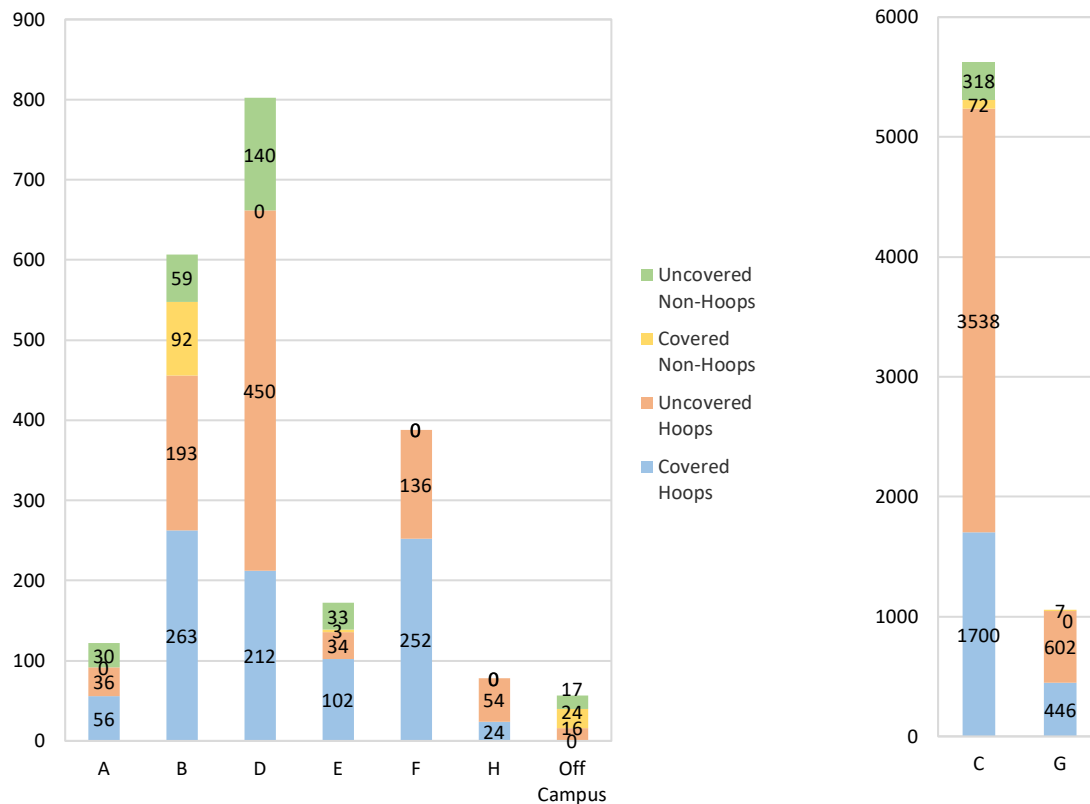
Figure 2: Campus Wide Bike Parking Capacity



As previously mentioned, due to the large difference in development intensity and size of the campus sectors, sector bike parking capacity and

capacity by type of rack vary greatly by sector. **Figure 3** illustrates bike parking type as a share of sector parking capacity. The bike parking capacity of sectors C and G are so much greater than the other sectors that when charted in **Figure 3** they must be displayed at a different scale than the other sectors. Also, as **Figure 3** illustrates, some sectors do not provide all four types of bike parking. Sectors F and H only have hoop racks, while sector D has no covered non-hoops. As OSU replaces old non-hoop racks and installs standard OSU hoop racks with new development, the share of hoops, both covered and uncovered will

Figure 3: Bike Parking Type as a Share of Sector Capacity



gradually increase in all sectors.

Campus Wide Hoop Space Capacity

The 2019 capacity survey determined that 91 percent of campus bike parking spaces (8,134 spaces) are OSU standard hoops (**Table 2**). In 2008, only 36 percent of OSU's bike parking spaces (2,219 spaces) were standard hoops. The 2019 capacity count illustrates there has been a 267 percent increase in hoop spaces in the past eleven years (**Figure 4**). Despite the relatively small gain in overall bike parking capacity between 2017 and 2019, increases were made in the share of hoop racks as OSU removed non-standard racks and replaced them with hoop racks (**Table 2**). Between 2017 and 2019, OSU added 295 hoop spaces, or four (4) percent more hoop spaces (**Table 2**).

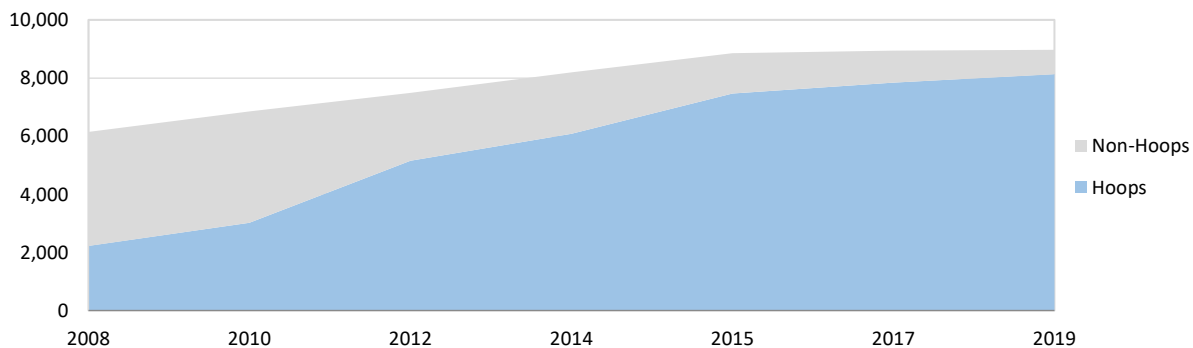
OSU installs new hoops with new development projects. OSU also replaces non-hoops with hoops in existing bike parking locations when a change would not interfere with pedestrian or ADA access. However, hoop racks require more space than non-hoop racks. Therefore, at times OSU cannot place hoop

racks in the same location as non-hoop racks, due to space constraints. Hoop rack locations are mapped in **Appendix D: Hoop Type Map**.

Table 2: OSU Standard Hoop Spaces 2008-2019

| Survey Year | Hoop Spaces | Non-Hoop Spaces | Total Capacity | Hoop Capacity |
|-------------|-------------|-----------------|----------------|---------------|
| 2008 | 2,219 | 3,926 | 6,145 | 36% |
| 2010 | 3,026 | 3,816 | 6,842 | 44% |
| 2012 | 5,156 | 2,335 | 7,491 | 69% |
| 2014 | 6,084 | 2,097 | 8,181 | 74% |
| 2015 | 7,462 | 1,393 | 8,855 | 84% |
| 2017 | 7,839 | 1,103 | 8,942 | 88% |
| 2019 | 8,134 | 835 | 8,969 | 91% |

Figure 4: Hoop and Non-Hoop Bike Parking Capacity Change Over Time



Campus Wide Covered Space Capacity

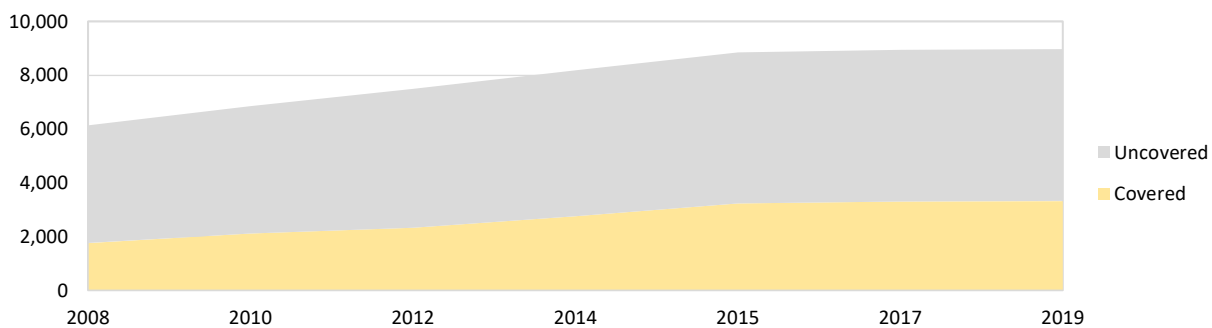
Covered bike parking is parking underneath a bike shelter, within an enclosed area such as a porch, or substantially protected by building eaves. OSU provides 50 percent of all required new bike parking as covered parking per LDC Section 3.36.60.13.c. New bike parking provided separate from development does not have to be covered per LDC regulations. Numerous factors other than land development code regulations affect the provision of covered bicycle parking. Cost is one factor. Covered bicycle parking is significantly more expensive than uncovered parking, costing approximately \$2,300 per space. Uncovered parking costs approximately \$100 per space. Additionally, siting covered bicycle parking is more challenging than siting uncovered parking due to the size of the covered parking structures. OSU has the need to balance function, aesthetics, transportation mode-prioritization, and safety. This is especially true in the built-out, historic portions of campus. City of Corvallis land development code regulations for the OSU National Historic District apply to the installation of new covered bike parking structures within the Historic District. These installations are subject to review and approval by the City of Corvallis Historic Resource Commission. Despite these challenges, OSU continues to increase the amount of covered bike parking on campus.

In 2008, only 29 percent of the total bike parking capacity (1,759 spaces) was covered (**Table 3**). Between 2008 and 2019, OSU increased the number of covered bike parking spaces on campus by 1,554 spaces, or 88 percent. As of 2019, 37 percent of the total bike parking capacity was covered (3,313 bike parking spaces) (**Table 3**). Between 2017 and 2019, covered bike parking capacity increased by 3 spaces, or 0.09 percent more covered bike parking spaces than in 2017. **Appendix E: Cover Type Map** identifies the covered status of bike racks on campus.

Table 3: Covered Bike Parking Spaces 2008-2019

| Survey Year | Covered Spaces | Uncovered Spaces | Total Capacity | Covered Capacity |
|-------------|----------------|------------------|----------------|------------------|
| 2008 | 1,759 | 4,386 | 6,145 | 29% |
| 2010 | 2,108 | 4,734 | 6,842 | 31% |
| 2012 | 2,326 | 5,165 | 7,491 | 31% |
| 2014 | 2,755 | 5,426 | 8,181 | 34% |
| 2015 | 3,222 | 5,633 | 8,855 | 36% |
| 2017 | 3,310 | 5,632 | 8,942 | 37% |
| 2019 | 3,313 | 5,656 | 8,969 | 37% |

Figure 5: Covered and Uncovered Bike Parking Capacity Change Over Time



Utilization Survey

The utilization survey was conducted between 10 a.m. and 12 p.m. on Tuesday, October 22th and Wednesday, October 23rd. The weather conditions on the days of the survey were good for biking. Tuesday the 22th was approximately 68 degrees and partly sunny. Wednesday, October 23rd was approximately 61 degrees and mostly sunny. There were no rain showers either day.

Campus Wide Utilization

The 2019 utilization survey found the average campus wide bike parking utilization was 33 percent. This utilization rate is 9 percent lower than the utilization rate observed in 2017, and the lowest utilization rate measured in the history of the bike parking utilization survey. All values are shown in **Table 5 OSU Bike Parking Utilization 2008-2019**. As in previous years, numerous locations had utilization rates in excess of 100 percent, though fewer locations had the excessively high utilization rates than were observed in previous years. Twenty-six locations had utilization rates of 75 percent or greater. In 2017 there were 55 locations with excessive utilization. Details on the 2019 highest utilization locations are provided in **Appendix F: Highest Utilized Sites Map and Report**. Like previous years, locations with the highest utilization rates were concentrated around residence halls and in the northeast portion of campus. The utilization survey measured the highest rates of utilization near the Orchard Court apartments and at residence halls in general. Campus wide bike Parking Utilization by site is mapped in **Appendix G: Bike Parking Utilization Map**.

Table 5: OSU Bike Parking Utilization 2008-2019

| Survey Year | Campus Wide Capacity | Utilized Spaces | Percent Utilization |
|-------------|----------------------|-----------------|---------------------|
| 2008 | 6,145 | 2,742 | 44% |
| 2010 | 6,842 | 5,029 | 74% |
| 2012 | 7,491 | 4,146 | 55% |
| 2014 | 8,178 | 4,241 | 54% |
| 2015 | 8,855 | 4,826 | 55% |
| 2017 | 8,942 | 3,778 | 42% |
| 2019 | 8,969 | 2,976 | 33% |

Capacity Share vs Utilization Share

Each type of bicycle parking facility represents a portion, or share of the overall campus bike parking capacity. The capacity share for each parking facility differs across sectors, where one area of campus may offer a greater number of one type of bike parking facility than another (**Figure 3**). Overall, the OSU campus provides primarily hoop rack bicycle parking, and the majority of campus bike parking is either covered or uncovered hoop racks (**Figure 2**). The utilization of each type of bicycle parking facility represents a portion or share of overall campus bike parking utilization.

Comparing bicycle parking capacity share to bike parking utilization share for a given type of bike parking facility illustrates the intensity of bike facility utilization in comparison to facility availability. Where utilization share exceeds capacity share for a given bike parking facility type it indicates that type of bike parking facility receives a disproportionate intensity of use. The 2019 bike parking survey demonstrated that the utilization share exceeded capacity share for covered hoops in individual campus sectors as well as across campus as a whole (**Figure 6 and Figure 7**).

Covered bike parking represents 36.9% of campus wide bike parking capacity and it receives 45.6% of campus wide utilization. Sector covered bike parking capacity share varies from 26% to 67% of bike parking capacity, per campus sector. Similarly the share of utilization of covered bike parking varies from 32% to 100% of covered bike parking, per campus sector. In all campus sectors the share of utilization exceeded the share of capacity for covered bike parking, indicating a disproportionate intensity of use for the covered bike parking.

Figure 6: Sector Covered Bike Parking Capacity Share Compared with Utilization Share

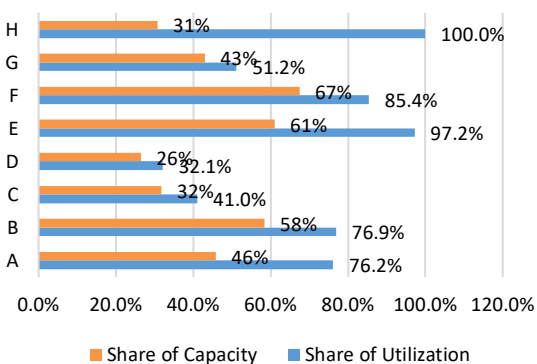
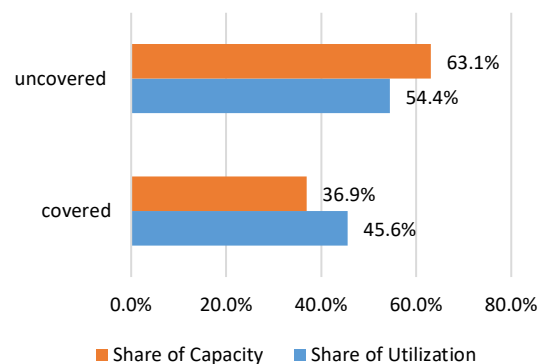


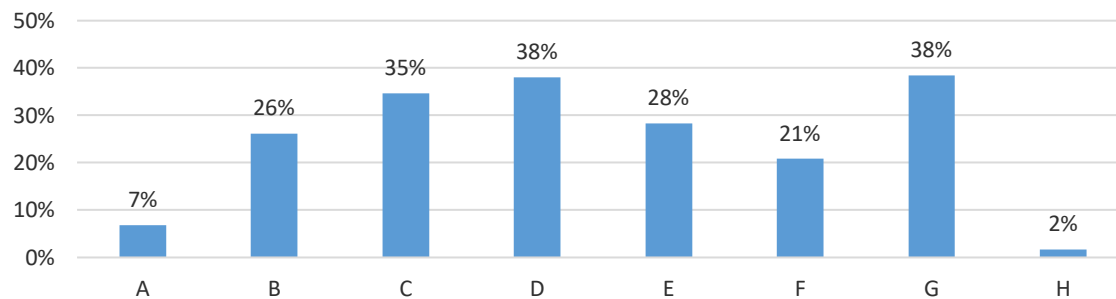
Figure 7: Campus Wide Covered Bike Parking Capacity Share Compared with Utilization Share



Sector Utilization

Sectors B, C, D and G have the highest percent utilization, have the highest bike parking capacity, and contain the campus core buildings and student housing. The bike parking survey is scheduled late morning, in October of fall term to capture peak utilization in these sectors. Sectors A, E, F and H contain primarily agricultural spaces, athletic facilities, and event facilities (**Figure 8**). These locations, especially the athletic and event facilities, experience much higher rates of utilization during events, outside of the regular academic schedule. To accurately evaluate the utilization of bike parking at these locations, surveys would need to be conducted during special events. Complete Site and Sector capacity and utilization data are provided in **Appendix H: Detailed Survey Report**.

Figure 8: Sector Percent Utilization



Additional Information/Contacts.

For additional information, please contact:

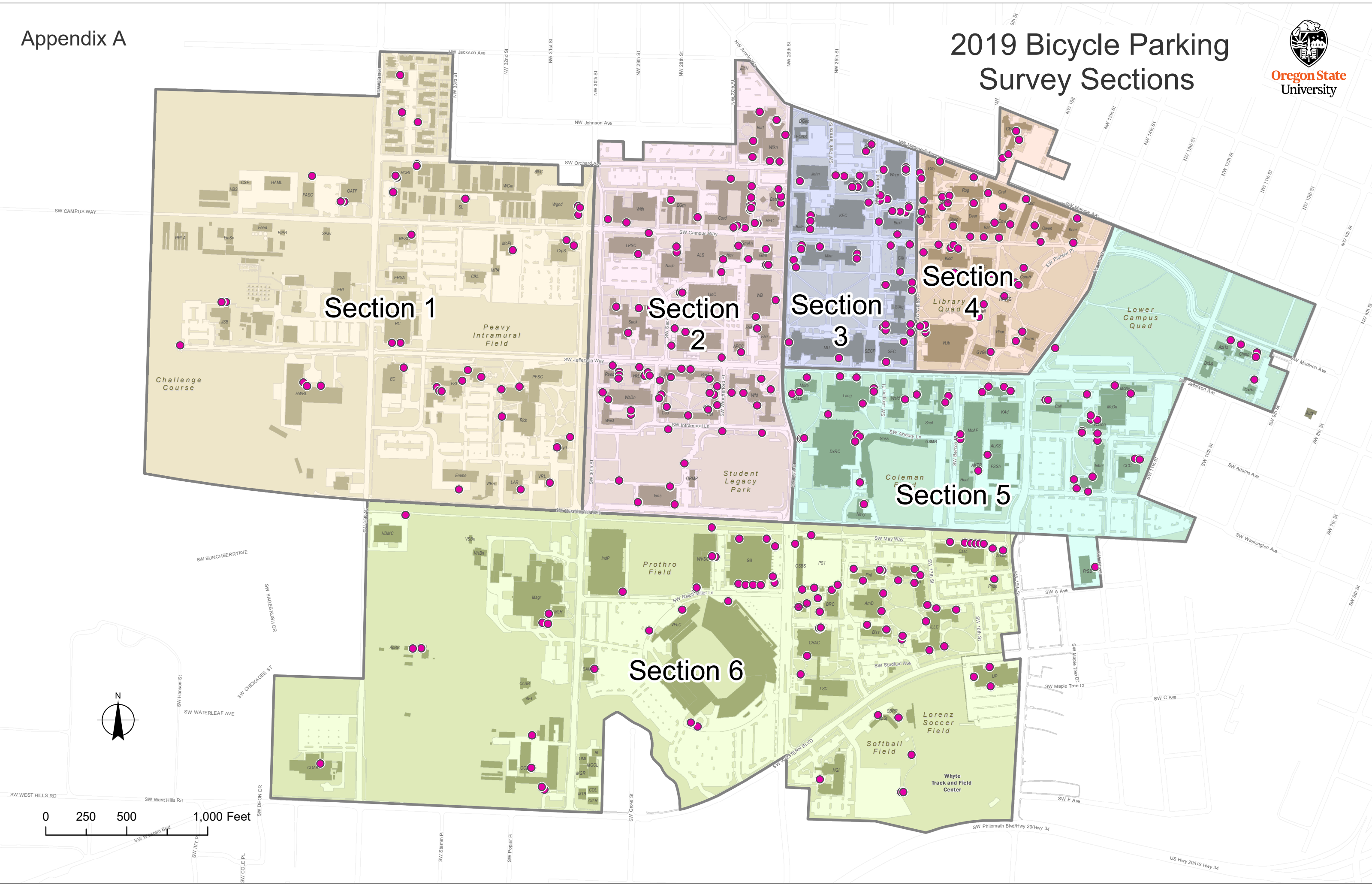
- ☐ Susan Padgett, Campus Planner
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Appendices

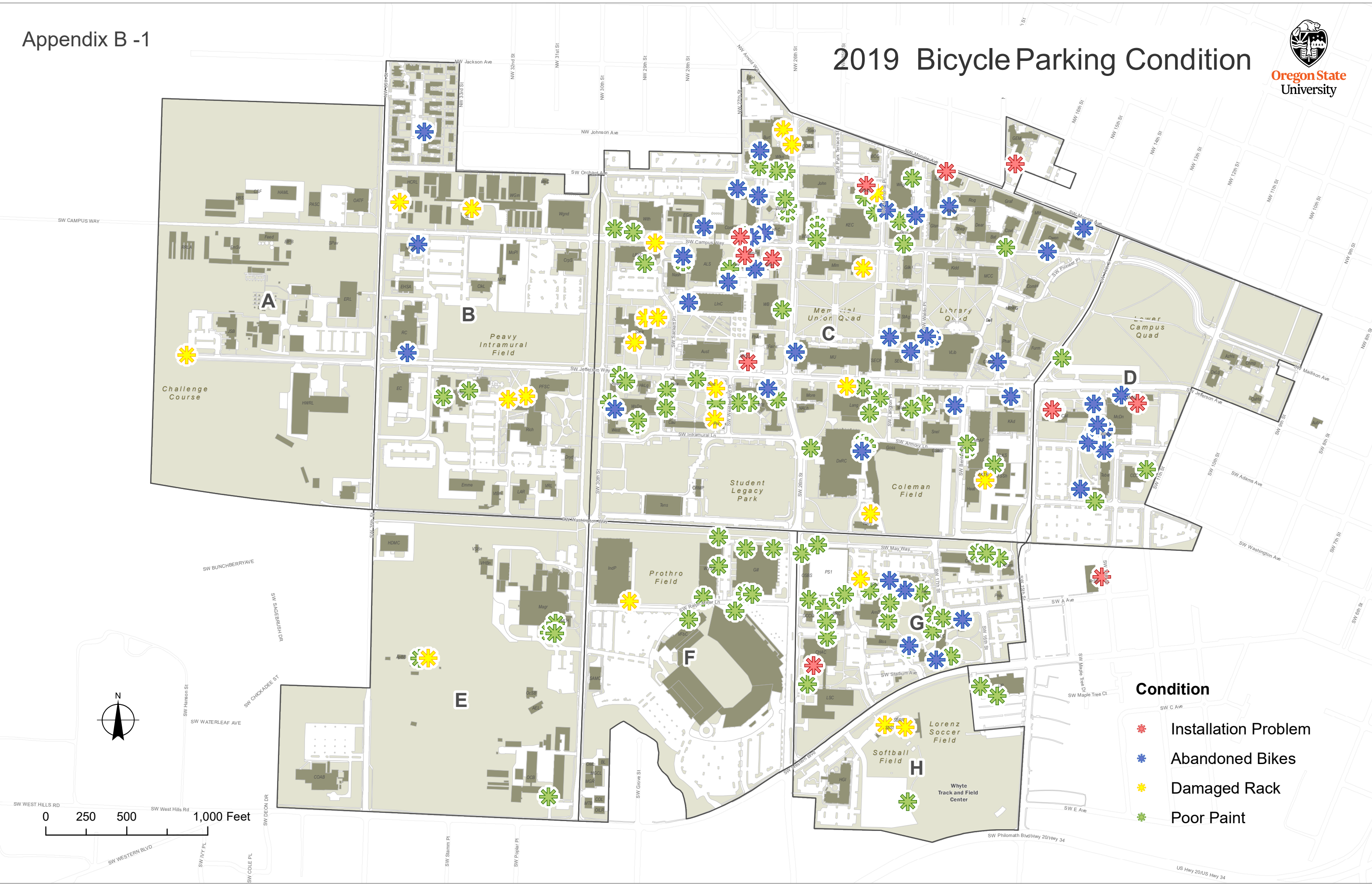
- A- Bicycle Survey Sections
- B- Condition Map and Report
- C- Bicycle Parking Capacity Map
- D- Hoop Type Map
- E- Cover Type Map
- F- Highest Utilized Sites Map and Report
- G- Bike Parking Utilization Map
- H- Detailed Survey Report



2019 Bicycle Parking Survey Sections



2019 Bicycle Parking Condition



- Condition**
- Installation Problem
 - Abandoned Bikes
 - Damaged Rack
 - Poor Paint

Appendix B -2

Condition Report

| Abandoned Bikes | | Abandoned Bikes (continued) | | Damaged / Unanchored Racks | | Rack Installation Problems | | Bikes out of Racks | |
|-----------------|-----------------|--------------------------------|-----------------|----------------------------|--------------------|----------------------------|-----------------|--------------------|--------------------|
| Location ID | Abandoned Bikes | Location ID | Abandoned Bikes | Location ID | Damaged/Unanchored | Location ID | Install Problem | Location ID | Bikes out of Racks |
| 1029 | y | 5155 | y | 2251 | y | 2241 | y | 2392 | y |
| 1047 | y | 5156 | y | 1364 | y | 2080 | y | 5154 | y |
| 1051 | y | 5395 | y | 1048 | y | 2240 | y | 2040 | y |
| 2068 | y | 6296 | y | 1057 | y | 2351 | y | 2079 | y |
| 2084 | y | 6301 | y | 1058 | y | 3221 | y | 2098 | y |
| 2236 | y | 6306 | y | 1403 | y | 4271 | y | 4180 | y |
| 2238 | y | 6308 | y | 1404 | y | 4346 | y | 4271 | y |
| 2241 | y | 6314 | y | 2066 | y | 5158 | y | 5132 | y |
| 2242 | y | | | 2073 | y | 5162 | y | 5133 | y |
| 2250 | y | | | 2074 | y | 6119 | y | 5382 | y |
| 2251 | y | | | 2075 | y | 5274 | y | 5150 | y |
| 2254 | y | | | 2094 | y | | | 6422 | y |
| 2264 | y | | | 2095 | y | | | | |
| 2359 | y | | | 2256 | y | | | | |
| 2390 | y | | | 2257 | y | | | | |
| 2391 | y | | | 3212 | y | | | | |
| 2392 | y | | | 3217 | y | | | | |
| 3195 | y | | | 5289 | y | | | | |
| 3199 | y | | | 5320 | y | | | | |
| 3331 | y | | | 5337 | y | | | | |
| 3332 | y | | | 5162 | y | | | | |
| 3343 | y | | | 6369 | y | | | | |
| 4164 | y | | | 6426 | y | | | | |
| 4171 | y | | | 6110 | y | | | | |
| 4273 | y | | | 6316 | y | | | | |
| 4324 | y | | | 6378 | y | | | | |
| 4328 | y | | | 6379 | y | | | | |
| 4330 | y | | | 5274 | y | | | | |
| 5283 | y | | | | | | | | |
| 5286 | y | | | | | | | | |
| 5381 | y | | | | | | | | |
| 5146 | y | | | | | | | | |
| 5148 | y | | | | | | | | |
| 5151 | y | | | | | | | | |
| 5152 | y | | | | | | | | |
| 5153 | y | | | | | | | | |
| 5154 | y | | | | | | | | |

Appendix B -3

Condition Report

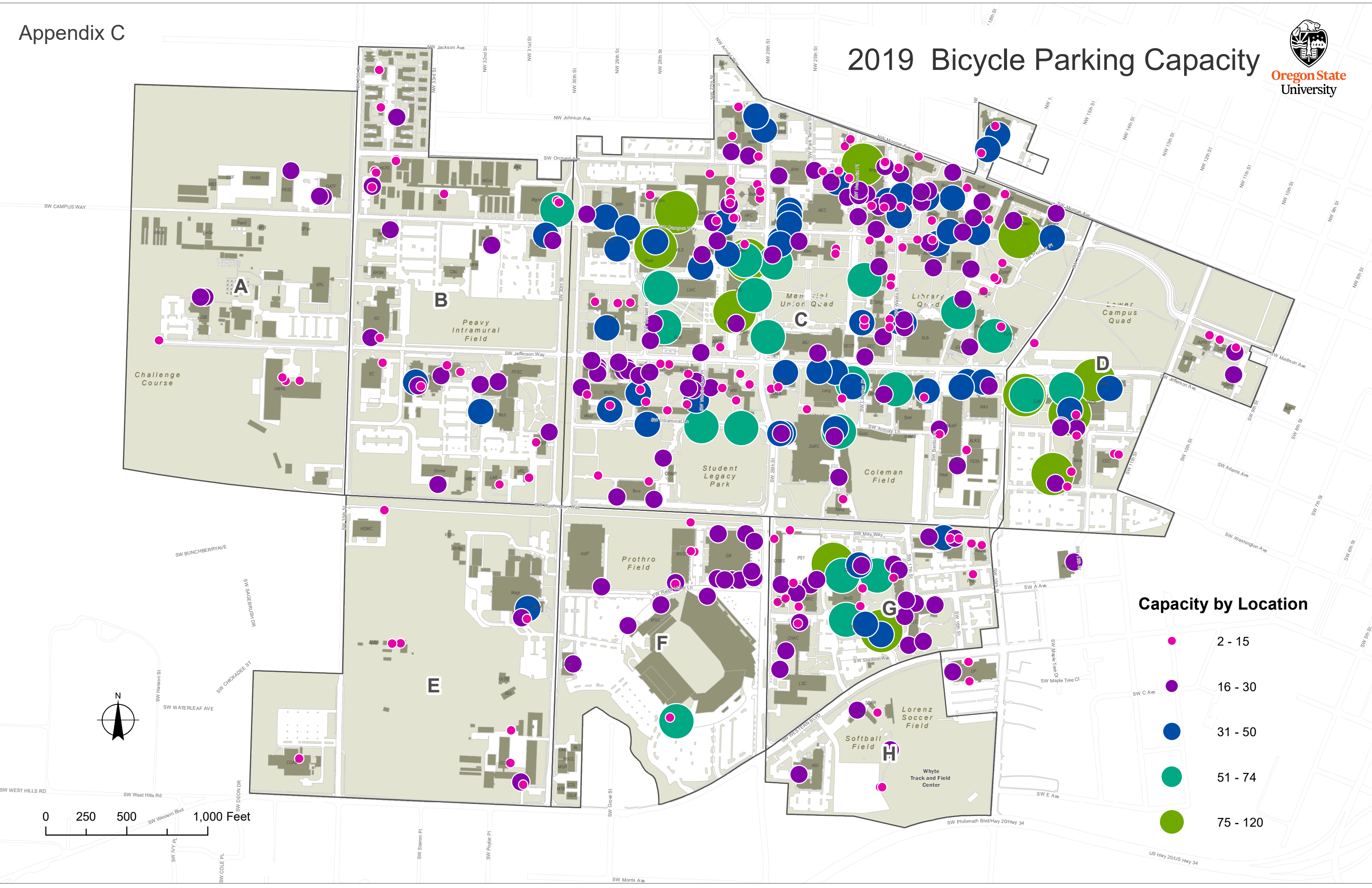
| Paint Issues | |
|--------------|-----------------|
| Location ID | Paint Condition |
| 2040 | fair |
| 2042 | fair |
| 2064 | fair |
| 2065 | fair |
| 2066 | fair |
| 2067 | fair |
| 2068 | fair |
| 2069 | fair |
| 2084 | fair |
| 2086 | fair |
| 2092 | fair |
| 2127 | fair |
| 2128 | fair |
| 2143 | fair |
| 2232 | fair |
| 2236 | fair |
| 2237 | fair |
| 2238 | fair |
| 2240 | fair |
| 2241 | fair |
| 2242 | fair |
| 2243 | fair |
| 2254 | fair |
| 2255 | fair |
| 2259 | fair |
| 2260 | fair |
| 2350 | fair |
| 2390 | fair |
| 2392 | fair |
| 5133 | fair |
| 5288 | fair |
| 5290 | fair |
| 5334 | fair |
| 5381 | fair |
| 5148 | fair |
| 5149 | fair |
| 5161 | fair |
| 5323 | fair |

| Paint Issues (continued) | |
|-----------------------------|-----------------|
| Location ID | Paint Condition |
| 6010 | fair |
| 6421 | fair |
| 6425 | fair |
| 6426 | fair |
| 6100 | fair |
| 6101 | fair |
| 6106 | fair |
| 6107 | fair |
| 6123 | fair |
| 6126 | fair |
| 6113 | fair |
| 6116 | fair |
| 6117 | fair |
| 6118 | fair |
| 6119 | fair |
| 6122 | fair |
| 6135 | fair |
| 6277 | fair |
| 6296 | fair |
| 6298 | fair |
| 6302 | fair |
| 6306 | fair |
| 6307 | fair |
| 6308 | fair |
| 6417 | fair |
| 6420 | fair |
| 6355 | fair |
| 6379 | fair |
| 6305 | fair |
| 6110 | fair |
| 1024 | poor |
| 1025 | poor |
| 1404 | poor |
| 2085 | poor |
| 2087 | poor |
| 2233 | poor |
| 2234 | poor |
| 2251 | poor |

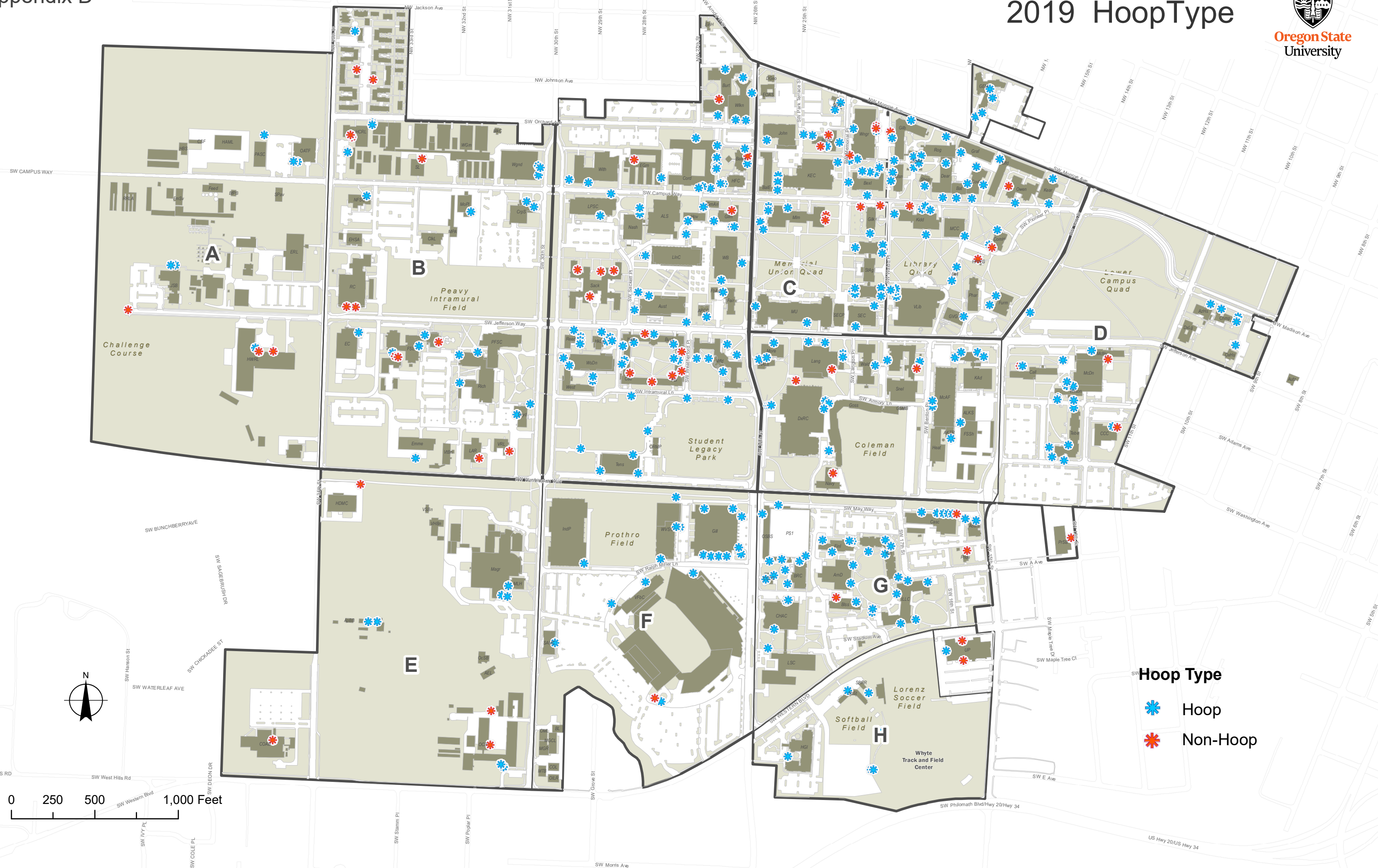
| Paint Issues (continued) | |
|-----------------------------|-----------------|
| Location ID | Paint Condition |
| 2257 | poor |
| 2258 | poor |
| 2349 | poor |
| 3188 | poor |
| 3195 | poor |
| 3197 | poor |
| 3201 | poor |
| 3213 | poor |
| 3218 | poor |
| 3222 | poor |
| 3223 | poor |
| 3224 | poor |
| 3343 | poor |
| 3413 | poor |
| 4166 | poor |
| 5131 | poor |
| 5132 | poor |
| 5281 | poor |
| 5282 | poor |
| 5289 | poor |
| 5291 | poor |
| 5292 | poor |
| 5293 | poor |
| 5320 | poor |
| 5336 | poor |
| 5337 | poor |
| 5382 | poor |
| 5158 | poor |
| 5160 | poor |
| 5162 | poor |
| 5409 | poor |
| 6005 | poor |
| 6009 | poor |
| 6369 | poor |
| 6108 | poor |
| 6353 | poor |
| 6398 | poor |
| 6423 | poor |

| Paint Issues (continued) | |
|-----------------------------|-----------------|
| Location ID | Paint Condition |
| 6120 | poor |
| 6134 | poor |
| 6280 | poor |
| 6297 | poor |
| 6299 | poor |
| 6300 | poor |
| 6301 | poor |
| 6311 | poor |
| 6313 | poor |
| 6354 | poor |
| 5274 | poor |

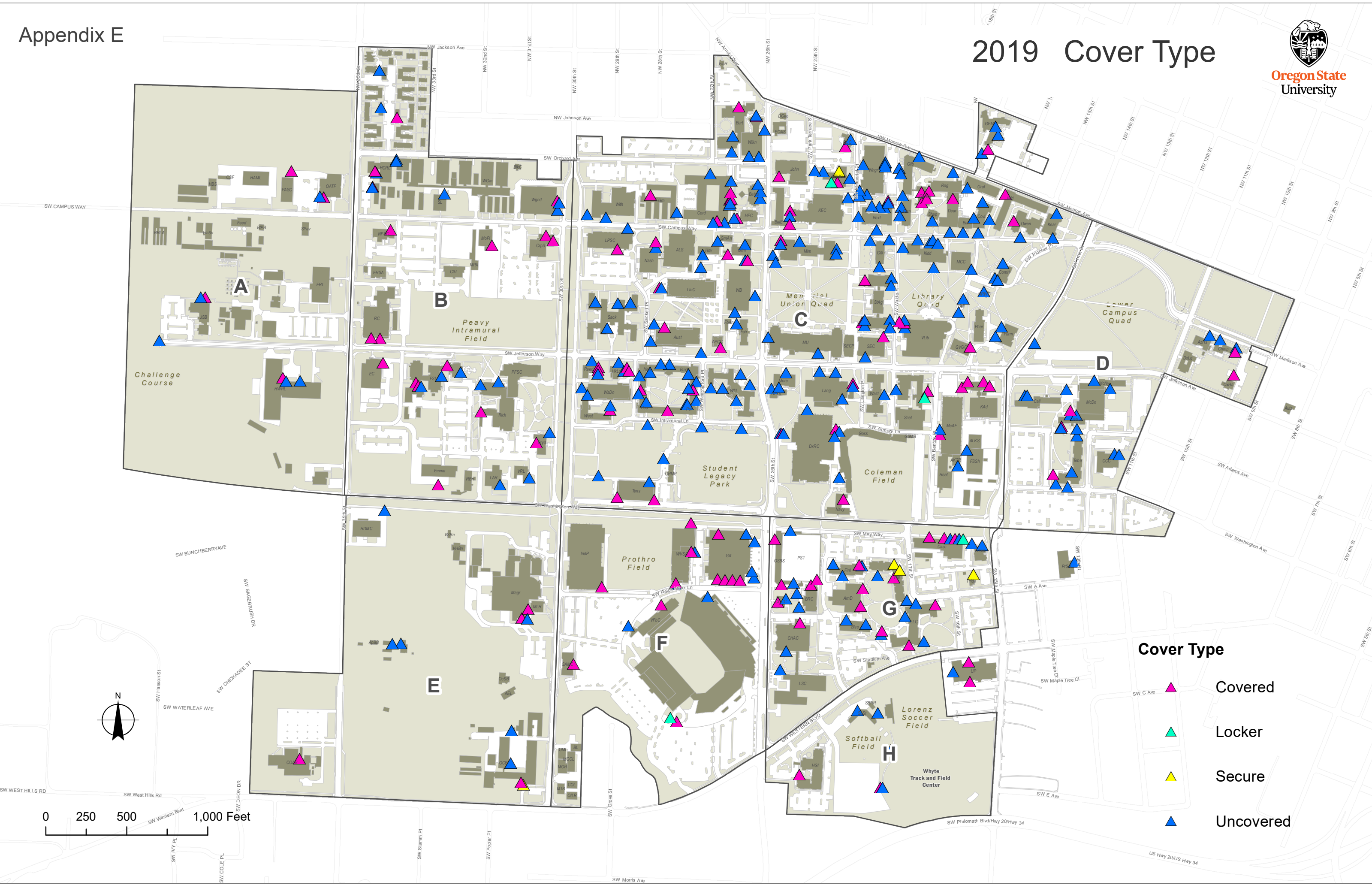
2019 Bicycle Parking Capacity







Oregon State
University

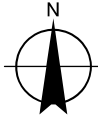
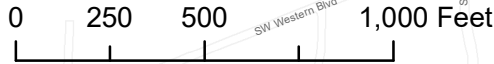


2019 Cover Type

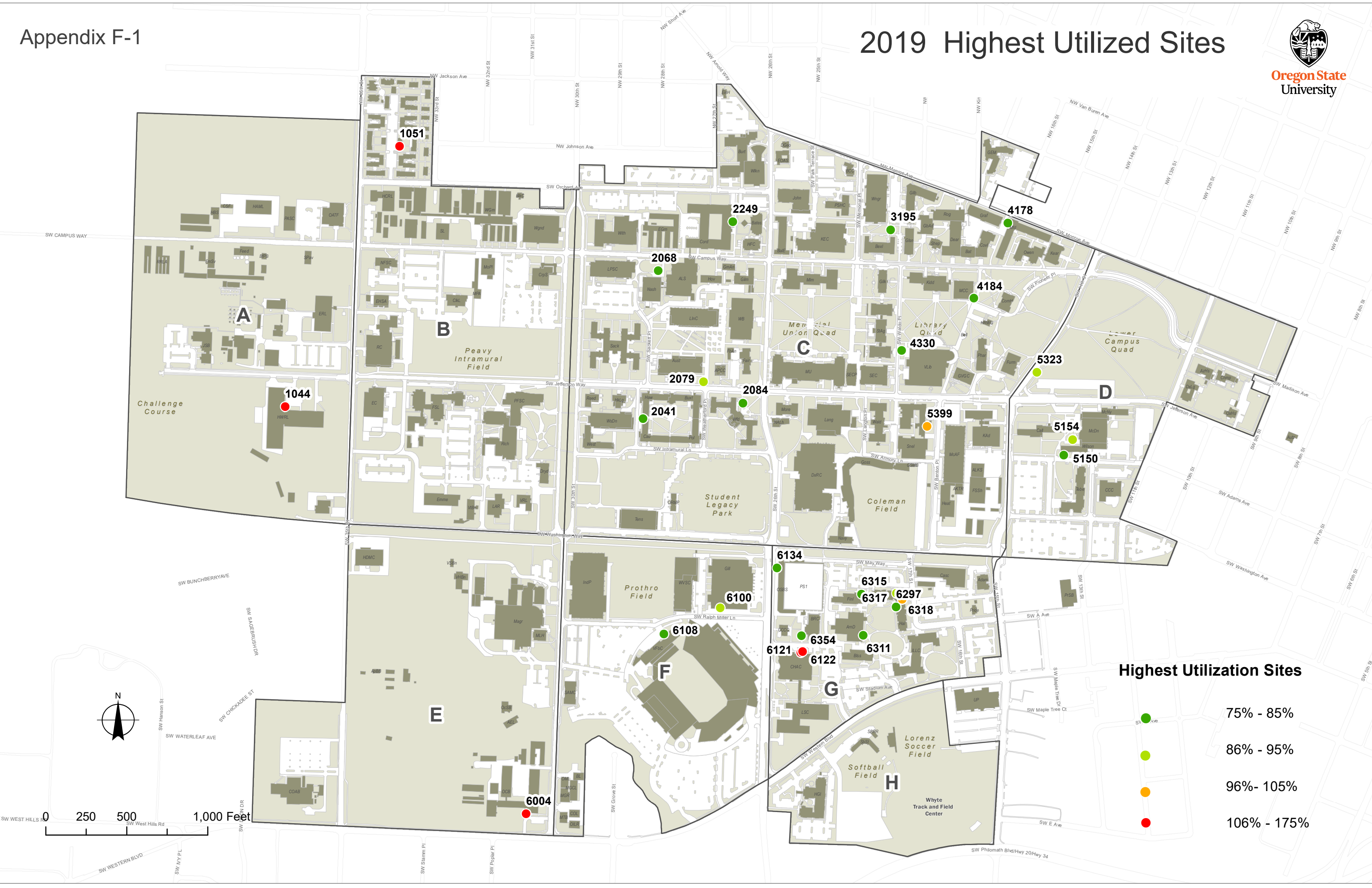


Cover Type

-  Covered
-  Locker
-  Secure
-  Uncovered



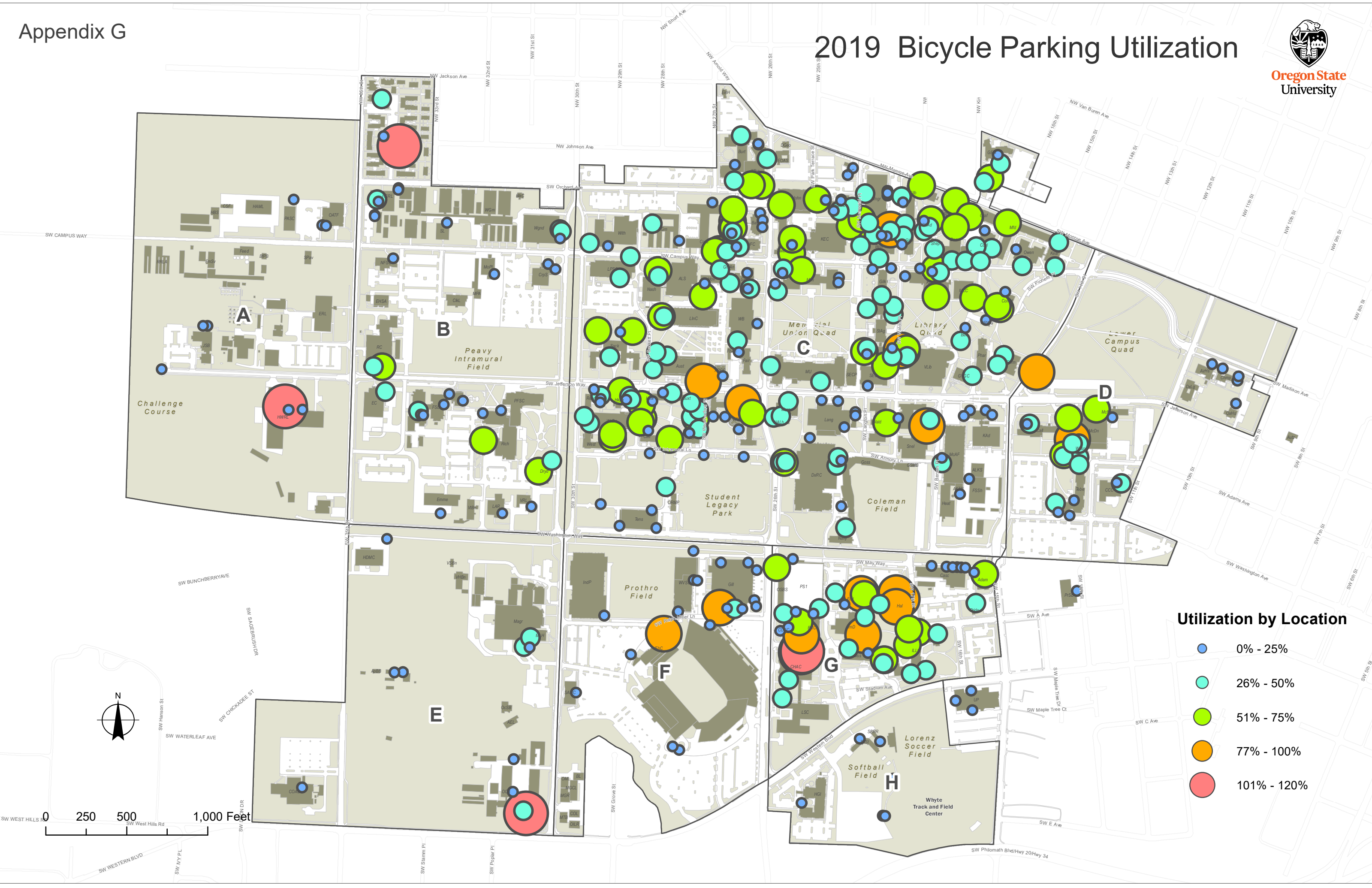
2019 Highest Utilized Sites



Highest Utilized Sites Report

| Sites with Utilization of 75% or Greater | | | | | |
|--|--------|----------|----------------|----------|---------------------|
| Location ID | Type | OSU Hoop | Survey Section | Capacity | Percent Utilization |
| 1044 | Covr | Y | A | 4 | 175% |
| 6121 | UnCovr | Y | G | 5 | 120% |
| 6122 | Covr | Y | G | 8 | 119% |
| 6004 | Covr | Y | E | 8 | 113% |
| 1051 | Covr | N | B | 26 | 112% |
| 5399 | Covr | N | C | 10 | 100% |
| 6318 | Covr | Y | G | 20 | 98% |
| 5323 | UnCovr | Y | D | 10 | 95% |
| 2079 | UnCovr | Y | C | 20 | 93% |
| 6317 | Covr | Y | G | 22 | 86% |
| 5154 | Covr | Y | D | 40 | 86% |
| 4330 | Covr | Y | C | 48 | 84% |
| 6311 | Covr | Y | G | 8 | 81% |
| 2084 | UnCovr | Y | C | 10 | 80% |
| 6297 | Covr | Y | G | 10 | 80% |
| 6354 | UnCovr | Y | G | 12 | 79% |
| 3195 | Covr | Y | C | 48 | 78% |
| 6108 | Covr | Y | F | 20 | 78% |
| 6315 | Covr | Y | G | 48 | 76% |
| 2041 | Covr | Y | C | 10 | 75% |
| 2068 | Covr | Y | C | 48 | 75% |
| 2249 | Covr | Y | C | 14 | 75% |
| 4177 | UnCovr | Y | C | 20 | 75% |
| 4183 | UnCovr | N | C | 2 | 75% |
| 5150 | Covr | Y | D | 20 | 75% |
| 6134 | Covr | Y | G | 8 | 75% |

2019 Bicycle Parking Utilization



Appendix H-1

Detailed Survey Report

| Capacity | | | | | | | | | |
|--------------------|----------------|---------|-----------|-------|-----------|---------------|-----------------|-------------------|---------------------|
| Section | Total Capacity | Covered | Uncovered | Hoops | Non-Hoops | Covered Hoops | Uncovered Hoops | Covered Non-Hoops | Uncovered Non-Hoops |
| Campus Wide | 8,969 | 3,313 | 5,656 | 8,134 | 835 | 3,075 | 5,059 | 238 | 597 |
| A | 122 | 56 | 66 | 92 | 30 | 56 | 36 | 0 | 30 |
| B | 607 | 355 | 252 | 456 | 151 | 263 | 193 | 92 | 59 |
| C | 5,656 | 1,800 | 3,856 | 5,238 | 418 | 1,700 | 3,538 | 100 | 318 |
| D | 802 | 212 | 590 | 662 | 140 | 212 | 450 | 0 | 140 |
| E | 172 | 105 | 67 | 136 | 36 | 102 | 34 | 3 | 33 |
| F | 418 | 282 | 136 | 408 | 10 | 272 | 136 | 10 | 0 |
| G | 1,057 | 455 | 602 | 1,048 | 9 | 446 | 602 | 9 | 0 |
| H | 78 | 24 | 54 | 78 | 0 | 24 | 54 | 0 | 0 |
| Off Campus | 57 | 24 | 33 | 16 | 41 | 0 | 16 | 24 | 17 |

| Utilization | | | | | | | | | |
|--------------------|-------------------|---------|-----------|--------|-----------|---------------|-----------------|-------------------|---------------------|
| Sections | Total Utilization | Covered | Uncovered | Hoops | Non-Hoops | Covered Hoops | Uncovered Hoops | Covered Non-Hoops | Uncovered Non-Hoops |
| Campus Wide | 2976 | 1356 | 1620 | 2814 | 162 | 1278 | 1536 | 78 | 84 |
| A | 10.5 | 8.0 | 2.5 | 8.5 | 2.0 | 8.0 | 0.5 | 0.0 | 2.0 |
| B | 153.5 | 118.0 | 35.5 | 105.5 | 48.0 | 74.5 | 31.0 | 43.5 | 4.5 |
| C | 1963.5 | 806.0 | 1157.5 | 1867.0 | 96.5 | 777.5 | 1089.5 | 28.5 | 68.0 |
| D | 313.0 | 100.5 | 212.5 | 305.0 | 8.0 | 100.5 | 204.5 | 0.0 | 8.0 |
| E | 54.0 | 52.5 | 1.5 | 52.5 | 1.5 | 52.5 | 0.0 | 0.0 | 1.5 |
| F | 65.0 | 55.5 | 9.5 | 65.0 | 0.0 | 55.5 | 9.5 | 0.0 | 0.0 |
| G | 411.5 | 210.5 | 201.0 | 409.0 | 2.5 | 208.0 | 201.0 | 2.5 | 0.0 |
| H | 1.5 | 1.5 | 0.0 | 1.5 | 0.0 | 1.5 | 0.0 | 0.0 | 0.0 |
| Off Campus | 3.0 | 3.0 | 0.0 | 0.0 | 3.0 | 0.0 | 0.0 | 3.0 | 0.0 |

| Sector A | | | | | | | | | | | | |
|-------------|--------|---------------------|----------|---------------|-------------------------|-------------------------|-----------------------|-----------------|---------|-----------------|--------------------|-----------------|
| Location ID | Sector | Covered / Uncovered | OSU Hoop | Rack Capacity | Utilization Count 10/17 | Utilization Count 10/18 | Average % Utilization | Abandoned Bikes | Damaged | Install Problem | bikes out of racks | paint condition |
| 1044 | A | Covr | Y | 4 | 7 | 7 | 175% | n | n | n | n | |
| 1045 | A | UnCovr | N | 11 | 2 | 2 | 18% | n | n | n | n | |
| 1046 | A | Covr | Y | 20 | 2 | 0 | 5% | n | n | n | n | |
| 1049 | A | Covr | Y | 16 | 0 | 0 | 0% | n | n | n | n | |
| 1050 | A | UnCovr | Y | 16 | 0 | 1 | 3% | n | n | n | n | |
| 1363 | A | UnCovr | Y | 20 | 0 | 0 | 0% | n | n | n | n | |
| 1364 | A | UnCovr | N | 14 | 0 | 0 | 0% | n | y | n | n | |
| 1409 | A | Covr | Y | 16 | 0 | 0 | 0% | n | n | n | n | |
| 1412 | A | UnCovr | N | 5 | 0 | 0 | 0% | n | n | n | n | |

| Sector B | | | | | | | | | | | | |
|-------------|---------|---------------------|----------|---------------|-------------------------|-------------------------|-----------------------|-----------------|---------|-----------------|--------------------|-----------------|
| Location ID | Section | Covered / Uncovered | OSU Hoop | Rack Capacity | Utilization Count 10/17 | Utilization Count 10/18 | Average % Utilization | Abandoned Bikes | Damaged | Install Problem | bikes out of racks | paint condition |
| 1011 | B | UnCovr | N | 5 | 0 | 1 | 10% | n | n | n | n | |
| 1012 | B | Covr | Y | 10 | 8 | 6 | 70% | n | n | n | n | |
| 1013 | B | UnCovr | Y | 20 | 9 | 3 | 30% | n | n | n | n | |
| 1016 | B | Covr | Y | 40 | 22 | 21 | 54% | n | n | n | n | |
| 1023 | B | UnCovr | N | 7 | 0 | 0 | 0% | n | n | n | n | |
| 1024 | B | UnCovr | Y | 22 | 0 | 2 | 5% | n | n | n | n | poor |
| 1025 | B | Covr | Y | 34 | 15 | 18 | 49% | n | n | n | n | poor |
| 1026 | B | Covr | N | 28 | 2 | 2 | 7% | n | n | n | n | |
| 1027 | B | UnCovr | N | 14 | 0 | 0 | 0% | n | n | n | n | |
| 1028 | B | Covr | Y | 6 | 2 | 2 | 33% | n | n | n | n | |
| 1029 | B | Covr | N | 7 | 3 | 5 | 57% | y | n | n | n | |
| 1030 | B | Covr | N | 21 | 3 | 8 | 26% | n | n | n | n | |
| 1031 | B | Covr | Y | 14 | 1 | 0 | 4% | n | n | n | n | |
| 1047 | B | Covr | Y | 20 | 4 | 4 | 20% | y | n | n | n | |
| 1048 | B | Covr | Y | 17 | 4 | 4 | 24% | n | y | n | n | |
| 1051 | B | Covr | N | 26 | 30 | 28 | 112% | y | n | n | n | |
| 1052 | B | UnCovr | N | 13 | 1 | 0 | 4% | n | n | n | n | |
| 1054 | B | UnCovr | Y | 10 | 3 | 3 | 30% | n | n | n | n | |
| 1055 | B | UnCovr | Y | 11 | 3 | 2 | 23% | n | n | n | n | |
| 1056 | B | UnCovr | Y | 8 | 1 | 1 | 13% | n | n | n | n | |
| 1057 | B | UnCovr | Y | 6 | 0 | 1 | 8% | n | y | n | n | |
| 1058 | B | UnCovr | N | 7 | 1 | 2 | 21% | n | y | n | n | |
| 1059 | B | Covr | Y | 14 | 8 | 4 | 43% | n | n | n | n | |
| 1060 | B | UnCovr | Y | 60 | 8 | 10 | 15% | n | n | n | n | |
| 1061 | B | UnCovr | Y | 6 | 3 | 2 | 42% | n | n | n | n | |
| 1062 | B | Covr | Y | 40 | 8 | 8 | 20% | n | n | n | n | |
| 1063 | B | Covr | Y | 24 | 3 | 2 | 10% | n | n | n | n | |

Appendix H-2

| | | | | | | | | | | | | |
|------|---|--------|---|----|---|---|-----|---|---|---|---|------|
| 1070 | B | Covr | Y | 24 | 4 | 1 | 10% | n | n | n | n | |
| 1361 | B | UnCovr | N | 8 | 2 | 2 | 25% | n | n | n | n | |
| 1362 | B | Covr | N | 10 | 3 | 3 | 30% | n | n | n | n | |
| 1403 | B | UnCovr | Y | 20 | 0 | 1 | 3% | n | y | n | n | |
| 1404 | B | UnCovr | Y | 30 | 4 | 6 | 17% | n | y | n | n | poor |
| 1411 | B | UnCovr | N | 5 | 0 | 0 | 0% | n | n | n | n | |
| 1413 | B | Covr | Y | 20 | 0 | 0 | 0% | n | n | n | n | |

Sector C

| Location ID | Section | Covered / Uncovered | OSU Hoop | Rack Capacity | Utilization Count 10/17 | Utilization Count 10/18 | Average % Utilization | Abandoned Bikes | Damaged | Install Problem | bikes out of racks | paint condition |
|-------------|---------|---------------------|----------|---------------|-------------------------|-------------------------|-----------------------|-----------------|---------|-----------------|--------------------|-----------------|
| 2032 | C | UnCovr | Y | 16 | 4 | 2 | 19% | n | n | n | n | |
| 2033 | C | Covr | Y | 20 | 8 | 5 | 33% | n | n | n | n | |
| 2034 | C | Covr | Y | 20 | 2 | 2 | 10% | n | n | n | n | |
| 2035 | C | UnCovr | Y | 20 | 0 | 0 | 0% | n | n | n | n | |
| 2036 | C | UnCovr | Y | 16 | 11 | 7 | 56% | n | n | n | n | |
| 2037 | C | UnCovr | Y | 24 | 5 | 4 | 19% | n | n | n | n | |
| 2038 | C | Covr | Y | 20 | 12 | 8 | 50% | n | n | n | n | |
| 2039 | C | Covr | Y | 20 | 11 | 8 | 48% | n | n | n | n | |
| 2040 | C | UnCovr | Y | 16 | 11 | 11 | 69% | n | n | n | y | fair |
| 2041 | C | Covr | Y | 10 | 8 | 7 | 75% | n | n | n | n | |
| 2042 | C | UnCovr | Y | 50 | 25 | 30 | 55% | n | n | n | n | fair |
| 2064 | C | UnCovr | Y | 18 | 5 | 6 | 31% | n | n | n | n | fair |
| 2065 | C | UnCovr | Y | 50 | 10 | 10 | 20% | n | n | n | n | fair |
| 2066 | C | UnCovr | Y | 34 | 9 | 13 | 32% | n | n | n | n | fair |
| 2067 | C | UnCovr | Y | 84 | 21 | 32 | 32% | n | y | n | n | fair |
| 2068 | C | Covr | Y | 48 | 37 | 35 | 75% | n | n | n | n | fair |
| 2069 | C | Covr | Y | 34 | 14 | 11 | 37% | y | n | n | n | fair |
| 2072 | C | UnCovr | N | 7 | 6 | 4 | 71% | n | n | n | n | |
| 2073 | C | UnCovr | N | 13 | 2 | 2 | 15% | n | n | n | n | |
| 2074 | C | UnCovr | N | 7 | 4 | 5 | 64% | n | y | n | n | |
| 2075 | C | UnCovr | N | 44 | 15 | 15 | 34% | n | y | n | n | |
| 2076 | C | UnCovr | Y | 20 | 7 | 10 | 43% | n | y | n | n | |
| 2077 | C | UnCovr | Y | 20 | 5 | 6 | 28% | n | n | n | n | |
| 2078 | C | Covr | Y | 68 | 23 | 28 | 38% | n | n | n | n | |
| 2079 | C | UnCovr | Y | 20 | 18 | 19 | 93% | n | n | n | y | |
| 2080 | C | Covr | Y | 6 | 2 | 1 | 25% | n | n | n | n | |
| 2081 | C | UnCovr | Y | 88 | 27 | 37 | 36% | n | n | y | n | |
| 2084 | C | UnCovr | Y | 10 | 7 | 9 | 80% | n | n | n | n | fair |
| 2085 | C | UnCovr | Y | 10 | 7 | 4 | 55% | y | n | n | n | poor |
| 2086 | C | UnCovr | Y | 10 | 3 | 1 | 20% | n | n | n | n | fair |
| 2087 | C | UnCovr | Y | 30 | 6 | 7 | 22% | n | n | n | n | poor |
| 2088 | C | UnCovr | Y | 10 | 1 | 1 | 10% | n | n | n | n | |
| 2089 | C | UnCovr | N | 41 | 20 | 14 | 41% | n | n | n | n | |
| 2090 | C | UnCovr | N | 24 | 9 | 8 | 35% | n | n | n | n | |
| 2091 | C | Covr | Y | 16 | 11 | 12 | 72% | n | n | n | n | |
| 2092 | C | UnCovr | Y | 16 | 8 | 8 | 50% | n | n | n | n | fair |
| 2093 | C | UnCovr | Y | 10 | 2 | 3 | 25% | n | n | n | n | |
| 2094 | C | UnCovr | N | 4 | 0 | 0 | 0% | n | n | n | n | |
| 2095 | C | UnCovr | Y | 11 | 3 | 4 | 32% | n | y | n | n | |
| 2096 | C | UnCovr | Y | 16 | 1 | 1 | 6% | n | y | n | n | |
| 2097 | C | UnCovr | N | 14 | 1 | 0 | 4% | n | n | n | n | |
| 2098 | C | Covr | N | 14 | 7 | 9 | 57% | n | n | n | y | |
| 2127 | C | Covr | Y | 32 | 19 | 21 | 63% | n | n | n | n | fair |
| 2128 | C | UnCovr | Y | 8 | 4 | 5 | 56% | n | n | n | n | fair |
| 2129 | C | UnCovr | Y | 56 | 4 | 4 | 7% | n | n | n | n | |
| 2130 | C | UnCovr | Y | 60 | 1 | 1 | 2% | n | n | n | n | |
| 2136 | C | Covr | Y | 20 | 1 | 2 | 8% | n | n | n | n | |
| 2137 | C | Covr | Y | 20 | 0 | 0 | 0% | n | n | n | n | |
| 2138 | C | UnCovr | Y | 6 | 0 | 1 | 8% | n | n | n | n | |
| 2139 | C | UnCovr | Y | 32 | 4 | 4 | 13% | n | n | n | n | |
| 2140 | C | UnCovr | Y | 20 | 4 | 8 | 30% | n | n | n | n | |
| 2141 | C | UnCovr | Y | 10 | 0 | 0 | 0% | n | n | n | n | |
| 2142 | C | UnCovr | Y | 24 | 2 | 7 | 19% | n | n | n | n | |
| 2143 | C | UnCovr | Y | 65 | 15 | 17 | 25% | n | n | n | n | fair |
| 2232 | C | UnCovr | Y | 10 | 2 | 1 | 15% | n | n | n | n | fair |
| 2233 | C | UnCovr | N | 3 | 0 | 1 | 17% | n | n | n | n | poor |
| 2234 | C | UnCovr | Y | 10 | 3 | 1 | 20% | n | n | n | n | poor |
| 2236 | C | Covr | Y | 8 | 5 | 3 | 50% | n | n | n | n | fair |
| 2237 | C | UnCovr | Y | 8 | 1 | 0 | 6% | y | n | n | n | fair |
| 2238 | C | UnCovr | Y | 36 | 9 | 15 | 33% | n | n | n | n | fair |
| 2239 | C | Covr | Y | 6 | 5 | 2 | 58% | y | n | n | n | |
| 2240 | C | UnCovr | Y | 20 | 8 | 13 | 53% | n | n | n | n | fair |
| 2241 | C | UnCovr | Y | 20 | 6 | 7 | 33% | n | n | y | n | fair |

Appendix H-3

| | | | | | | | | | | | | |
|------|---|--------|---|-----|----|----|-----|---|---|---|---|------|
| 2242 | C | Covr | Y | 48 | 22 | 20 | 44% | y | n | y | n | fair |
| 2243 | C | UnCovr | Y | 20 | 1 | 7 | 20% | y | n | n | n | fair |
| 2244 | C | UnCovr | Y | 24 | 1 | 5 | 13% | n | n | n | n | |
| 2247 | C | Covr | Y | 12 | 10 | 4 | 58% | n | n | n | n | |
| 2248 | C | Covr | Y | 6 | 4 | 3 | 58% | n | n | n | n | |
| 2249 | C | Covr | Y | 14 | 12 | 9 | 75% | n | n | n | n | |
| 2250 | C | UnCovr | Y | 12 | 6 | 7 | 54% | n | n | n | n | |
| 2251 | C | UnCovr | Y | 110 | 14 | 28 | 19% | y | n | n | n | |
| 2253 | C | Covr | N | 12 | 6 | 3 | 38% | y | y | n | n | |
| 2254 | C | UnCovr | Y | 10 | 2 | 1 | 15% | n | n | n | n | fair |
| 2255 | C | Covr | Y | 32 | 7 | 3 | 16% | y | n | n | n | fair |
| 2256 | C | UnCovr | Y | 38 | 0 | 0 | 0% | n | n | n | n | |
| 2257 | C | UnCovr | Y | 46 | 8 | 26 | 37% | n | y | n | n | poor |
| 2258 | C | UnCovr | Y | 14 | 6 | 14 | 71% | n | y | n | n | poor |
| 2259 | C | UnCovr | Y | 18 | 6 | 18 | 67% | n | n | n | n | fair |
| 2260 | C | UnCovr | Y | 26 | 7 | 9 | 31% | n | n | n | n | fair |
| 2264 | C | UnCovr | N | 14 | 0 | 0 | 0% | n | n | n | n | |
| 2265 | C | Covr | Y | 12 | 6 | 3 | 38% | y | n | n | n | |
| 2349 | C | UnCovr | Y | 6 | 3 | 3 | 50% | n | n | n | n | poor |
| 2350 | C | UnCovr | Y | 16 | 5 | 5 | 31% | n | n | n | n | fair |
| 2351 | C | UnCovr | N | 12 | 0 | 0 | 0% | n | n | n | n | |
| 2359 | C | UnCovr | Y | 4 | 2 | 2 | 50% | n | n | y | n | |
| 2373 | C | UnCovr | Y | 6 | 2 | 2 | 33% | y | n | n | n | |
| 2390 | C | Covr | Y | 60 | 43 | 33 | 63% | n | n | n | n | fair |
| 2391 | C | UnCovr | Y | 60 | 23 | 36 | 49% | y | n | n | n | |
| 2392 | C | UnCovr | Y | 40 | 18 | 27 | 56% | y | n | n | y | fair |
| 2393 | C | UnCovr | Y | 60 | 0 | 16 | 13% | y | n | n | n | |
| 2394 | C | Covr | Y | 120 | 47 | 59 | 44% | n | n | n | n | |
| 2414 | C | UnCovr | N | 4 | 0 | 0 | 0% | n | n | n | n | |
| 3185 | C | UnCovr | Y | 30 | 5 | 17 | 37% | n | n | n | n | |
| 3187 | C | UnCovr | Y | 16 | 1 | 2 | 9% | n | n | n | n | |
| 3188 | C | UnCovr | Y | 10 | 1 | 0 | 5% | n | n | n | n | poor |
| 3189 | C | UnCovr | N | 7 | 0 | 0 | 0% | n | n | n | n | |
| 3195 | C | Covr | Y | 48 | 42 | 33 | 78% | n | n | n | n | poor |
| 3196 | C | UnCovr | Y | 10 | 3 | 0 | 15% | y | n | n | n | |
| 3197 | C | UnCovr | Y | 26 | 0 | 0 | 0% | n | n | n | n | poor |
| 3199 | C | UnCovr | Y | 18 | 13 | 12 | 69% | n | n | n | n | |
| 3200 | C | UnCovr | Y | 30 | 16 | 0 | 27% | y | n | n | n | |
| 3201 | C | UnCovr | Y | 29 | 1 | 19 | 34% | n | n | n | n | poor |
| 3202 | C | UnCovr | N | 11 | 1 | 1 | 9% | n | n | n | n | |
| 3203 | C | UnCovr | N | 11 | 0 | 0 | 0% | n | n | n | n | |
| 3210 | C | UnCovr | Y | 26 | 5 | 10 | 29% | n | n | n | n | |
| 3211 | C | UnCovr | N | 7 | 2 | 0 | 14% | n | n | n | n | |
| 3212 | C | UnCovr | N | 7 | 2 | 0 | 14% | n | n | n | n | |
| 3213 | C | UnCovr | Y | 24 | 19 | 13 | 67% | n | y | n | n | poor |
| 3214 | C | UnCovr | N | 16 | 6 | 11 | 53% | n | n | n | n | |
| 3215 | C | UnCovr | Y | 80 | 47 | 26 | 46% | n | n | n | n | |
| 3216 | C | Covr | Y | 6 | 0 | 0 | 0% | n | n | n | n | |
| 3217 | C | UnCovr | Y | 10 | 4 | 4 | 40% | n | n | n | n | |
| 3218 | C | Covr | Y | 48 | 17 | 15 | 33% | n | y | n | n | poor |
| 3219 | C | UnCovr | Y | 10 | 0 | 2 | 10% | n | n | n | n | |
| 3220 | C | Covr | Y | 10 | 0 | 4 | 20% | n | n | n | n | |
| 3221 | C | Covr | N | 4 | 0 | 2 | 25% | n | n | n | n | |
| 3222 | C | Covr | Y | 40 | 22 | 19 | 51% | n | n | y | n | poor |
| 3223 | C | UnCovr | Y | 40 | 6 | 6 | 15% | n | n | n | n | poor |
| 3224 | C | Covr | Y | 40 | 28 | 23 | 64% | n | n | n | n | poor |
| 3225 | C | UnCovr | Y | 24 | 11 | 16 | 56% | n | n | n | n | |
| 3226 | C | Covr | Y | 48 | 24 | 22 | 48% | n | n | n | n | |
| 3227 | C | UnCovr | Y | 38 | 2 | 9 | 14% | n | n | n | n | |
| 3228 | C | UnCovr | Y | 20 | 2 | 0 | 5% | n | n | n | n | |
| 3230 | C | UnCovr | Y | 60 | 13 | 18 | 26% | n | n | n | n | |
| 3267 | C | Covr | N | 28 | 0 | 0 | 0% | n | n | n | n | |
| 3331 | C | Covr | Y | 20 | 13 | 15 | 70% | y | n | n | n | |
| 3332 | C | Covr | Y | 50 | 28 | 31 | 0% | y | n | n | n | |
| 3333 | C | UnCovr | Y | 26 | 2 | 7 | 17% | y | n | n | n | |
| 3338 | C | UnCovr | Y | 16 | 5 | 6 | 34% | n | n | n | n | |
| 3343 | C | UnCovr | Y | 54 | 21 | 17 | 35% | n | n | n | n | poor |
| 3352 | C | UnCovr | Y | 4 | 1 | 0 | 13% | y | n | n | n | |
| 3358 | C | UnCovr | Y | 20 | 6 | 6 | 30% | n | n | n | n | |
| 3374 | C | UnCovr | N | 13 | 0 | 0 | 0% | n | n | n | n | |
| 3375 | C | UnCovr | Y | 14 | 3 | 2 | 18% | n | n | n | n | |
| 3376 | C | UnCovr | Y | 14 | 4 | 8 | 43% | n | n | n | n | |
| 3385 | C | UnCovr | Y | 10 | 1 | 5 | 30% | n | n | n | n | |

Appendix H-4

| | | | | | | | | | | | | |
|------|---|--------|---|----|----|----|-----|---|---|---|---|------|
| 3386 | C | UnCovr | Y | 8 | 0 | 5 | 31% | n | n | n | n | |
| 3387 | C | UnCovr | Y | 10 | 0 | 3 | 15% | n | n | n | n | |
| 3388 | C | UnCovr | Y | 8 | 3 | 3 | 38% | n | n | n | n | |
| 3389 | C | Covr | Y | 52 | 24 | 15 | 38% | n | n | n | n | |
| 3401 | C | Covr | Y | 30 | 13 | 23 | 60% | n | n | n | n | |
| 3402 | C | UnCovr | Y | 20 | 13 | 13 | 65% | n | n | n | n | |
| 3413 | C | UnCovr | Y | 6 | 2 | 4 | 50% | n | n | n | n | poor |
| 4163 | C | UnCovr | Y | 50 | 25 | 25 | 50% | n | n | n | n | |
| 4164 | C | UnCovr | Y | 86 | 26 | 36 | 36% | n | n | n | n | |
| 4165 | C | Covr | N | 23 | 4 | 1 | 11% | y | n | n | n | |
| 4166 | C | UnCovr | Y | 40 | 13 | 15 | 35% | n | n | n | n | poor |
| 4167 | C | UnCovr | Y | 18 | 8 | 6 | 39% | n | n | n | n | |
| 4168 | C | UnCovr | Y | 40 | 15 | 25 | 50% | n | n | n | n | |
| 4169 | C | UnCovr | Y | 10 | 4 | 4 | 40% | n | n | n | n | |
| 4170 | C | Covr | Y | 28 | 15 | 8 | 41% | n | n | n | n | |
| 4171 | C | Covr | Y | 20 | 13 | 8 | 53% | n | n | n | n | |
| 4174 | C | Covr | Y | 34 | 24 | 14 | 56% | y | n | n | n | |
| 4175 | C | UnCovr | Y | 10 | 1 | 7 | 40% | n | n | n | n | |
| 4176 | C | UnCovr | Y | 20 | 2 | 4 | 15% | n | n | n | n | |
| 4177 | C | UnCovr | Y | 20 | 12 | 18 | 75% | n | n | n | n | |
| 4178 | C | Covr | Y | 6 | 2 | 3 | 42% | n | n | n | n | |
| 4179 | C | UnCovr | Y | 10 | 2 | 1 | 15% | n | n | n | n | |
| 4180 | C | UnCovr | Y | 14 | 6 | 9 | 54% | n | n | n | y | |
| 4181 | C | UnCovr | Y | 10 | 3 | 8 | 55% | n | n | n | n | |
| 4182 | C | UnCovr | N | 12 | 0 | 1 | 4% | n | n | n | n | |
| 4183 | C | UnCovr | N | 2 | 2 | 1 | 75% | n | n | n | n | |
| 4184 | C | UnCovr | Y | 20 | 5 | 8 | 33% | n | n | n | n | |
| 4190 | C | UnCovr | N | 7 | 0 | 1 | 7% | n | n | n | n | |
| 4191 | C | UnCovr | Y | 28 | 15 | 13 | 50% | n | n | n | n | |
| 4192 | C | UnCovr | Y | 42 | 11 | 17 | 33% | n | n | n | n | |
| 4193 | C | UnCovr | Y | 10 | 2 | 1 | 15% | n | n | n | n | |
| 4194 | C | UnCovr | Y | 40 | 7 | 5 | 15% | n | n | n | n | |
| 4204 | C | UnCovr | Y | 10 | 2 | 3 | 25% | n | n | n | n | |
| 4205 | C | UnCovr | N | 14 | 0 | 0 | 0% | n | n | n | n | |
| 4206 | C | UnCovr | Y | 21 | 11 | 11 | 52% | n | n | n | n | |
| 4207 | C | UnCovr | Y | 10 | 3 | 4 | 35% | n | n | n | n | |
| 4208 | C | UnCovr | Y | 44 | 13 | 14 | 31% | n | n | n | n | |
| 4209 | C | UnCovr | Y | 26 | 16 | 13 | 56% | n | n | n | n | |
| 4268 | C | Covr | Y | 28 | 25 | 13 | 68% | n | n | n | n | |
| 4269 | C | UnCovr | Y | 18 | 12 | 10 | 61% | n | n | n | n | |
| 4270 | C | UnCovr | Y | 12 | 2 | 6 | 33% | n | n | n | n | |
| 4271 | C | Covr | Y | 40 | 24 | 28 | 65% | n | n | n | y | |
| 4272 | C | UnCovr | Y | 44 | 11 | 13 | 27% | n | n | y | n | |
| 4273 | C | UnCovr | Y | 26 | 10 | 13 | 44% | n | n | n | n | |
| 4321 | C | UnCovr | Y | 12 | 5 | 3 | 33% | y | n | n | n | |
| 4322 | C | UnCovr | Y | 52 | 21 | 8 | 28% | n | n | n | n | |
| 4324 | C | Covr | Y | 30 | 16 | 12 | 47% | n | n | n | n | |
| 4325 | C | UnCovr | Y | 56 | 18 | 28 | 41% | y | n | n | n | |
| 4326 | C | UnCovr | Y | 30 | 3 | 7 | 17% | n | n | n | n | |
| 4327 | C | UnCovr | Y | 16 | 7 | 7 | 44% | n | n | n | n | |
| 4328 | C | Covr | Y | 48 | 38 | 32 | 73% | n | n | n | n | |
| 4329 | C | UnCovr | Y | 16 | 10 | 12 | 69% | y | n | n | n | |
| 4330 | C | Covr | Y | 48 | 43 | 38 | 84% | n | n | n | n | |
| 4346 | C | UnCovr | Y | 8 | 4 | 5 | 56% | y | n | n | n | |
| 4380 | C | UnCovr | Y | 12 | 3 | 3 | 25% | n | n | y | n | |
| 4412 | C | Covr | Y | 34 | 15 | 6 | 31% | n | n | n | n | |
| 5131 | C | UnCovr | Y | 38 | 17 | 16 | 43% | n | n | n | n | poor |
| 5132 | C | Covr | Y | 28 | 24 | 14 | 68% | n | n | n | y | poor |
| 5133 | C | UnCovr | Y | 48 | 16 | 14 | 31% | n | n | n | y | fair |
| 5281 | C | Covr | Y | 10 | 4 | 2 | 30% | n | n | n | n | poor |
| 5282 | C | UnCovr | Y | 20 | 3 | 2 | 13% | n | n | n | n | poor |
| 5283 | C | Covr | Y | 44 | 16 | 12 | 32% | n | n | n | n | |
| 5284 | C | Covr | Y | 32 | 4 | 6 | 16% | y | n | n | n | |
| 5285 | C | Covr | Y | 48 | 9 | 15 | 25% | n | n | n | n | |
| 5286 | C | Covr | Y | 48 | 6 | 9 | 16% | n | n | n | n | |
| 5287 | C | Covr | Y | 26 | 1 | 2 | 6% | y | n | n | n | |
| 5288 | C | UnCovr | Y | 6 | 0 | 2 | 17% | n | n | n | n | fair |
| 5289 | C | UnCovr | Y | 22 | 0 | 0 | 0% | n | n | n | n | poor |
| 5290 | C | UnCovr | Y | 54 | 8 | 11 | 18% | n | y | n | n | fair |
| 5291 | C | UnCovr | Y | 16 | 8 | 9 | 53% | n | n | n | n | poor |
| 5292 | C | Covr | Y | 40 | 11 | 12 | 29% | n | n | n | n | poor |
| 5293 | C | UnCovr | Y | 58 | 4 | 4 | 7% | n | n | n | n | poor |
| 5294 | C | UnCovr | Y | 20 | 0 | 0 | 0% | n | n | n | n | |

Appendix H-5

| | | | | | | | | | | | | |
|------|---|--------|---|----|----|----|------|---|---|---|---|------|
| 5320 | C | Covr | N | 9 | 3 | 2 | 28% | n | n | n | n | poor |
| 5334 | C | Covr | Y | 64 | 14 | 18 | 25% | n | y | n | n | fair |
| 5335 | C | UnCovr | Y | 32 | 0 | 1 | 2% | n | n | n | n | |
| 5336 | C | UnCovr | Y | 40 | 6 | 7 | 16% | n | n | n | n | poor |
| 5337 | C | UnCovr | Y | 36 | 8 | 8 | 22% | n | n | n | n | poor |
| 5339 | C | UnCovr | Y | 34 | 8 | 10 | 26% | n | y | n | n | |
| 5341 | C | UnCovr | Y | 4 | 1 | 3 | 50% | n | n | n | n | |
| 5342 | C | UnCovr | Y | 4 | 2 | 2 | 50% | n | n | n | n | |
| 5355 | C | UnCovr | N | 14 | 0 | 0 | 0% | n | n | n | n | |
| 5381 | C | UnCovr | Y | 20 | 7 | 11 | 45% | n | n | n | n | fair |
| 5382 | C | UnCovr | N | 10 | 1 | 1 | 10% | y | n | n | y | poor |
| 5399 | C | Covr | N | 10 | 10 | 10 | 100% | n | n | n | n | |

Sector D

| Location ID | Section | Covered / Uncovered | OSU Hoop | Rack Capacity | Utilization Count 10/17 | Utilization Count 10/18 | Average % Utilization | Abandoned Bikes | Damaged | Install Problem | bikes out of racks | paint condition |
|-------------|---------|---------------------|----------|---------------|-------------------------|-------------------------|-----------------------|-----------------|---------|-----------------|--------------------|-----------------|
| 5145 | D | UnCovr | Y | 16 | 0 | 0 | 0% | n | n | n | n | |
| 5146 | D | Covr | Y | 92 | 43 | 38 | 44% | y | n | n | n | |
| 5147 | D | UnCovr | Y | 10 | 0 | 1 | 5% | n | n | n | n | |
| 5148 | D | UnCovr | Y | 14 | 7 | 6 | 46% | y | n | n | n | fair |
| 5149 | D | UnCovr | Y | 20 | 12 | 8 | 50% | n | n | n | n | fair |
| 5150 | D | Covr | Y | 20 | 15 | 15 | 75% | n | n | n | y | |
| 5151 | D | UnCovr | Y | 20 | 10 | 10 | 50% | y | n | n | n | |
| 5152 | D | UnCovr | Y | 86 | 35 | 29 | 37% | y | n | n | n | |
| 5153 | D | UnCovr | Y | 8 | 2 | 4 | 38% | y | n | n | n | |
| 5154 | D | Covr | Y | 40 | 37 | 32 | 86% | y | n | n | y | |
| 5155 | D | UnCovr | Y | 68 | 50 | 50 | 74% | y | n | n | n | |
| 5156 | D | UnCovr | Y | 104 | 61 | 63 | 60% | y | n | n | n | |
| 5158 | D | UnCovr | N | 35 | 5 | 6 | 16% | n | n | y | n | poor |
| 5160 | D | UnCovr | Y | 6 | 1 | 1 | 17% | n | n | n | n | poor |
| 5161 | D | UnCovr | Y | 6 | 1 | 1 | 17% | n | n | n | n | fair |
| 5162 | D | UnCovr | N | 100 | 0 | 0 | 0% | n | y | y | n | poor |
| 5323 | D | UnCovr | Y | 10 | 11 | 8 | 95% | n | n | n | n | fair |
| 5384 | D | Covr | Y | 30 | 4 | 5 | 15% | n | n | n | n | |
| 5395 | D | UnCovr | Y | 70 | 19 | 19 | 27% | y | n | n | n | |
| 5405 | D | UnCovr | Y | 6 | 0 | 0 | 0% | n | n | n | n | |
| 5406 | D | UnCovr | Y | 4 | 0 | 0 | 0% | n | n | n | n | |
| 5407 | D | UnCovr | Y | 2 | 0 | 0 | 0% | n | n | n | n | |
| 5408 | D | Covr | Y | 30 | 6 | 6 | 20% | n | n | n | n | |
| 5409 | D | UnCovr | N | 5 | 0 | 5 | 50% | n | n | n | n | poor |

Sector E

| Location ID | Section | Covered / Uncovered | OSU Hoop | Rack Capacity | Utilization Count 10/17 | Utilization Count 10/18 | Average % Utilization | Abandoned Bikes | Damaged | Install Problem | bikes out of racks | paint condition |
|-------------|---------|---------------------|----------|---------------|-------------------------|-------------------------|-----------------------|-----------------|---------|-----------------|--------------------|-----------------|
| 6004 | E | Covr | Y | 8 | 9 | 9 | 113% | n | n | n | n | |
| 6005 | E | Covr | Y | 26 | 8 | 11 | 37% | n | n | n | n | poor |
| 6006 | E | UnCovr | N | 14 | 2 | 1 | 11% | n | n | n | n | |
| 6009 | E | Covr | Y | 29 | 14 | 15 | 50% | n | n | n | n | poor |
| 6010 | E | Covr | Y | 39 | 15 | 24 | 50% | n | n | n | n | fair |
| 6043 | E | Covr | N | 3 | 0 | 0 | 0% | n | n | n | n | |
| 6348 | E | UnCovr | N | 6 | 0 | 0 | 0% | n | n | n | n | |
| 6368 | E | UnCovr | N | 13 | 0 | 0 | 0% | n | n | n | n | |
| 6369 | E | UnCovr | Y | 8 | 0 | 0 | 0% | n | y | n | n | poor |
| 6421 | E | UnCovr | Y | 6 | 0 | 0 | 0% | n | n | n | n | fair |
| 6425 | E | UnCovr | Y | 10 | 0 | 0 | 0% | n | n | n | n | fair |
| 6426 | E | UnCovr | Y | 10 | 0 | 0 | 0% | n | y | n | n | fair |

Sector F

| Location ID | Section | Covered / Uncovered | OSU Hoop | Rack Capacity | Utilization Count 10/17 | Utilization Count 10/18 | Average % Utilization | Abandoned Bikes | Damaged | Install Problem | bikes out of racks | paint condition |
|-------------|---------|---------------------|----------|---------------|-------------------------|-------------------------|-----------------------|-----------------|---------|-----------------|--------------------|-----------------|
| 6008 | F | Covr | Y | 20 | 2 | 1 | 8% | n | n | n | n | |
| 6100 | F | Covr | Y | 20 | 12 | 16 | 70% | n | n | n | n | fair |
| 6101 | F | Covr | Y | 16 | 7 | 8 | 47% | n | n | n | n | fair |
| 6102 | F | Covr | Y | 30 | 4 | 7 | 18% | n | n | n | n | |
| 6103 | F | Covr | Y | 20 | 0 | 0 | 0% | n | n | n | n | |
| 6104 | F | UnCovr | Y | 16 | 0 | 0 | 0% | n | n | n | n | |
| 6105 | F | UnCovr | Y | 10 | 1 | 1 | 10% | n | n | n | n | |
| 6106 | F | Covr | Y | 10 | 2 | 1 | 15% | n | n | n | n | fair |
| 6107 | F | UnCovr | Y | 10 | 1 | 1 | 10% | n | n | n | n | fair |
| 6108 | F | Covr | Y | 20 | 13 | 18 | 78% | n | n | n | n | |
| 6110 | F | Covr | Y | 20 | 0 | 1 | 3% | n | y | n | n | fair |
| 6111 | F | Covr | Y | 66 | 4 | 6 | 8% | n | n | n | n | |
| 6123 | F | UnCovr | Y | 20 | 0 | 9 | 23% | n | n | n | n | fair |
| 6126 | F | Covr | Y | 12 | 0 | 0 | 0% | n | n | n | n | fair |

Appendix H-6

| | | | | | | | | | | | | |
|------|---|--------|---|----|---|---|-----|---|---|---|---|------|
| 6353 | F | Covr | Y | 18 | 3 | 3 | 17% | n | n | n | n | poor |
| 6398 | F | Covr | Y | 20 | 2 | 1 | 8% | n | n | n | n | poor |
| 6400 | F | Covr | N | 10 | 0 | 0 | 0% | n | n | n | n | |
| 6422 | F | UnCovr | Y | 28 | 1 | 3 | 7% | n | n | n | y | |
| 6423 | F | UnCovr | Y | 20 | 0 | 0 | 0% | n | n | n | n | poor |
| 6424 | F | UnCovr | Y | 16 | 0 | 0 | 0% | n | n | n | n | |
| 6429 | F | UnCovr | Y | 16 | 0 | 2 | 0% | n | n | n | n | |

Sector G

| Location ID | Section | Covered / Uncovered | OSU Hoop | Rack Capacity | Utilization Count 10/17 | Utilization Count 10/18 | Average % Utilization | Abandoned Bikes | Damaged | Install Problem | bikes out of racks | paint condition |
|-------------|---------|---------------------|----------|---------------|-------------------------|-------------------------|-----------------------|-----------------|---------|-----------------|--------------------|-----------------|
| 6112 | G | Covr | Y | 6 | 0 | 1 | 8% | n | n | n | n | good |
| 6113 | G | Covr | Y | 20 | 3 | 14 | 43% | n | n | n | n | fair |
| 6114 | G | UnCovr | Y | 12 | 0 | 2 | 8% | n | n | n | n | good |
| 6115 | G | UnCovr | Y | 6 | 1 | 0 | 8% | n | n | n | n | good |
| 6116 | G | UnCovr | Y | 16 | 6 | 15 | 66% | n | n | n | n | fair |
| 6117 | G | Covr | Y | 26 | 6 | 5 | 21% | n | n | n | n | fair |
| 6118 | G | Covr | Y | 24 | 10 | 9 | 40% | n | n | n | n | fair |
| 6119 | G | UnCovr | Y | 20 | 2 | 10 | 30% | n | n | y | n | fair |
| 6120 | G | UnCovr | Y | 26 | 3 | 17 | 38% | n | n | n | n | poor |
| 6121 | G | UnCovr | Y | 5 | 0 | 12 | 120% | n | n | n | n | good |
| 6122 | G | Covr | Y | 8 | 4 | 15 | 119% | n | n | n | n | fair |
| 6134 | G | Covr | Y | 8 | 3 | 9 | 75% | n | n | n | n | poor |
| 6135 | G | UnCovr | Y | 10 | 1 | 3 | 20% | n | n | n | n | fair |
| 6276 | G | Covr | N | 7 | 2 | 3 | 36% | n | n | n | n | good |
| 6277 | G | UnCovr | Y | 10 | 1 | 2 | 15% | n | n | n | n | fair |
| 6280 | G | Covr | Y | 28 | 0 | 1 | 2% | n | n | n | n | poor |
| 6295 | G | UnCovr | Y | 60 | 3 | 2 | 4% | n | n | n | n | good |
| 6296 | G | UnCovr | Y | 60 | 32 | 1 | 28% | y | n | n | n | fair |
| 6297 | G | Covr | Y | 10 | 8 | 8 | 80% | n | n | n | n | poor |
| 6298 | G | UnCovr | Y | 18 | 9 | 13 | 61% | n | n | n | n | fair |
| 6299 | G | UnCovr | Y | 16 | 6 | 12 | 56% | n | n | n | n | poor |
| 6300 | G | UnCovr | Y | 28 | 18 | 23 | 73% | n | n | n | n | poor |
| 6301 | G | Covr | Y | 16 | 6 | 5 | 34% | y | n | n | n | poor |
| 6302 | G | UnCovr | Y | 16 | 4 | 8 | 38% | n | n | n | n | fair |
| 6306 | G | Covr | Y | 30 | 8 | 11 | 32% | y | n | n | n | fair |
| 6307 | G | UnCovr | Y | 46 | 7 | 18 | 27% | n | n | n | n | fair |
| 6308 | G | Covr | Y | 100 | 51 | 53 | 52% | y | n | n | n | fair |
| 6309 | G | UnCovr | Y | 52 | 8 | 10 | 17% | n | n | n | n | good |
| 6310 | G | UnCovr | Y | 60 | 18 | 21 | 33% | n | n | n | n | good |
| 6311 | G | Covr | Y | 8 | 7 | 6 | 81% | n | n | n | n | poor |
| 6313 | G | Covr | Y | 8 | 1 | 5 | 38% | n | n | n | n | poor |
| 6314 | G | UnCovr | Y | 28 | 19 | 19 | 68% | y | n | n | n | good |
| 6315 | G | Covr | Y | 48 | 36 | 37 | 76% | n | n | n | n | good |
| 6316 | G | UnCovr | Y | 76 | 21 | 24 | 30% | n | y | n | n | good |
| 6317 | G | Covr | Y | 22 | 19 | 19 | 86% | n | n | n | n | |
| 6318 | G | Covr | Y | 20 | 19 | 20 | 98% | n | n | n | n | |
| 6354 | G | UnCovr | Y | 12 | 5 | 14 | 79% | n | n | n | n | poor |
| 6416 | G | Covr | Y | 40 | 5 | 6 | 14% | n | n | n | n | good |
| 6417 | G | UnCovr | Y | 8 | 0 | 0 | 0% | n | n | n | n | fair |
| 6419 | G | Covr | Y | 24 | 3 | 3 | 13% | n | n | n | n | good |
| 6420 | G | UnCovr | Y | 8 | 0 | 0 | 0% | n | n | n | n | fair |
| 6427 | G | UnCovr | Y | 9 | 6 | 6 | 67% | n | n | n | n | |
| 6429.1777 | G | Covr | N | 2 | 0 | 0 | 0% | n | n | n | n | |

Sector G

| Location ID | Section | Covered / Uncovered | OSU Hoop | Rack Capacity | Utilization Count 10/17 | Utilization Count 10/18 | Average % Utilization | Abandoned Bikes | Damaged | Install Problem | bikes out of racks | paint condition |
|-------------|---------|---------------------|----------|---------------|-------------------------|-------------------------|-----------------------|-----------------|---------|-----------------|--------------------|-----------------|
| 6355 | H | Covr | Y | 6 | 2 | 0 | 17% | n | n | n | n | fair |
| 6356 | H | UnCovr | Y | 4 | 0 | 0 | 0% | n | n | n | n | good |
| 6378 | H | UnCovr | Y | 20 | 0 | 0 | 0% | n | y | n | n | good |
| 6379 | H | UnCovr | Y | 10 | 0 | 0 | 0% | n | y | n | n | fair |
| 6383 | H | Covr | Y | 18 | 1 | 0 | 3% | n | n | n | n | good |
| 6415 | H | UnCovr | Y | 20 | 0 | 0 | 0% | n | n | n | n | good |

Off Campus

| Location ID | Section | Covered / Uncovered | OSU Hoop | Rack Capacity | Utilization Count 10/17 | Utilization Count 10/18 | Average % Utilization | Abandoned Bikes | Damaged | Install Problem | bikes out of racks | paint condition |
|-------------|---------|---------------------|----------|---------------|-------------------------|-------------------------|-----------------------|-----------------|---------|-----------------|--------------------|-----------------|
| 5274 | NA | UnCovr | N | 17 | 0 | 0 | 0% | n | y | y | n | poor |
| 6303 | NA | Covr | N | 10 | 0 | 1 | 5% | n | n | n | n | good |
| 6304 | NA | UnCovr | Y | 16 | 0 | 0 | 0% | n | n | n | n | good |
| 6305 | NA | Covr | N | 14 | 3 | 2 | 18% | n | n | n | n | fair |