

MEMORANDUM

Date: July 21, 2015
To: Arthur Ross
From: Kevin Luecke
Re: Downtown Madison Bicycle & Moped Parking Study Online Survey Summary & Results

This memo highlights key points from the online survey that was administered for the Downtown Madison Bicycle & Moped Parking Study. Not all survey questions are addressed in this summary, but the full survey results are provided at the conclusion of the memo. Responses to open ended questions or "Other" fields are not provided due to the large number of responses. All survey results, including those from partially complete surveys, are included in this memo. The survey results will help inform the recommendations in the final Downtown Madison Bicycle & Moped Parking Study.

Survey availability and participation

The online survey was available from April 22 through May 15, 2015. During this time 1,382 people completed the survey with an additional 491 people partially completing the survey. Over half (55%) of the respondents reported that they were male, with 43% reporting that they were female, and 2% not reporting their gender. Figure 1 displays the age breakdown of survey respondents (nobody reported being under the age of 18).

The vast majority of survey respondents (79%) reported that they were employed either part time or full time. Only 8% of survey respondents reported that they were students, despite the proximity of the study area to the University of Wisconsin and the likelihood that students make up a large percentage of people living and parking bicycles and/or mopeds in the study area. The low percentage of students responding to the survey may reflect a variety of factors:

- The survey may have been better publicized and distributed to non-students than to students.
- Students may be less likely than non-students to complete an online survey.
- Bicycle and moped parking issues may not be a significant concern to students.

These factors are speculation however, and the actual reasons for low student participation are unknown.

Vehicle ownership and access

Nearly all of the survey respondents (95%) reported that they own or have easy access to a bicycle, while the ratio was almost exactly reversed for respondents who own or have easy access to a moped (7%). Ninety percent of respondents reported that they own or have easy and free access to a motor vehicle. Survey questions about bicycling or moped use were only directed to those respondents who stated that they had access to a bicycle or moped, respectively.

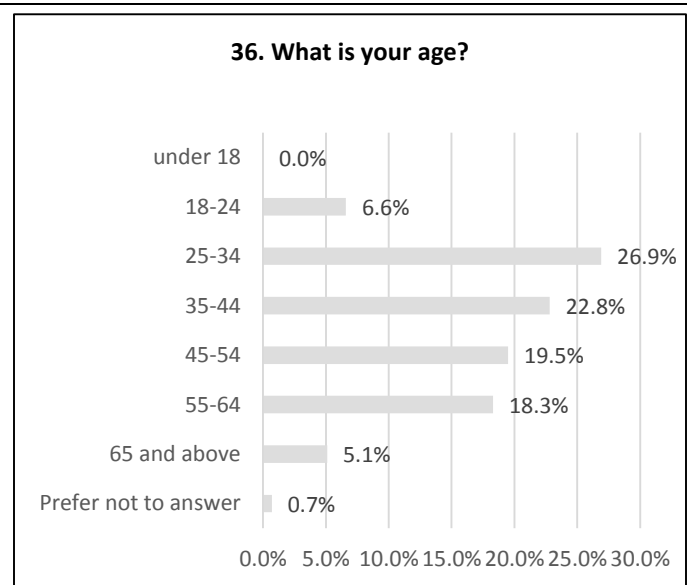


Figure 1: Age of survey respondents

Reasons for not bicycling more often to or within the study area

A variety of reasons were cited for not using a bike more often in the study area. Over 28% of respondents stated that finding bicycle parking was difficult enough to deter them from bicycling more. Over 22% of respondents stated that they do not feel comfortable locking their bicycle in the study area. These responses point to the need for both more bicycle parking throughout the study area, as well as the need for more secure parking options such as on-demand bicycle lockers or bicycle cages that require a key or key fob for access. Figure 2 displays the reasons cited for not bicycling more in the study area.

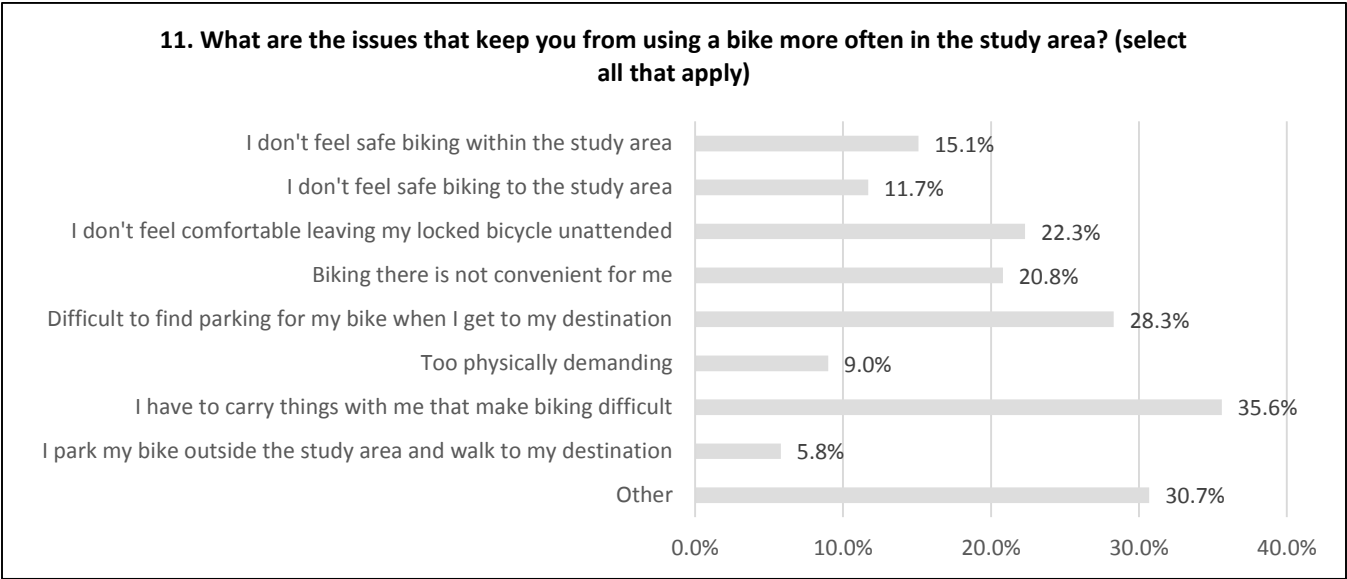


Figure 2: What are the issues that keep you from using a bike more often in the study area?

Reasons for visiting the study area and time spent there

Reasons for visiting the study area varied. Approximately 6% (98) of respondents stated that they live within the study area – a relatively low number of responses given the large amounts of housing within the study area. The vast majority of the housing within the study area is student housing, and the low number of people stating that they live in the study area likely corresponds with the low student input in the survey. Nearly half of survey respondents (46%) stated that they work or attend school in the study area, and nearly all respondents (99%) stated that they visit the study area for events, dining, or entertainment.

The length of time people park their bicycles in the study area varies with their reason for visiting the area. Residents obviously tend to park for long periods of time and overnight. The vast majority of people visiting the area for work or school park for four or more hours, with 42% reporting that they park for eight or more hours at a time. On the other hand, people visiting the area for dining, entertainment, shopping, or other errands, tend to park for much shorter periods of time, with 92% reporting that they park for between 30 minutes and 4 hours.

These differences point to the need for different types of bicycle parking facilities. Standard bicycle racks located frequently throughout the study area are ideal for serving people dining, running errands, or attending events who don't tend to park for long periods of time and want to park as close to their destination as possible. People parking for longer periods may be more inclined to park slightly further from their destination if a rack is protected from the elements or provides a higher level of security than a standard rack.

Where people park bicycles

The types and locations of bicycle racks that people use for locking their bicycles varies by the reason they are in the study area. Residents, as might be expected, tend to park in their buildings, with over one third of respondents stating that they keep their bicycle in a secured on-site garage or storage area and nearly a quarter of respondents bring their bicycle into their housing unit (Figure 3). Only 3% of respondents who live in the study area report that they park their bicycle at public bicycle racks on the street, a number that seems low based on the rack utilization counts and observations that have been conducted for the study. Given the small number people reporting that they live in the study area, the numbers presented in Figure 4 likely are not representative of all people living in the study area.

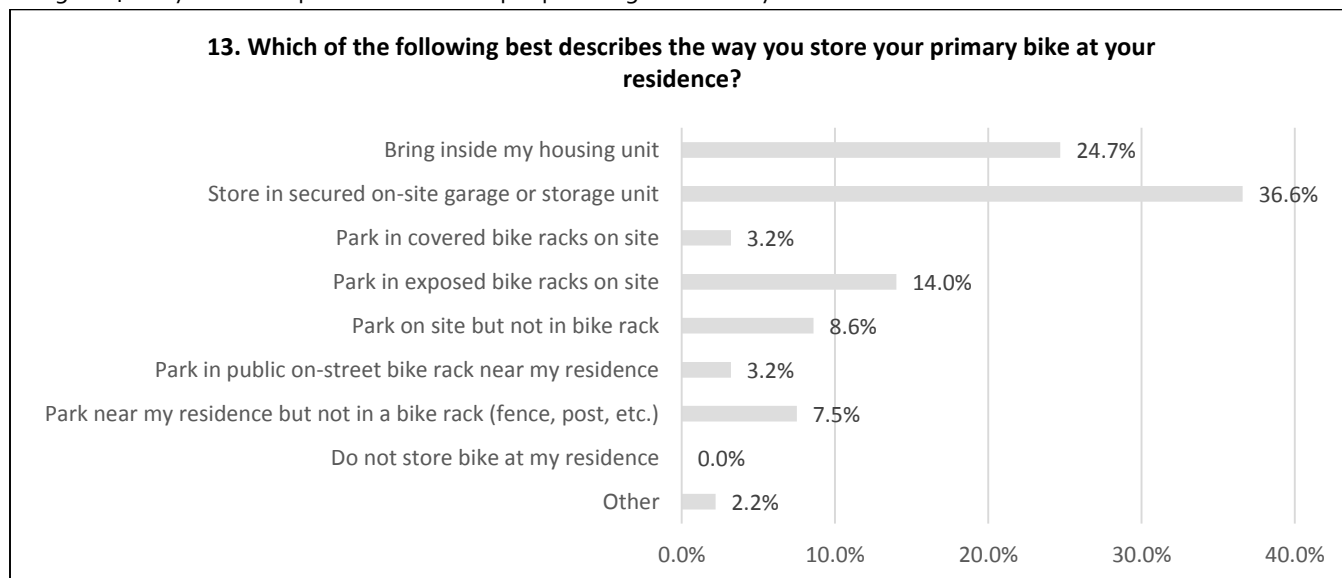


Figure 3: Which of the following best describes the way you store your primary bike at your residence?

In general, people parking in the study area for work, school, entertainment, dining or other purposes park in exposed bicycle racks near their destination.

Respondents were asked why they would not use bicycle parking that is provided on-site at their residence, school, or place of employment. In each instance, substantial numbers of respondents stated that parking was provided at an inconvenient location, was frequently overcrowded, or that the racks provided were inadequate to lock a bike properly (respondents could select multiple options). Newly constructed residential and commercial buildings in the study area have been required to provide bicycle parking for a number of years; responses to this question indicate that the bicycle parking that is being provided is often provided in locations or using racks that are not useful to residents.

Issues with bicycle parking

A variety of issues were cited with bicycle parking in the study area, as shown in Figure 4. Primary among the issues is that the racks closest to the respondent’s destination are full. Related to this, nearly half of respondents stated that they regularly encounter bicycles that appear to be abandoned taking up space at racks. Additional concerns include racks not being located convenient to destinations, and users not liking the type of racks that are provided.

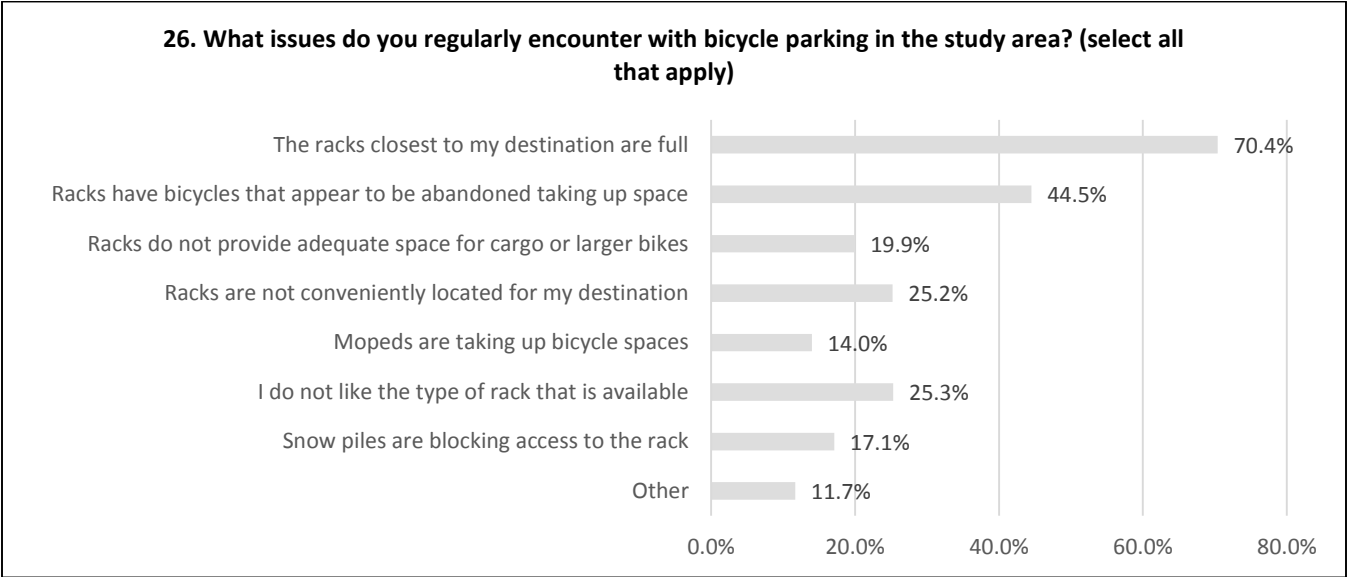


Figure 4: What issues do you regularly encounter with bicycle parking in the study area? (select all that apply)

Willingness to Pay for Bicycle Parking

Survey respondents were asked about their willingness to pay for using bicycle lockers or cages or a full-service bicycle center to park their bicycles. Such facilities provide greater security than standard bicycle racks, protection from the elements, and the ability to secure personal belongings. In general, willingness to pay for these types of facilities is low. Fewer than half of the survey respondents completed these questions, and among those who did, over half replied that they were not willing to pay anything for the use of such facilities. Among the small percentage of survey respondents who stated a willingness to pay for bicycle parking, residents who live in the study area were willing to pay less than non-residents of the study area.

Figures 5 and 6 display the average amount that people were willing to pay for given facility types in specific locations relative to their destination. Only people citing any willingness to pay are included in the average displayed in Figures 5 and 6; when accounting for all responses to the questions, the median amount is zero for all circumstances, and the average is less than half of what is displayed in the figures below.

The farther a bicycle parking facility is from a destination, the less people are willing to pay to use the facility. In general, people would be willing to pay slightly more to use a full-service bicycle center than to use bicycle lockers or a bicycle cage (with the exception of the annual rate, which may be skewed by the small number of respondents). In all instances, secure bicycle parking would require a subsidy to cover the capital costs of installation as well as ongoing operational and maintenance costs.

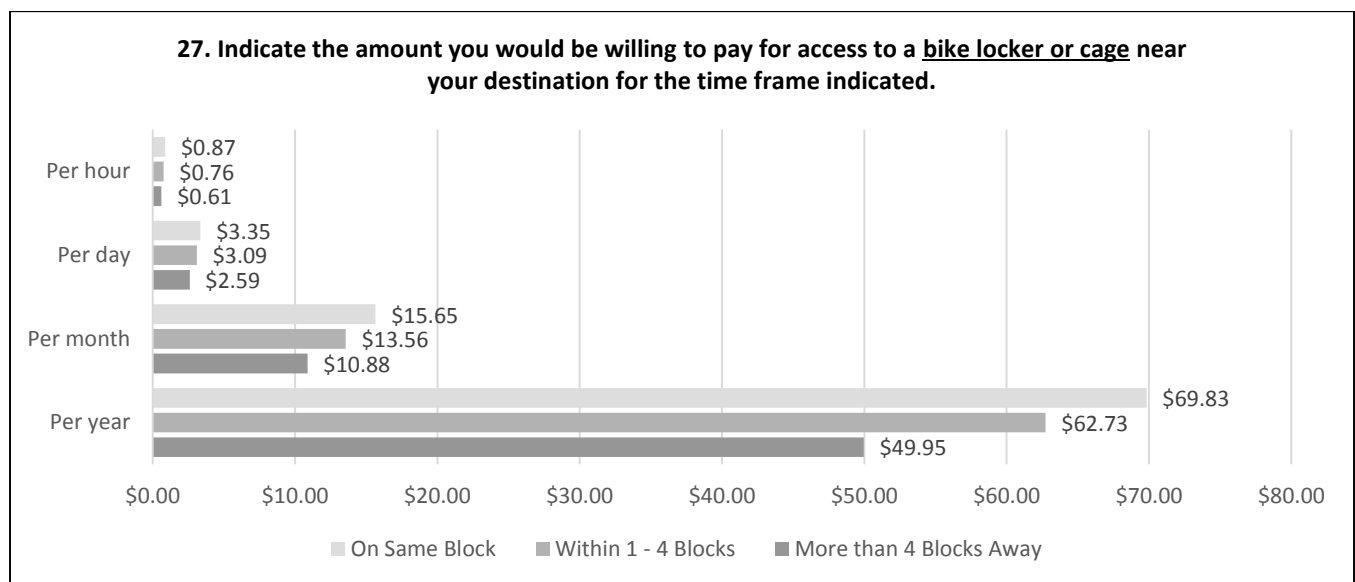


Figure 5: Average amount people who indicated a willingness to pay would be willing to pay for bicycle parking.

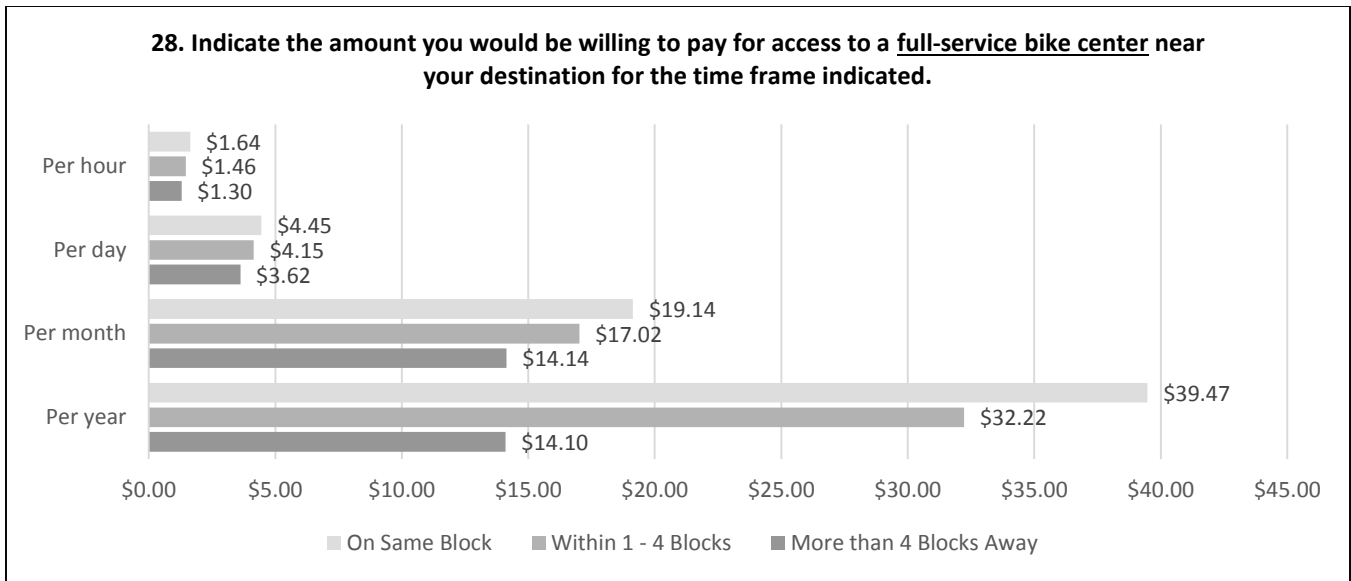


Figure 6: Average amount people who indicated a willingness to pay would be willing to pay for bicycle parking.

Moped parking

A small number of people, less than 100, responded to the questions about moped parking in the study area. Given the small number of respondents, and the small number of students also replying to the survey, it is likely that the data gathered regarding moped parking is not representative of moped parking as a whole in the study area.

Moped use in the study area is primarily for travel to school or work – over half of respondents reported parking a moped in the study area for those purposes at least two days a week during warmer months. Less than a third of respondents reported parking a moped in the study area with that frequency for entertainment, dining, or other purposes. As shown in Figures 6 and 7, moped parking locations vary with the purpose of the trip. The majority of people parking a moped in the study area for work or school park either in an on-site parking garage or lot, or near their final destination but not at a bicycle rack. On the other hand, a greater percentage of users park at bicycle racks when traveling for events, dining, or entertainment. For all trip purposes, parking in the public right of way, but not at a bike rack, is the most popular parking location.

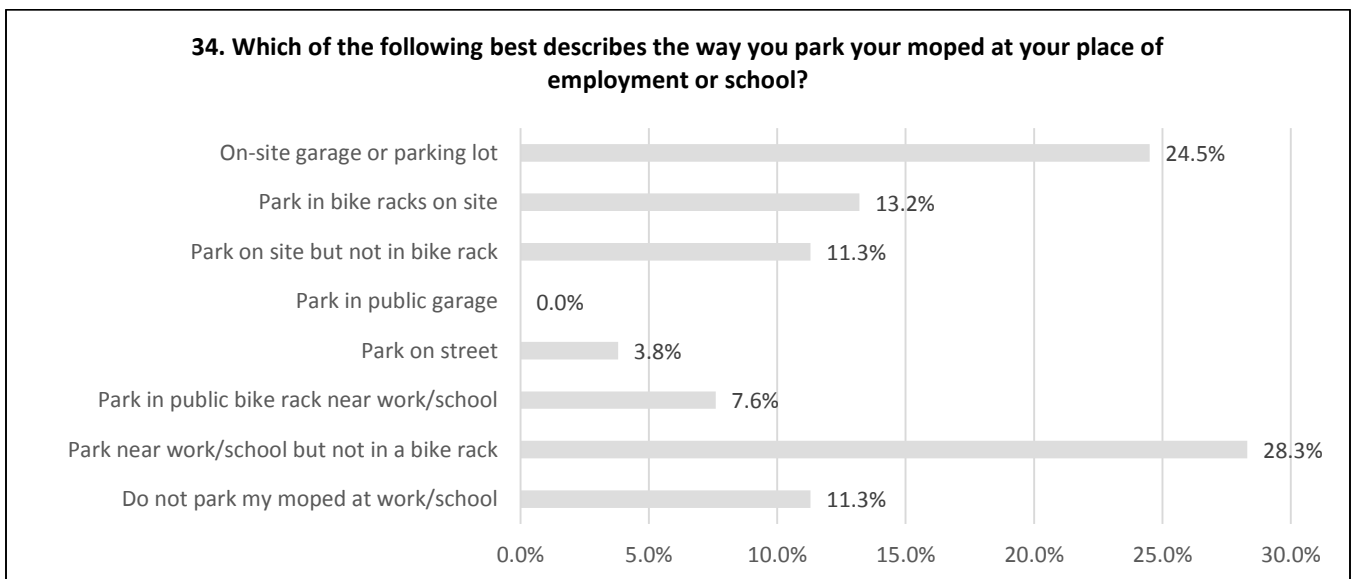


Figure 7: Which of the following best describes the way you park your moped at your place of employment or school?

35. Which of the following best describes the way you park your moped when visiting the study area for events, dining, or entertainment?

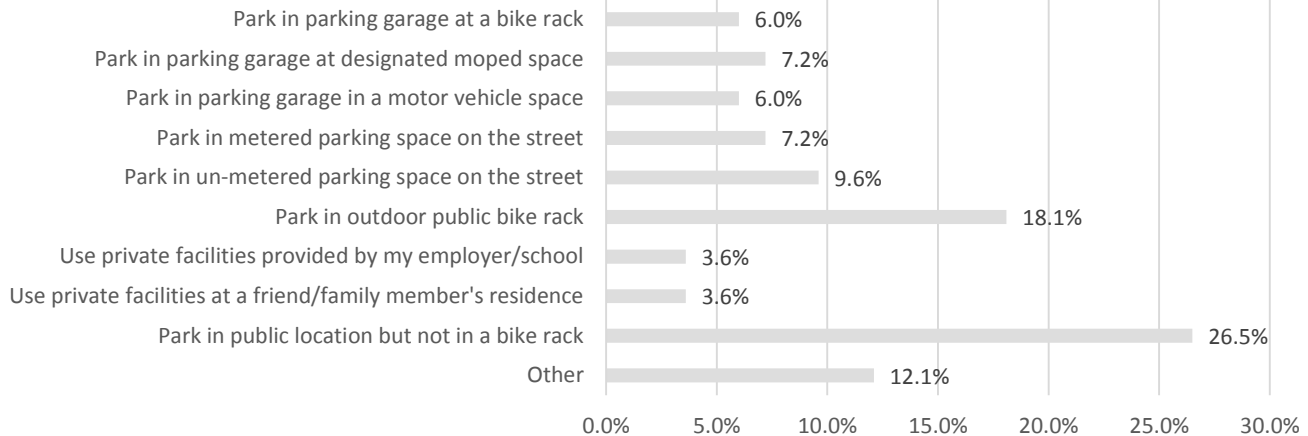


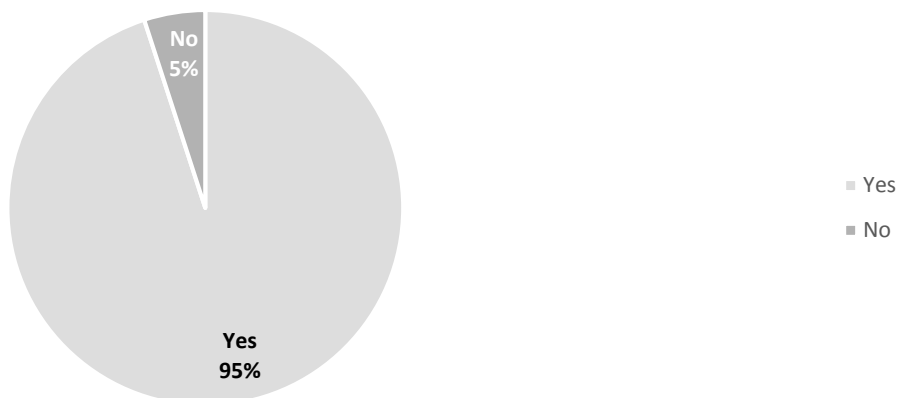
Figure 8: Which of the following best describes the way you park your moped when visiting the study area for events, dining, or entertainment?

Conclusion

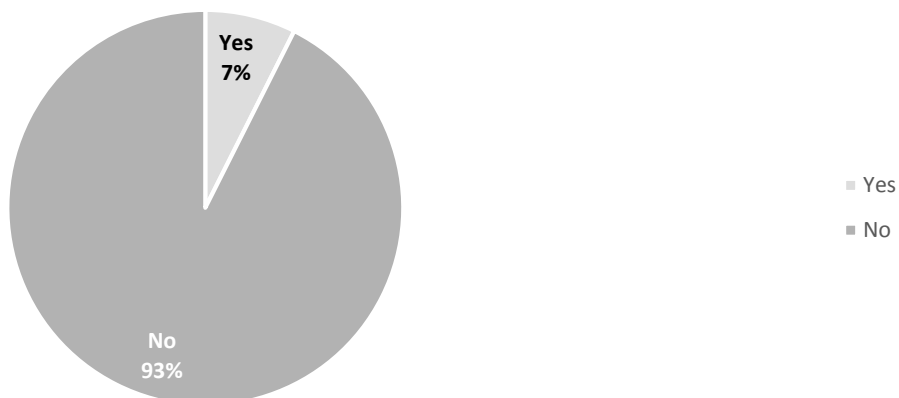
The online survey presented interesting insights about bicycle and moped parking in the study area. The full survey results are provided following this conclusion, with the exception of text responses, which are too numerous to include. The survey results, including the text responses that are not included here, will help inform the final recommendations of the study.

Full Survey Results

1. Do you own or have free and convenient access to a bike?



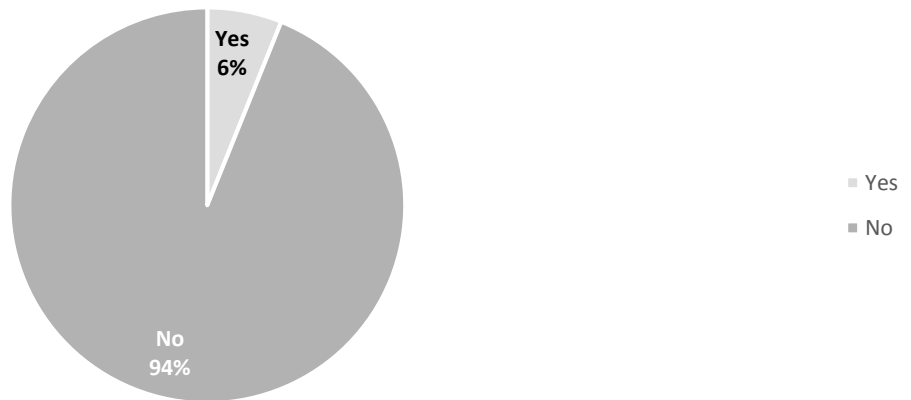
2. Do you own or have free and convenient access to a moped?



3. Do you own or have free and convenient access to a car or other motor vehicle (truck, van, motorcycle)?



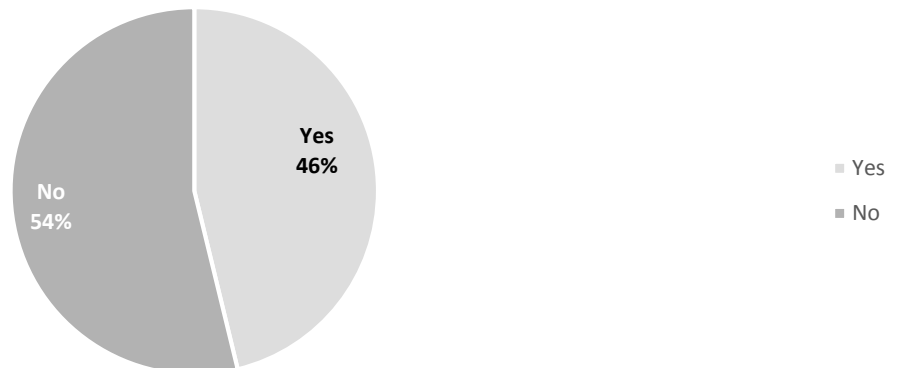
4. Do you live in the study area?



5. What is the nearest intersection to your place of residence?

Text response

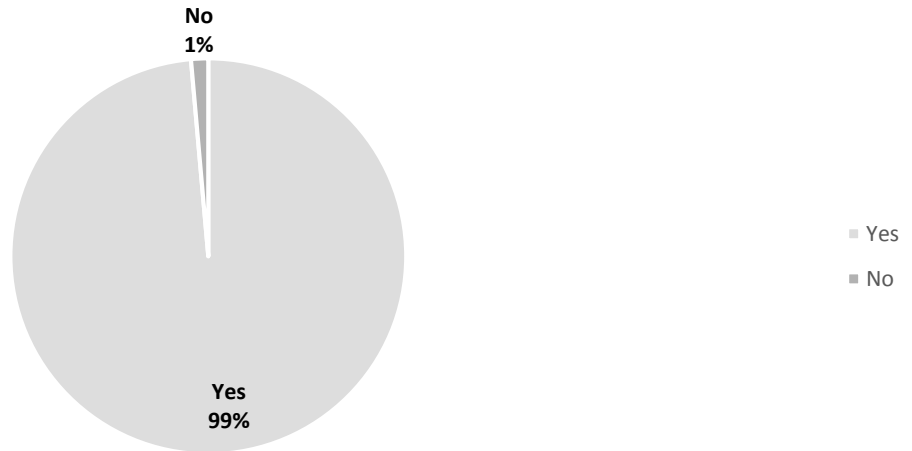
6. Do you work or attend school in the study area? (If you park a bike in the study area answer YES)



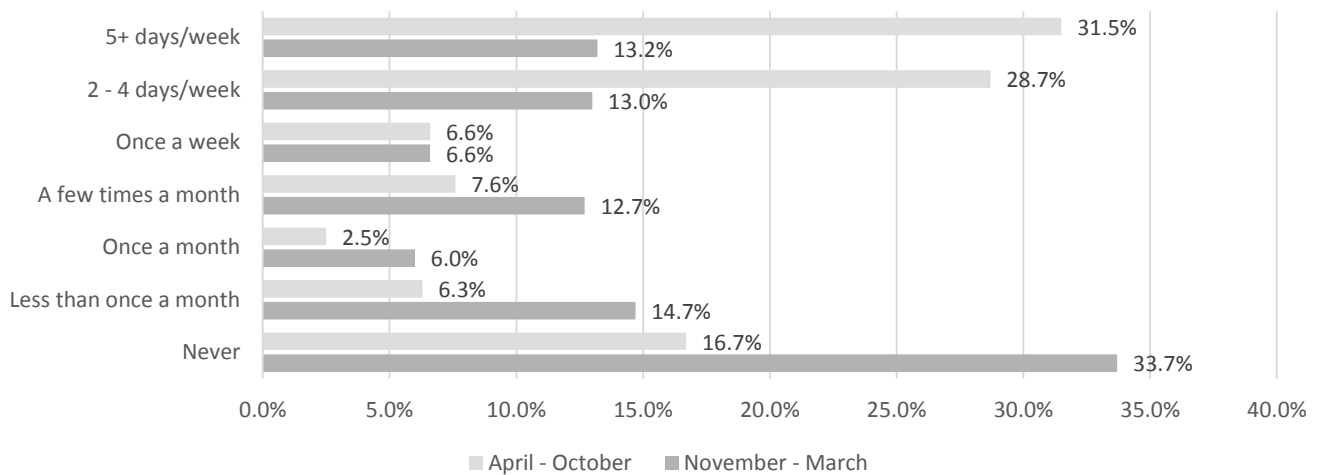
7. What is the nearest intersection to your work/school destination? (If destination is outside the study area, indicate the nearest intersection to where you park your bike.)

Text response

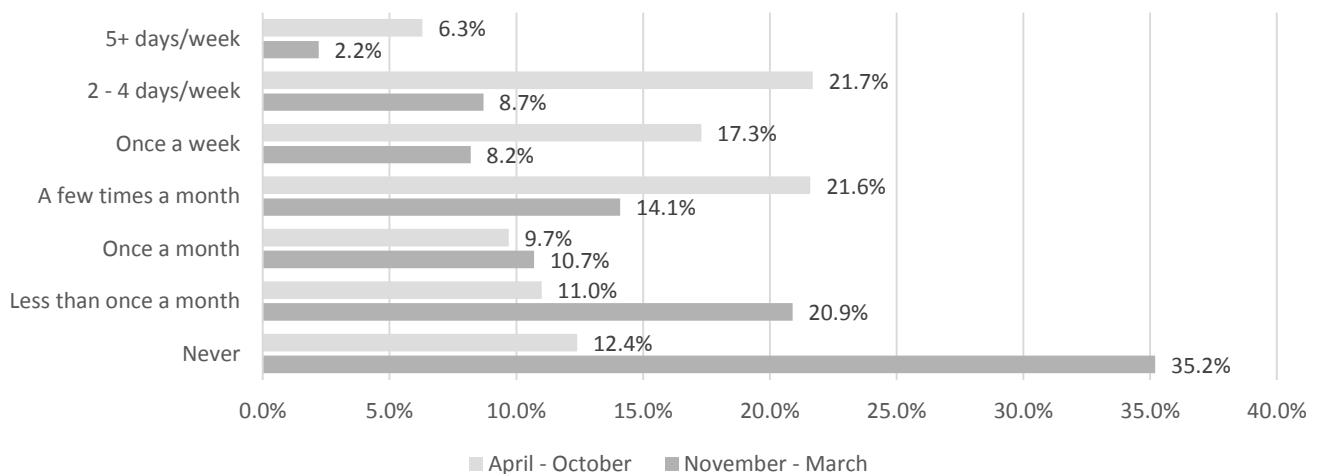
8. Do you occasionally visit the study area for events, dining, or entertainment?



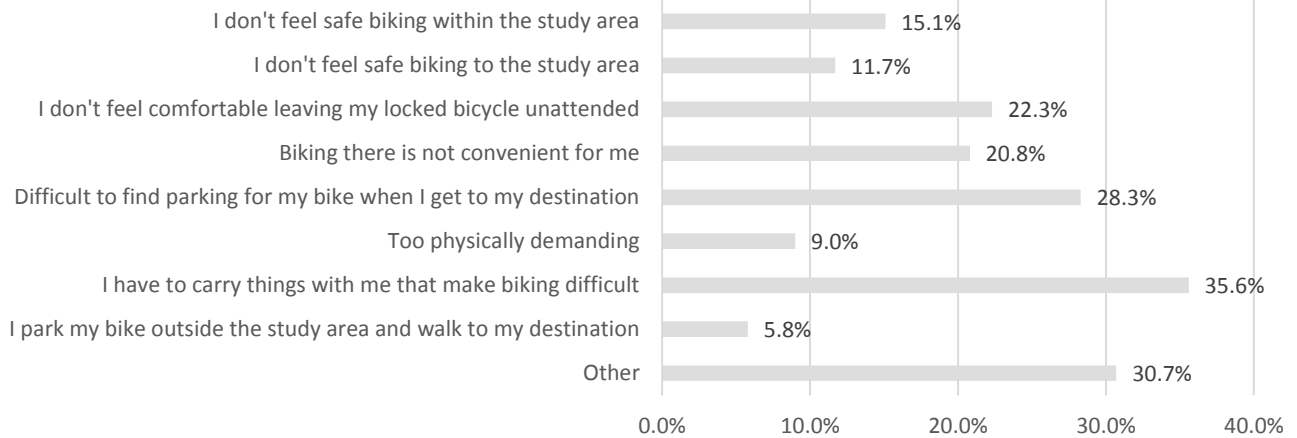
9. How often do you park a bicycle in the study area for work or school?



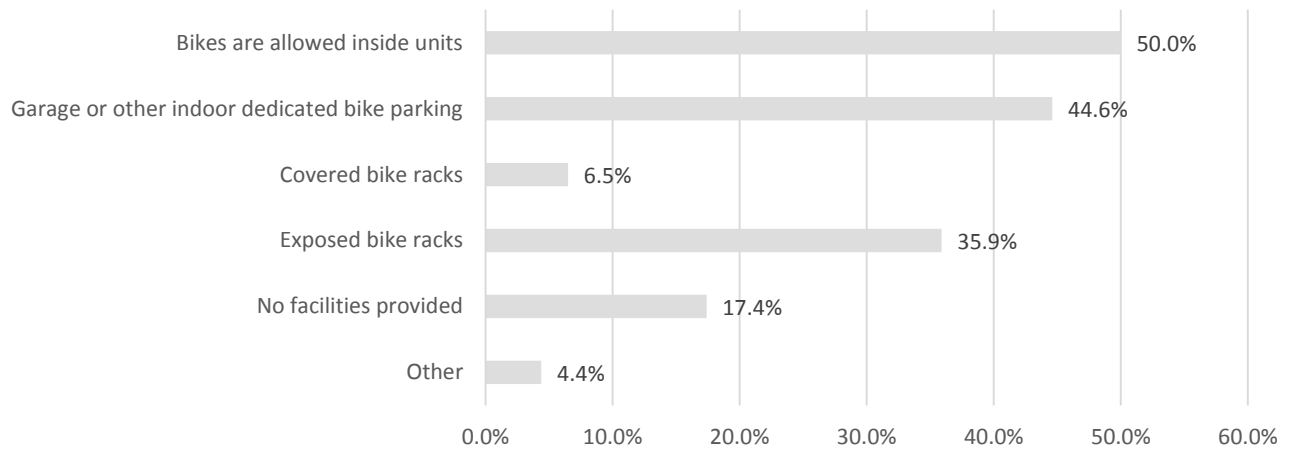
10. How often do you park a bicycle in the study area for entertainment, dining, or events?



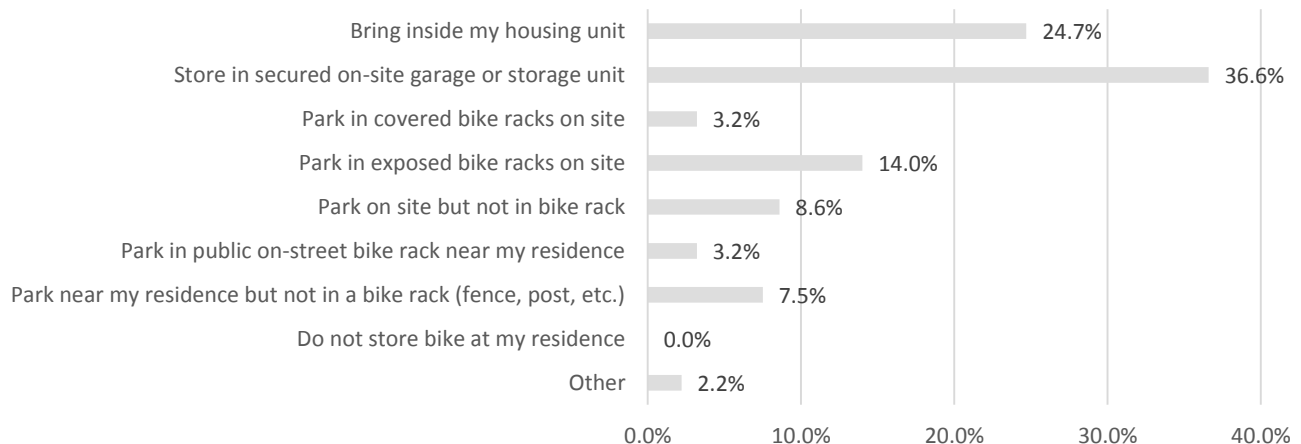
11. What are the issues that keep you from using a bike more often in the study area? (select all that apply)



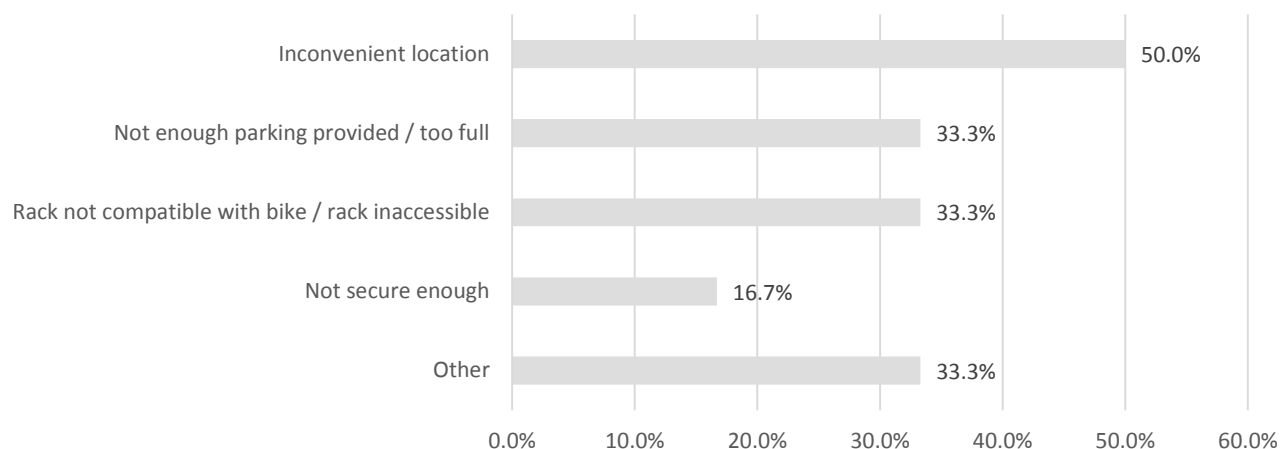
12. Which of the following bike storage facilities are provided at your residence? (select all that apply)



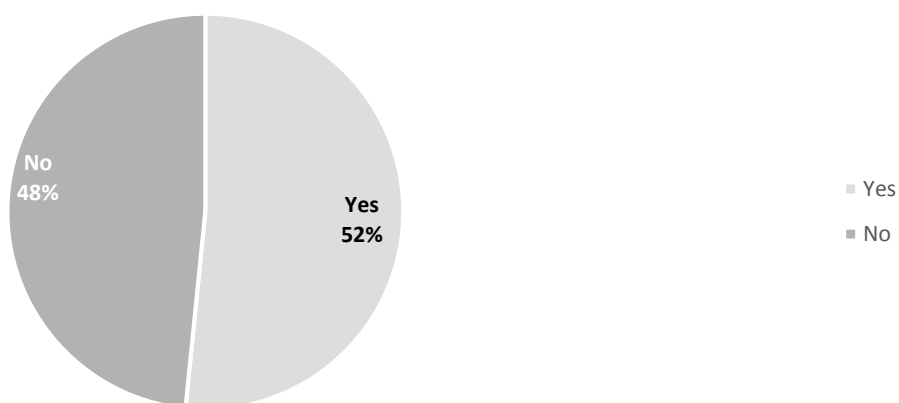
13. Which of the following best describes the way you store your primary bike at your residence?



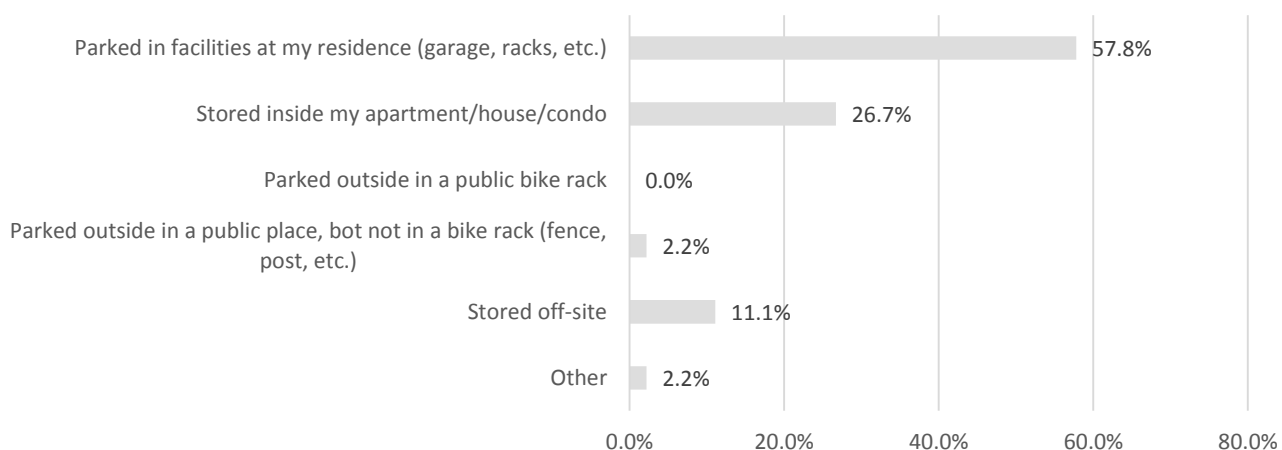
14. Which of the following would you give as reasons for not using the provided on-site bike parking? (select all that apply)



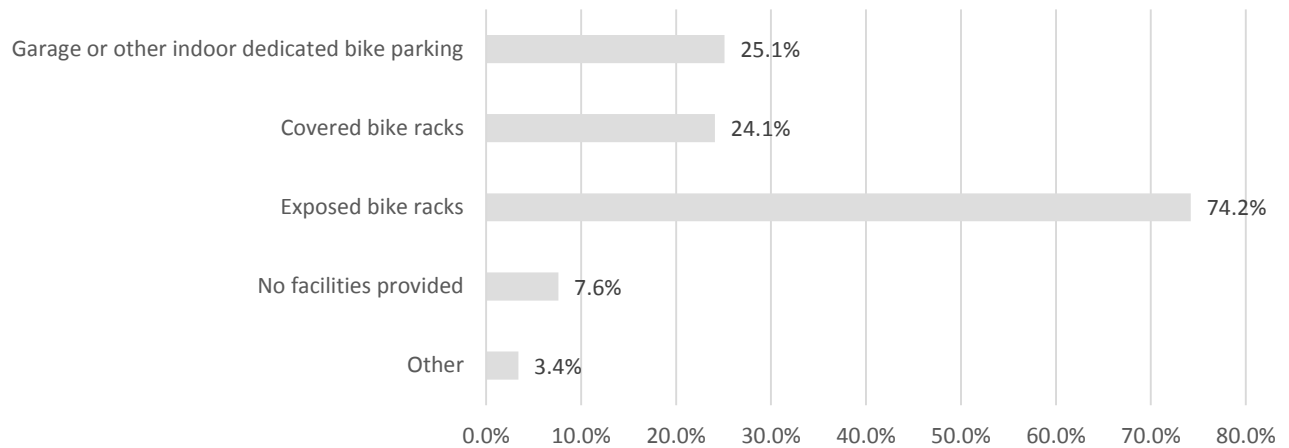
15. Do you continue to ride your bike during the winter (November - March)?



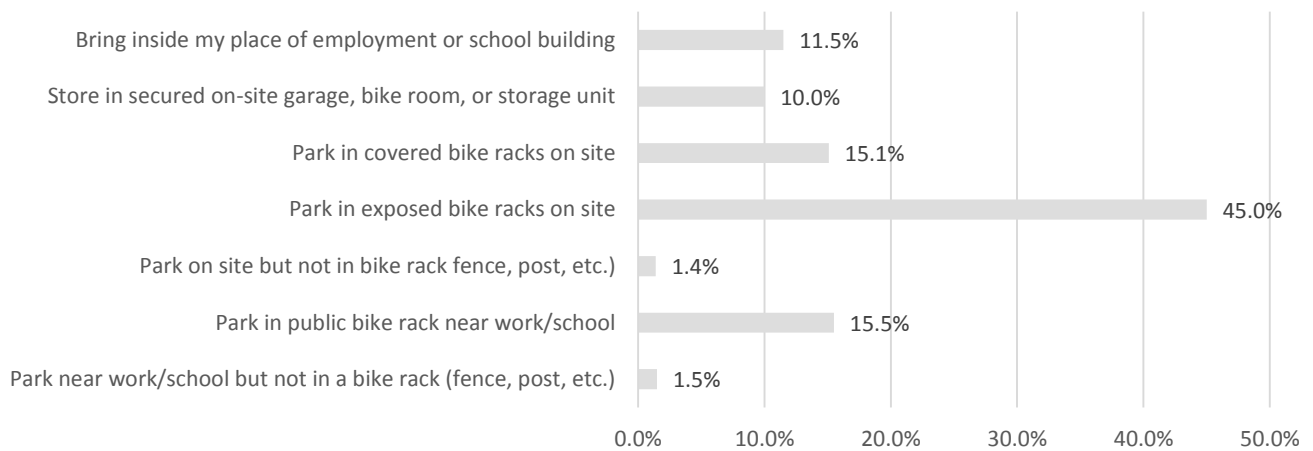
16. Where do you store your bike during the winter?



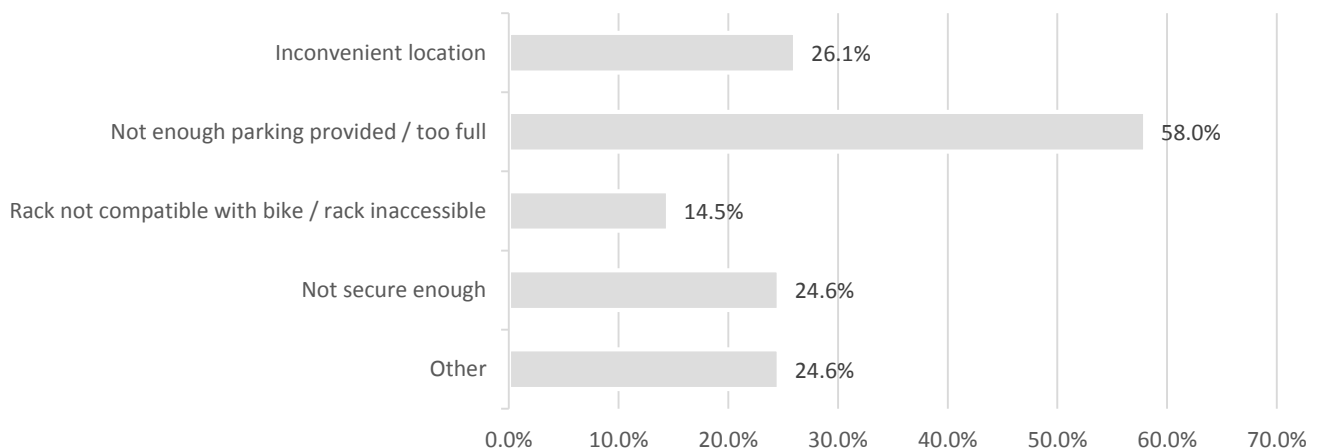
17. Which of the following bike storage facilities are provided at your place of employment or school? (select all that apply)



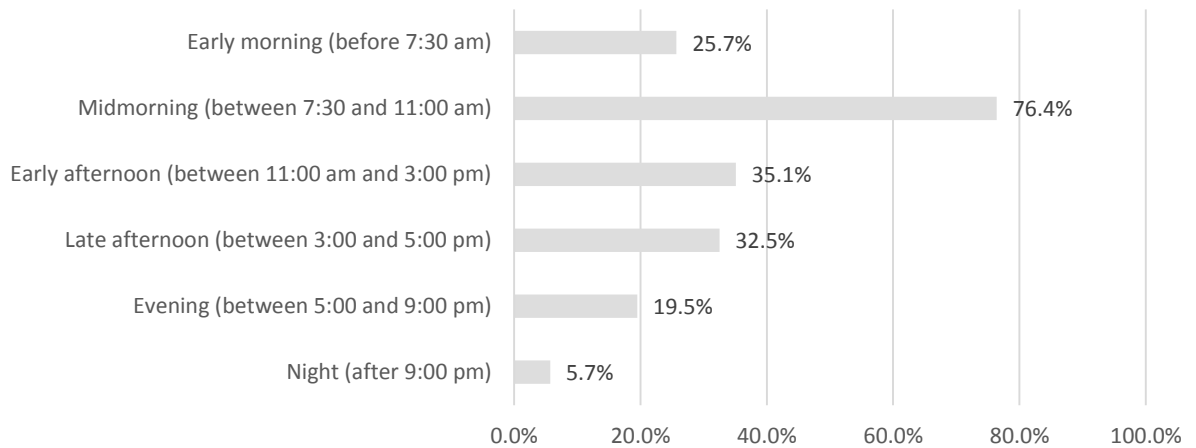
18. Which of the following best describes the way you store your bike at your place of employment or school?



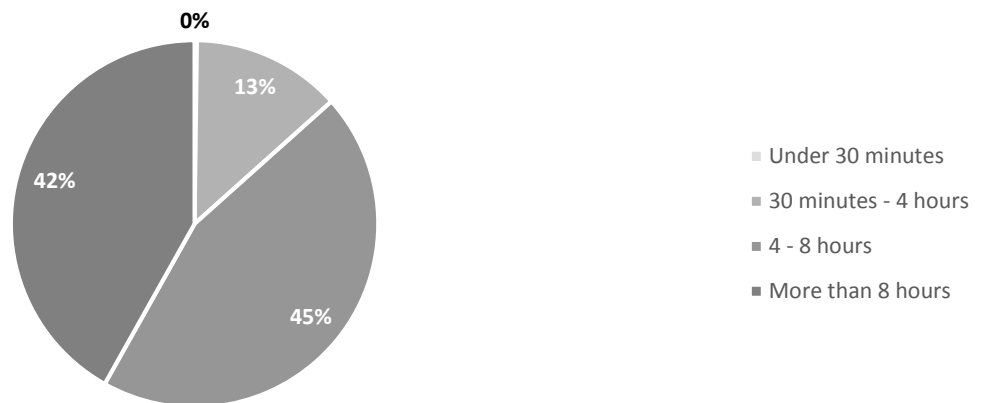
19. Which of the following would you give as reasons for not using the provided on-site bike parking? (select all that apply)



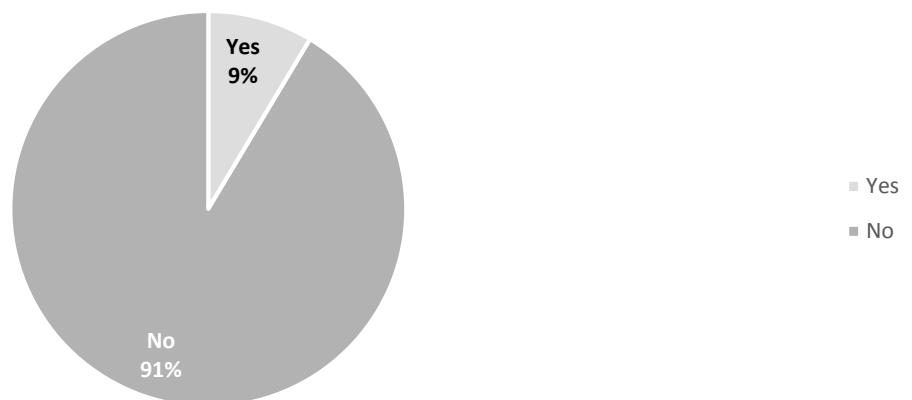
**20. What time of day do you typically park your bike in the study area for work or school?
(select all that apply)**



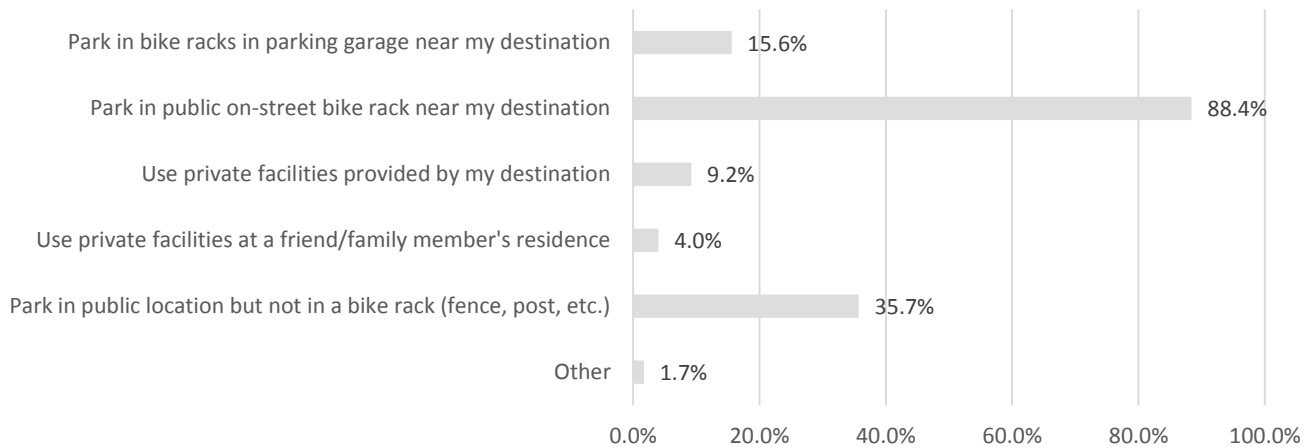
21. Which of the following best describes the length of time you generally leave your bike parked when at work or school in the study area?



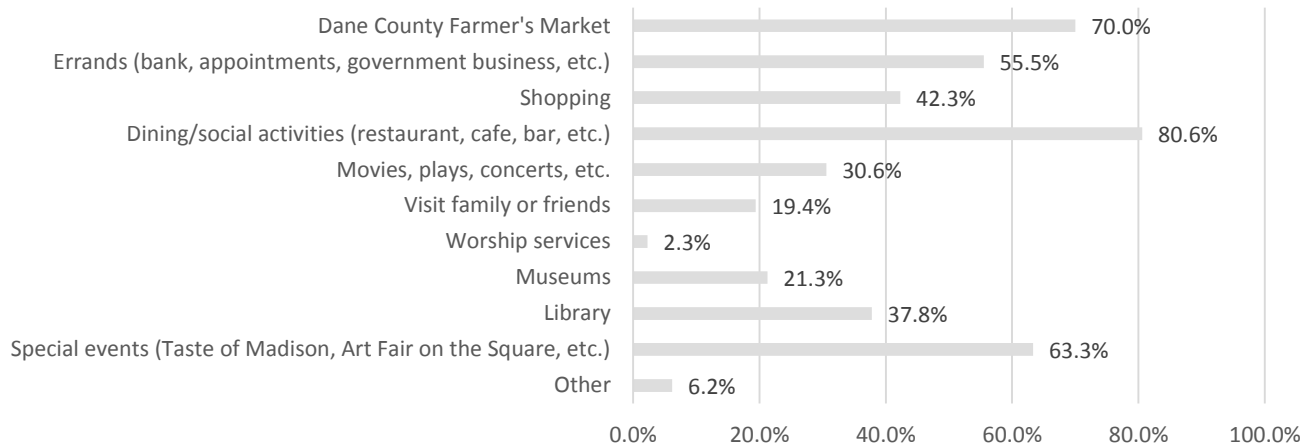
22. Do you park your bike overnight in the study area for work or school?



23. Which of the following describe the way you typically park your bike when visiting the study area for events, dining, or entertainment?



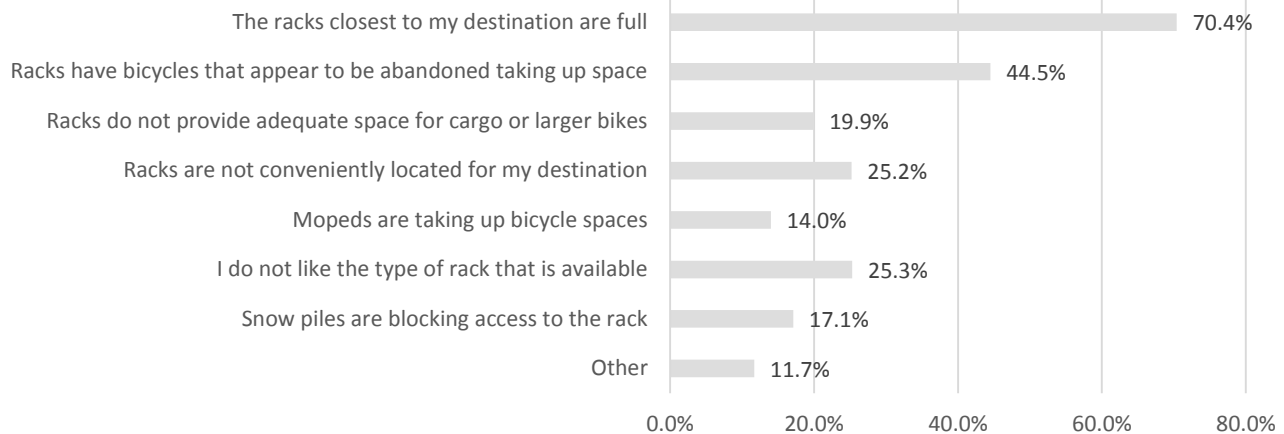
24. What are the primary destinations when you park your bike in the study area for events, dining, or entertainment? (select all that apply)



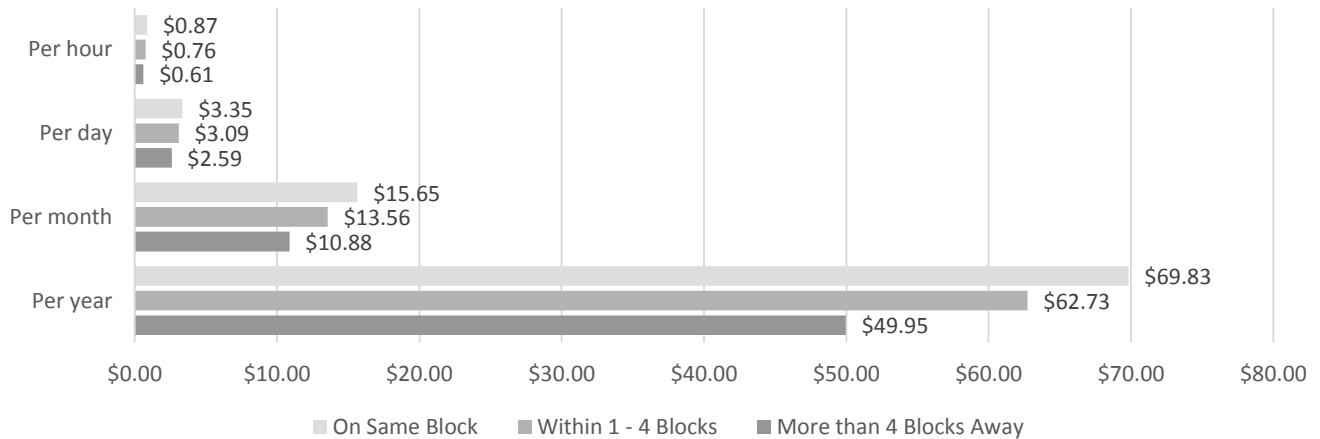
Which of the following best describes the length of time you generally leave your bike parked when visiting the study area for events, dining, or entertainment?



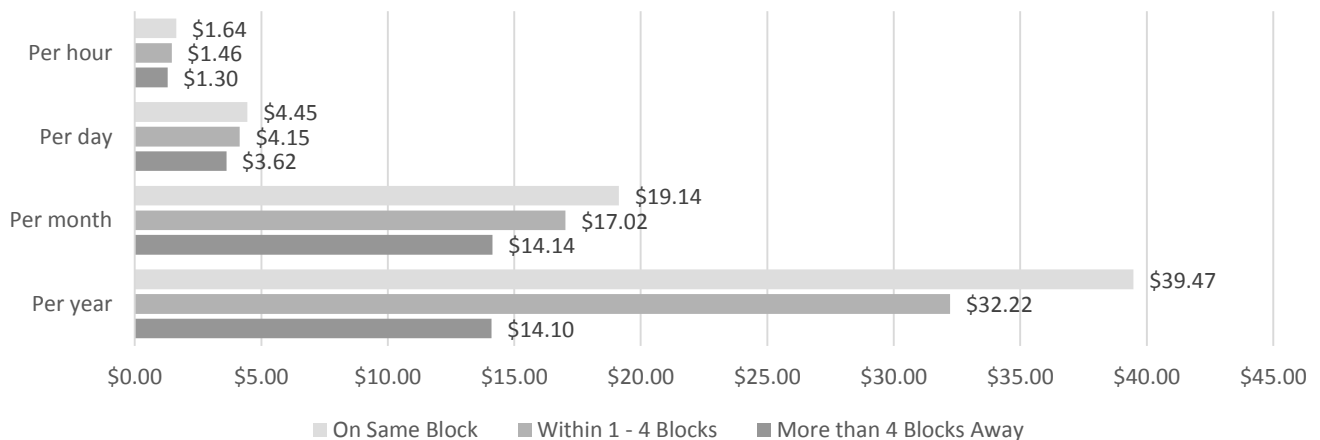
26. What issues do you regularly encounter with bicycle parking in the study area? (select all that apply)



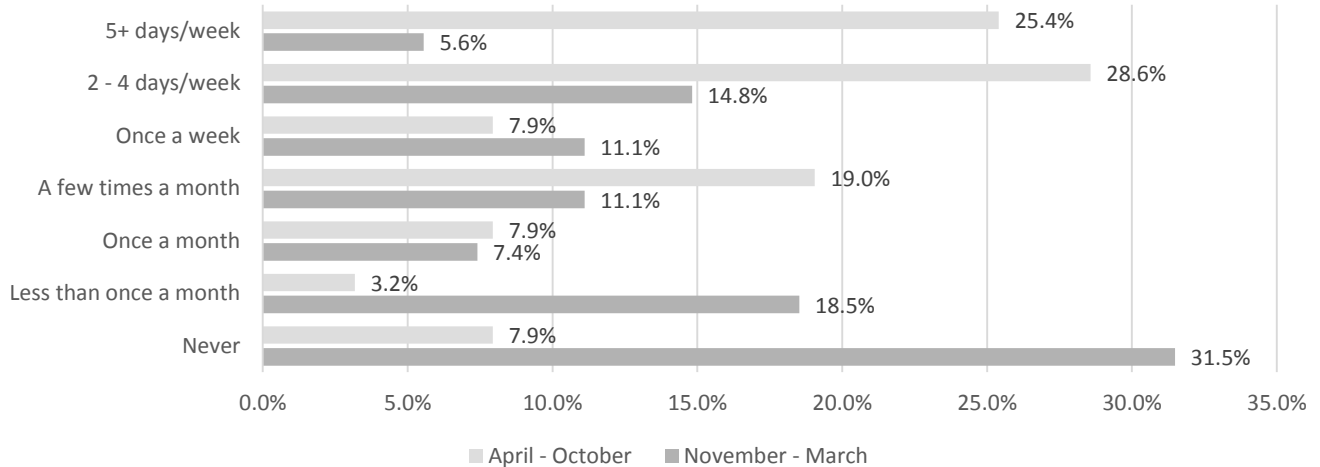
27. Indicate the amount you would be willing to pay for access to a bike locker or cage near your destination for the time frame indicated.



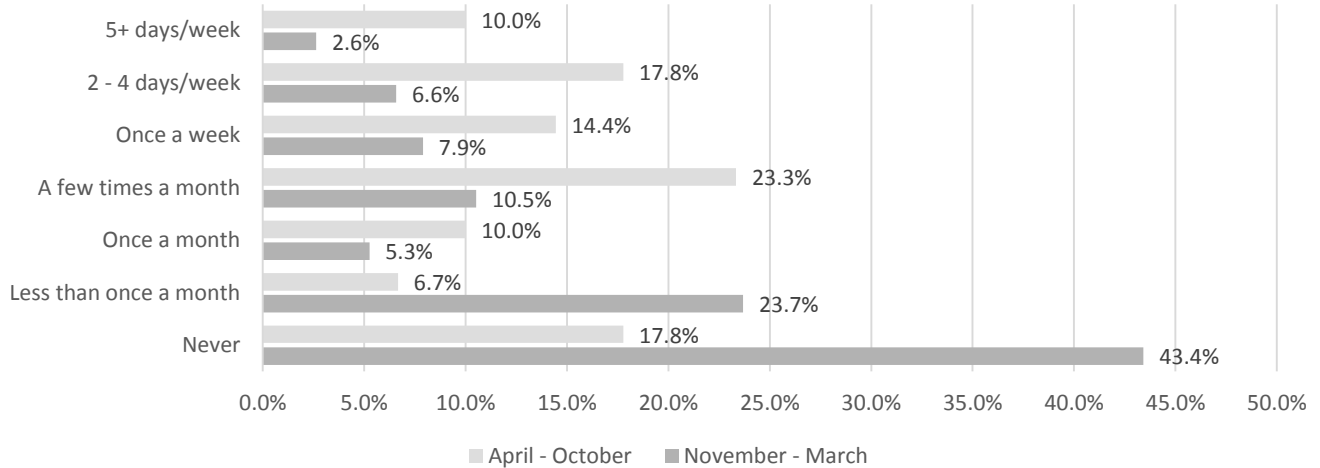
28. Indicate the amount you would be willing to pay for access to a full-service bike center near your destination for the time frame indicated.



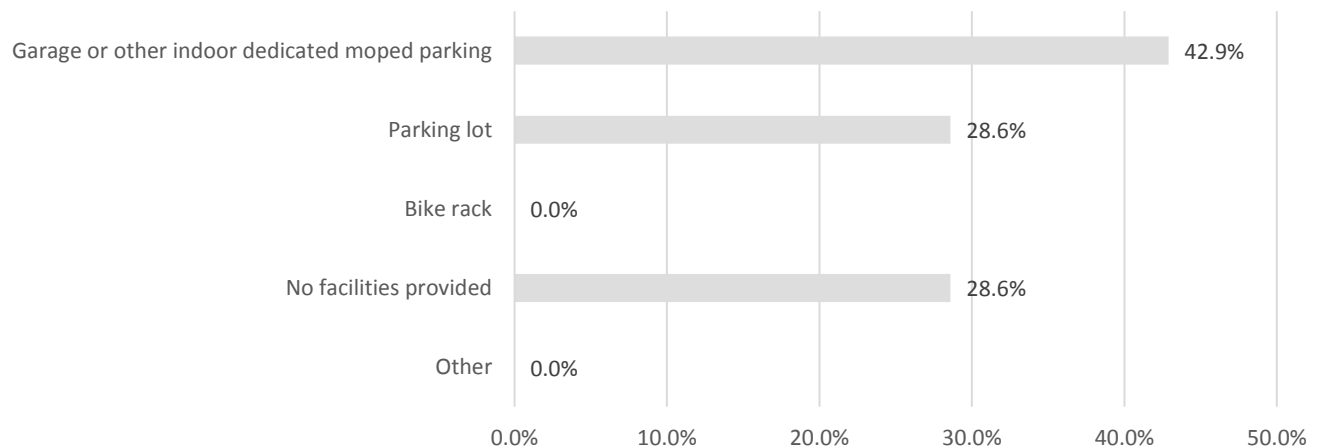
29. How often do you park a moped in the study area for work or school?



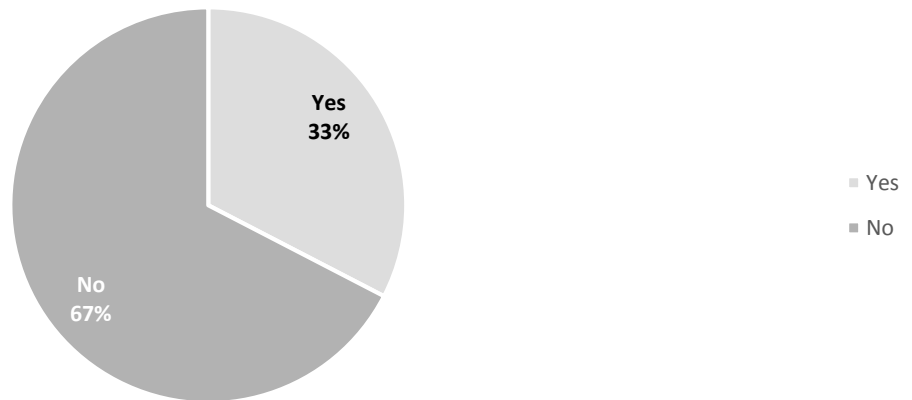
30. How often do you park a moped in the study area for events, dining, or entertainment?



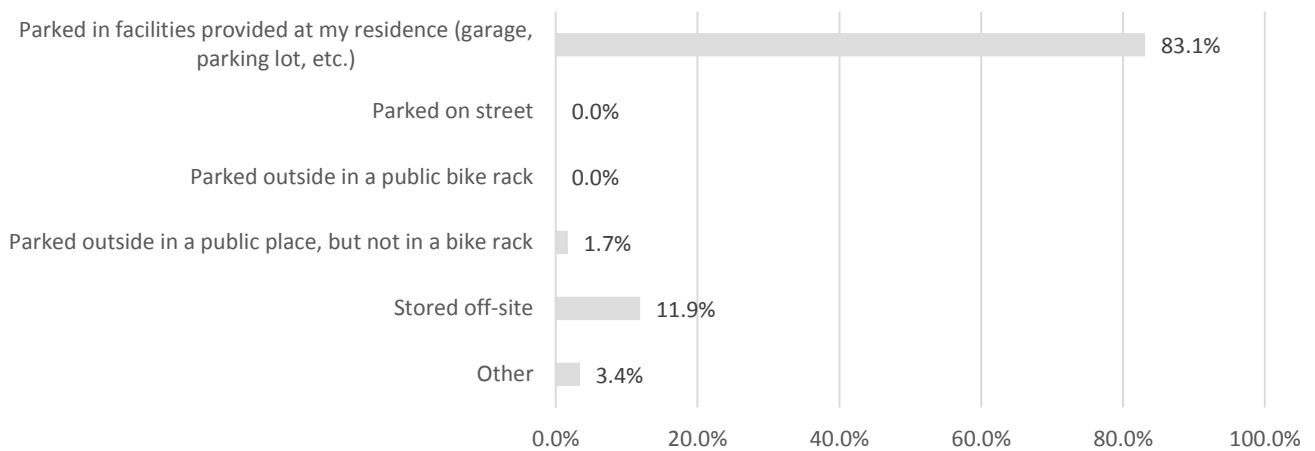
31. Which of the following moped storage facilities are provided at your residence? (select all that apply)



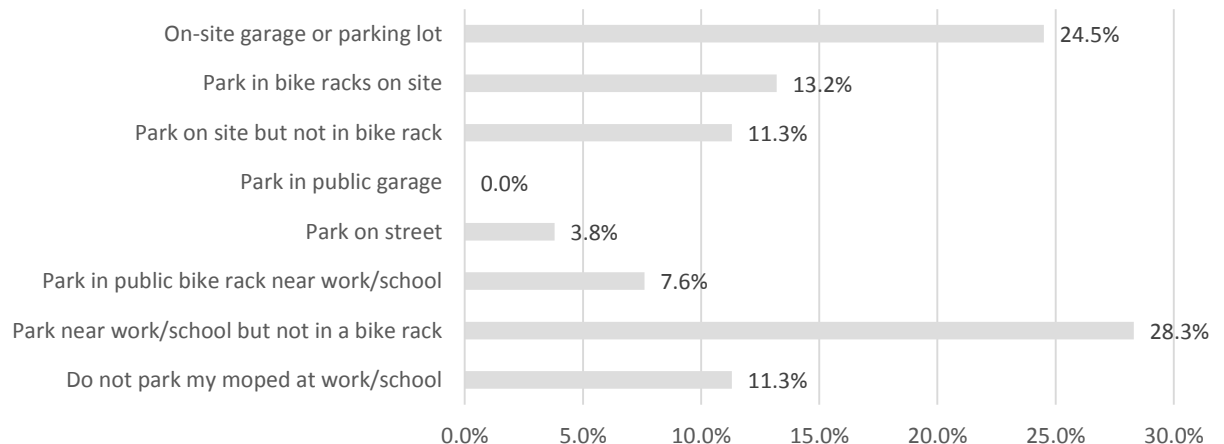
32. Do you continue to ride your moped during the winter (Nov - March)?



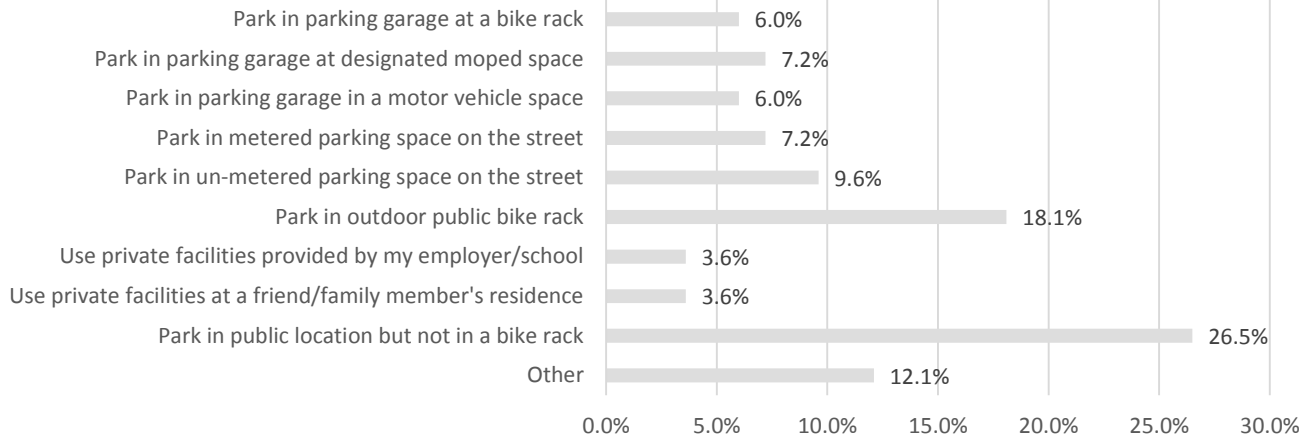
33. Where do you store your moped during the winter?



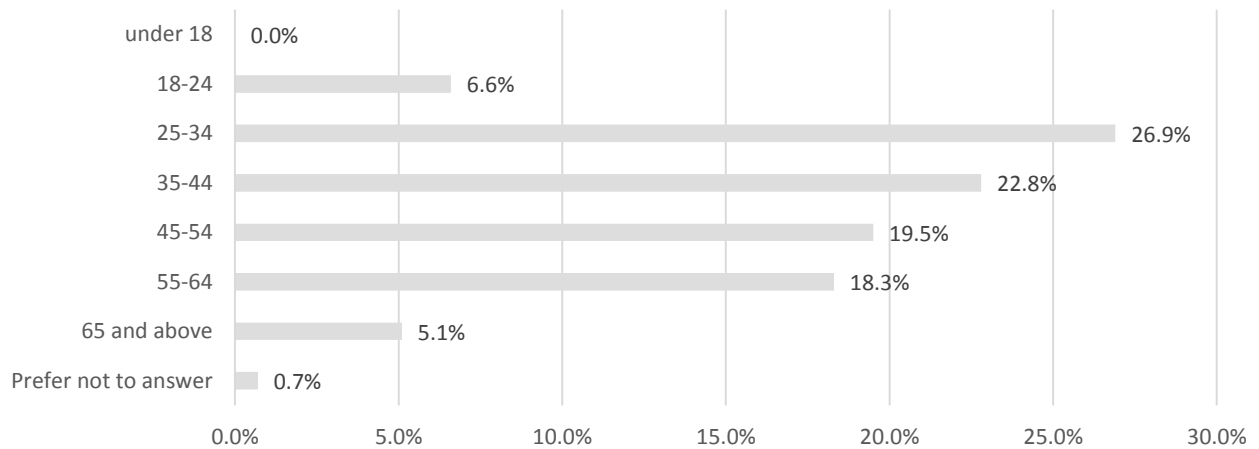
34. Which of the following best describes the way you park your moped at your place of employment or school?



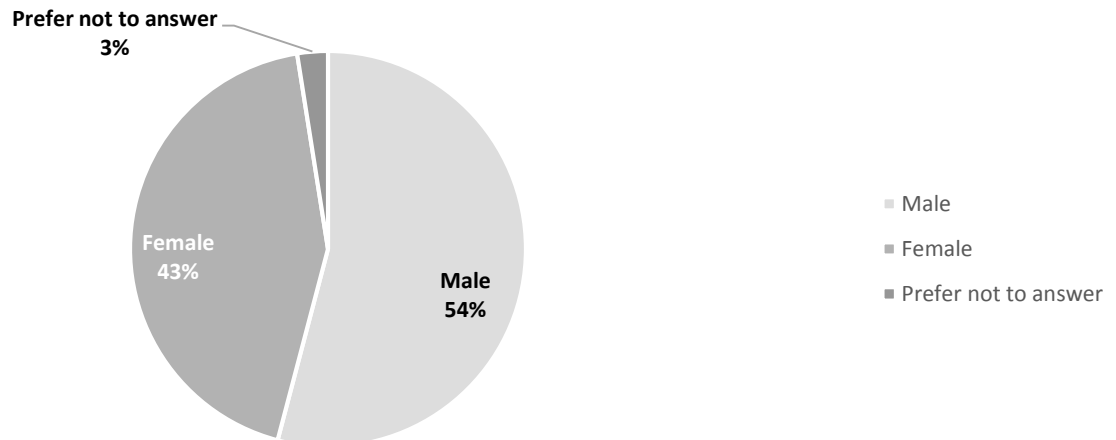
35. Which of the following best describes the way you park your moped when visiting the study area for events, dining, or entertainment?



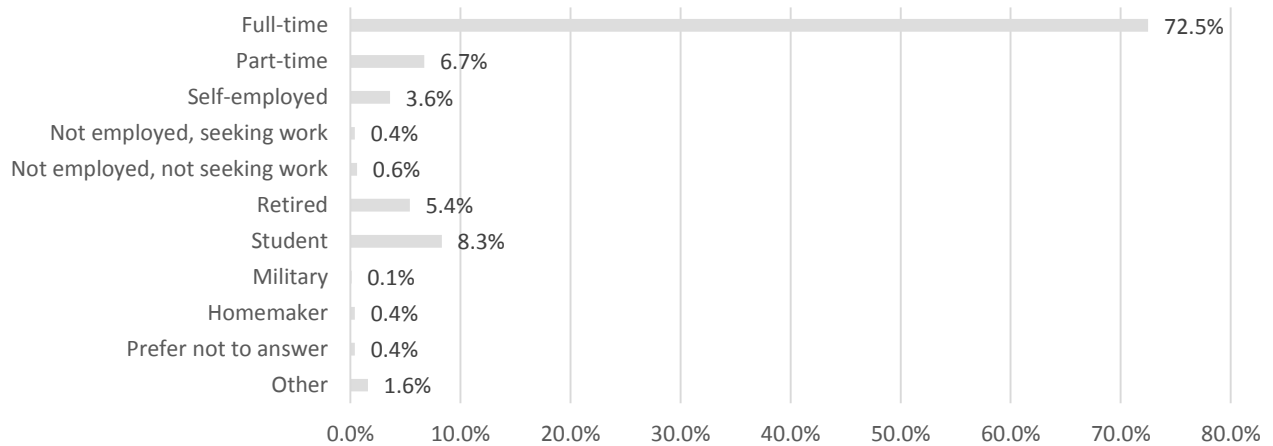
36. What is your age?



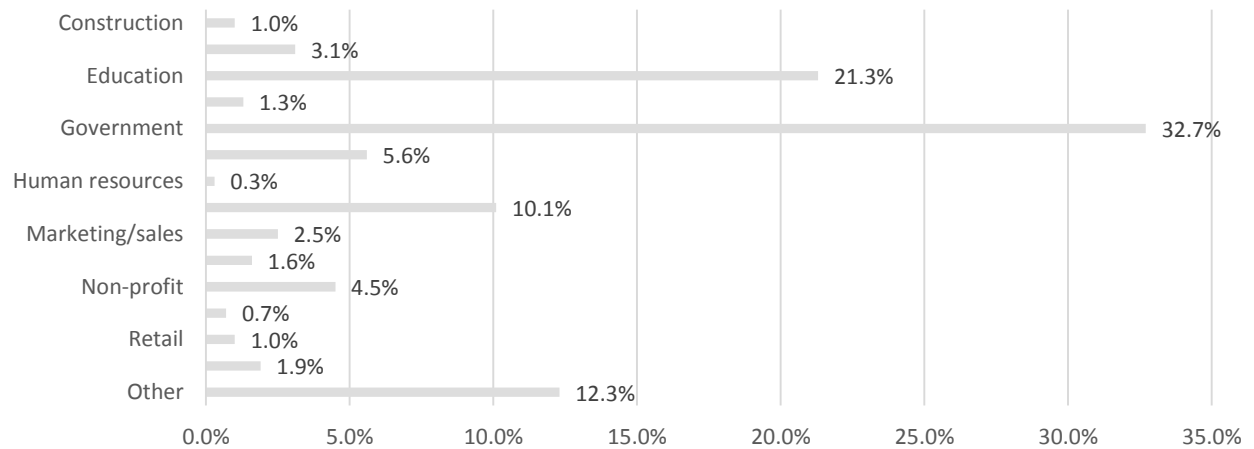
37. What is your gender?



38. Which best describes your employment status?



39. Which category best describes the industry in which you work?



40. What is your annual household income?

