

Jackson Hole Pathways Master Plan USER SURVEY

Summary of Results

July 29, 2005

Prepared For

Jackson Hole Community Pathways
Friends of Pathways
Town of Jackson

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Sponsored by Friends of Pathways and Jackson Hole Community Pathways

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Executive Summary

Shared use pathways are a transportation facility that is quickly growing in popularity, especially in Teton County Wyoming. This research was conducted in order to better understand not only what activities are currently taking place on the Jackson Hole Community Pathways but also the community's opinions on how best to expand and improve the pathway network in the future. Data collection consisted of collecting surveys and personal interviews on the Community Pathways and collecting surveys online through the Friends of Pathways website.

The following are a list of the key results from the survey:

- There is an overwhelming support for pathways.
- Biking and walking are currently the most common activities on the pathways for both adults and children.
- Although most trips on the pathways are currently recreational there is a definite interest in using the pathways for more utilitarian purposes, including getting to work and going shopping.
- Most pathway users agree that they would do more utilitarian trips if the pathways were expanded and more connected to residential communities and the downtown areas.
- The majority of pathway users do not travel more than a mile (and most of that group travels even less than half a mile) to access the pathway.
- Close to 75% of all pathway users are meeting or exceeding the US government's recommendation of getting at least 30 minutes of physical exercise at least 5 days a week.
- Pathway users own considerably more bikes than automobiles.

It is recommended that future expansion should include what the public strongly agreed on as 'specific areas that need to be developed', including missing pathway locations and a few unsafe areas. Connecting to communities and building more pathways are the best way to encourage more pathway use and help make pathways a vibrant and popular place to be.

Project Overview

Shared use paths are a relatively new transportation facility that is emerging with great interest across the United States. These facilities not only serve as a recreational area, but also act as transportation routes for communities. They give all different modes, including walkers, runners, cyclists, skaters, and horseback riders, access to travel corridors. Researchers have shown shared-use paths can improve the environment, enrich the vitality of an area, and increase the health of a community.

The Jackson Hole Community Pathways are continually growing across Teton County, Wyoming. Each year both the number of miles of pathway and the number of users increases significantly. In fact, the popularity of these corridors is growing not only among the local residents but also among the visiting tourists. These shared-use pathways are effectively used for both recreation and for transportation year round: walking and biking in the warmer seasons, and snow shoeing and cross country skiing in the colder seasons. The area is surrounded by National Forests and National Parks, and great interest is taken to develop the pathway network with respect for the environment and wildlife.

This research survey was conducted to learn more about the activities that take place on the pathways year round. The town and county were specifically interested in identifying how often people used the paths, what they used them for, when they used them, and if they used it with anyone else. It was also used as a tool to collect information about what users thought about the pathways: what they liked, what they thought could be improved, what they felt was unsafe, and where they would like to see new pathways in the future. The survey instrument was expanded to ask users about their general travel habits in order to compare with their pathway use.

Surveys were collected in the field (along the pathways), online, and at special events from June 16, 2005 to July 16, 2005. The survey consisted of a 4-page color booklet that asked the user to circle and write in responses. Interviews were also conducted as users filled out the booklets to get a better appreciation for why people felt the way they did. Comments from these interviews are included in Appendix B. Survey distribution was conducted at a tent and table that were set up on the side of the path. Colorful signs made pathway users aware of the survey activity ahead. Pathway maps, snacks, and water were given out to those who completed the survey. A total of 428 surveys were collected. Table 1 lists the number of surveys collected at each site and event.

Table 1: Number of Surveys Collected at Different Locations

	Location	No. of Surveys Collected
Pathways	Russ Garaman Trail	70
	Rafter J Trail	16
	Moose/ Wilson Trail	46
	Wilson Centennial	29
	Old Pass	14
	Cache Creek	32
Events	Bike to Work Day	34
	Bike Rodeo	19
	M/W Rest Area Dedication	17
	Fourth of July Events	13
	Online	130
	Pearl Street Bagels	8
	Total	428

It is important to note that the survey respondents are a self-selected audience. First, all people using the pathways were not required to fill it out, and a small number declined. Those that did fill out a survey did so because they chose to, so the data collected focuses on the pathway users who had something to share. Some (especially those on bicycles) did not have time to stop and fill one out even when they wanted to. The online version was created specifically to catch those people: if they did not have enough time, users were given a paper with the online website link so they could complete it at a later time. This proved very effective.

That being said, the self-selected audience was a good percentage of the total users seen on the pathways while the survey was being done. These are the people who probably use the pathway most often and will be affected most with changes to the pathways. It is also clear from conducting interviews with the survey respondents that those that chose to share their thoughts are aware of the pathway-user-community feelings, and they represent that group well.

Unfortunately the 'might use pathways in the future but are not now' audience, while represented, was not fully captured. It was a hope that the online version, publicized in the newspaper and over the radio, would be an effective venue for non-pathway users to describe what would help them start using pathways. It clearly reached the intended audience, but those not interested enough in sharing their thoughts about how to get him/her using the paths are not included in the data. It is hoped that with the expansion of pathways to new neighborhoods and further integration into communities this last group will automatically start to use the pathways, as is currently the case.

Survey Audience Analysis

Demographic data was collected from each survey to eventually describe the survey sample population. This information illustrates what pathway users are like and where they come from. The data also shows how well the 428 people who completed surveys represent the entire Teton County population characteristics of age, gender, where they live, and Friends of Pathways members.

According to the US Census Bureau, "the proportion of residents aged 25-54 is significantly larger in Teton County than the state or nation." (Charture 6) This trend emerges from the survey population too, as seen in Figure 1. Close to 58% of those surveyed were aged between 25 and 45 years old. The drastically smaller number of respondents aged less than 25 has to do with the fact that many younger children did not fill out the survey. Young children are present on the pathway, but they either declined or their parents filled it out instead. Also it is important to note that the average age was roughly 39 years old (with a standard deviation of 13.7), which is slightly higher than the county average of about 37 years old. (Charture 6)

Figure 1: Ages of Pathway Users

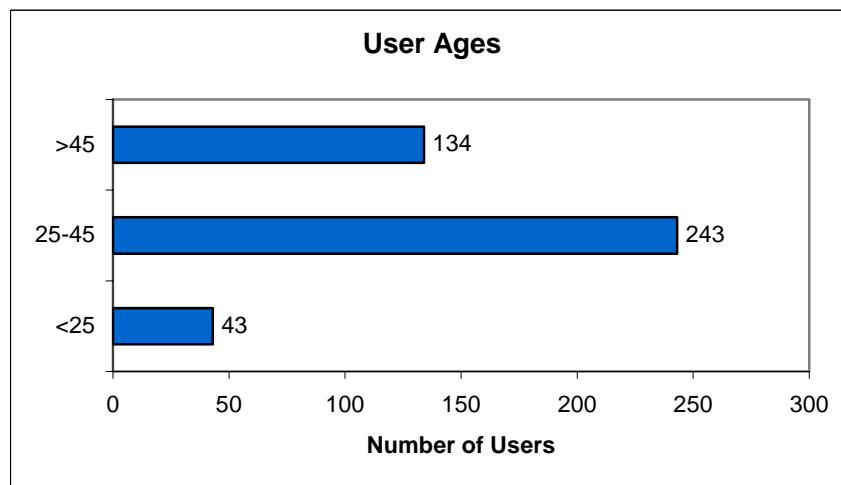


Figure 2 describes the number of males and females present among the survey population. The survey population is close to the state average of 55% males and 45% females. (US Census) There are 58% males and 42% females in this sample. These percentages are consistent with the users on the path as well (including those who did not fill out the survey). There were slightly more males using the paths, especially towards the evening. Both and males and females were equally likely to complete the survey.

To completely appreciate the users on the pathways, it is helpful to further breakdown and compare genders and ages. Figure 3 illustrates that the difference in gender is common throughout all age ranges.

Figure 2: Genders of Pathway Users

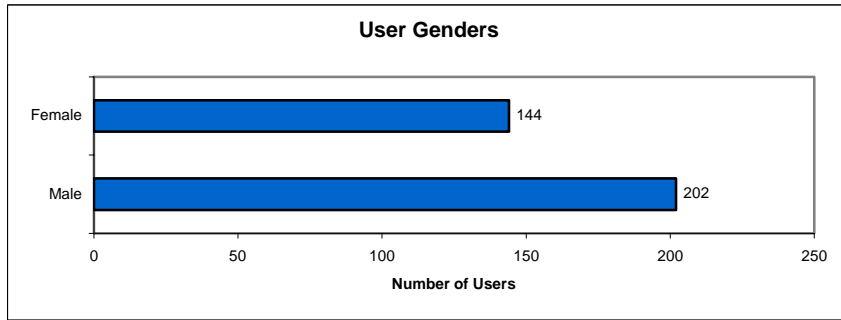
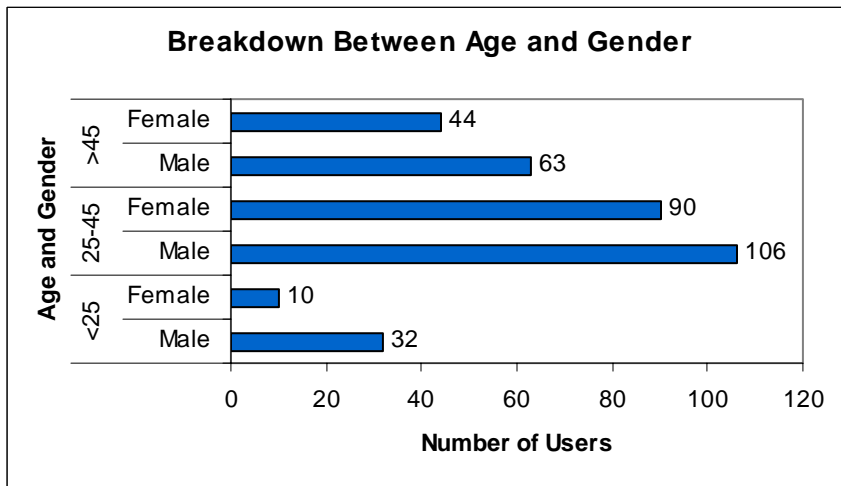
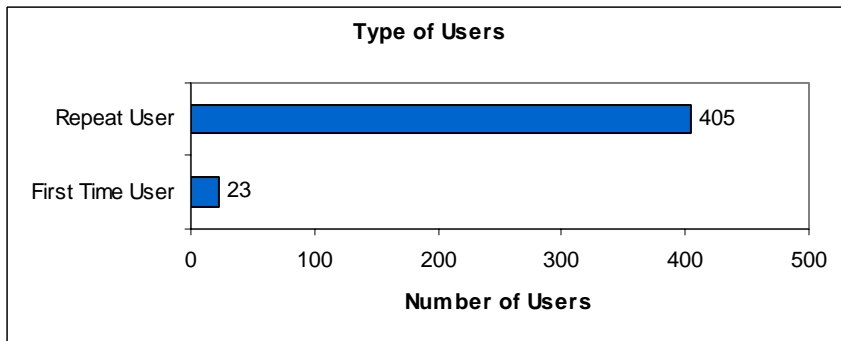


Figure 3: Breakdown of Age and Gender



A surprising 5% of all pathway users surveyed were using the pathways for the first time. These first time users were mostly visitors from Teton Village or a Dude Ranch. Their surveys were mainly collected on the West Bank along the Moose-Wilson Trail, Wilson Centennial Trail, and the Old Pass. Figure 4 describes the repeat versus first time users.

Figure 4: Types of Users



While less than 5% of the pathway users were first time visitors, 14% of the surveyed pathway users were visitors (as seen in Figure 5). This means that about 10% of the pathway users were visitors who used the pathways either on multiple visits or multiple times on the same visit. It is encouraging that some visitors are already seeing and using the pathway system as a worthwhile means of transportation or exercise. Table 2 lists the different zipcodes of where visitors who use the pathways are from.

Figure 5: Where Users Live

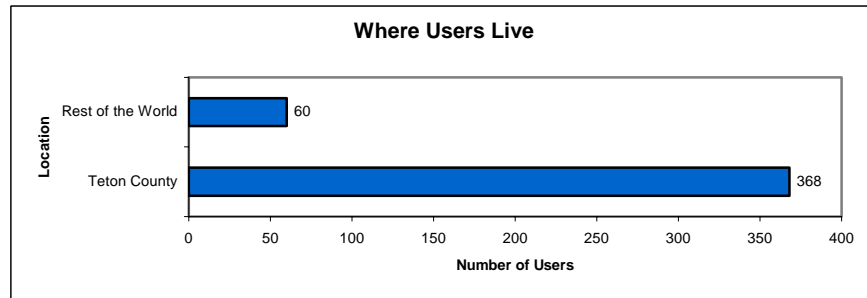
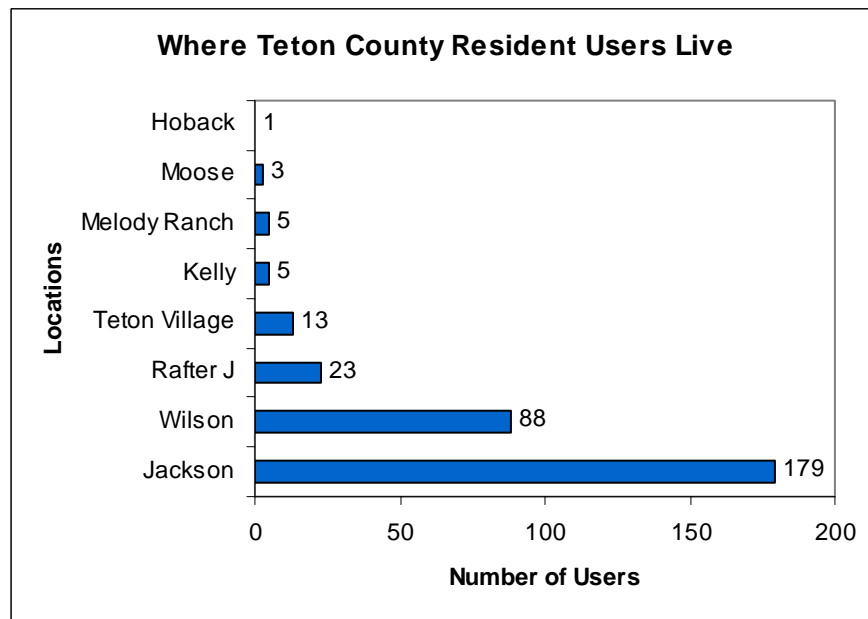


Table 2: Home Zipcodes of Visitor Using the Pathways

01742	60559
01775	60661
02764	70437
05401	72205
06880	76567
07090	79902
08070	83001
11358	83002
17055	83014
18966	83025
29201	83128
33304	83404
33316	83414
33412	83445
37849	83452
39110	83455
48451	84020
53901	84321
56601	90265
59030	90405
59715	95616
60015	98070

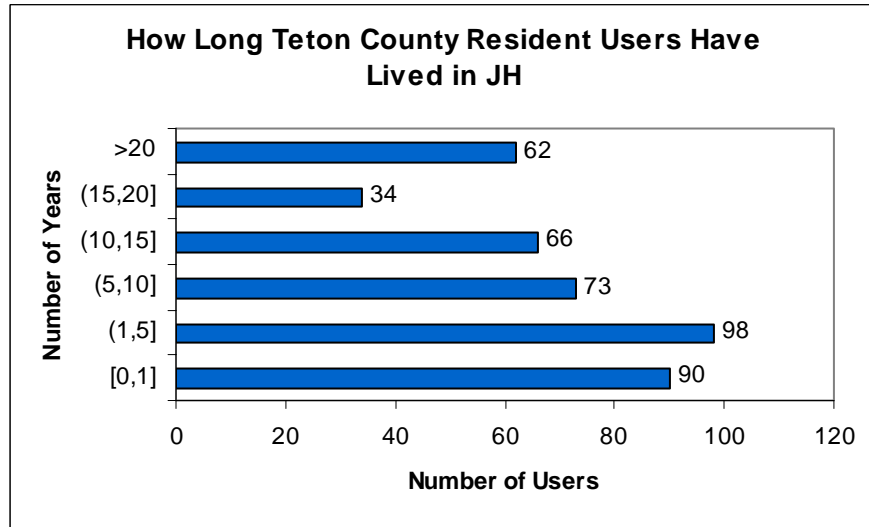
Figure 6 describes the breakdown of where those pathway users who are residents of Teton County actually live. Surveys were distributed for roughly the same amount of time on each pathway to give an equal time exposure for pathway users. In fact there was more time spent on the West Bank (Teton Village, Rafter J, Wilson) simply because there are more pathways on that side of the county. However, after factoring out the events and online surveys in Table 1, close to half of the surveys collected by hand on the pathways came from both the West and East Banks. This means that even though there was less time spent collecting in Jackson there are more pathway users there. Counts on pathways in Appendix D also confirm this. This information parallels what is seen in Figure 6. Simply put, Jackson is one of the biggest sources of pathway users, followed by the town of Wilson.

Figure 6: Where Teton County Resident Users Live



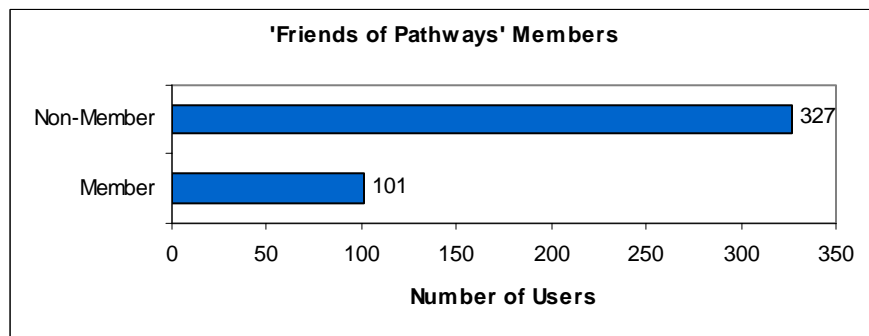
The next step is to look at how long the Teton County resident Pathway users have lived here. Are the pathway users the ones who have moved here the most recently? Actually no. Figure 7 shows that no matter how long someone has lived in Jackson Hole they have about the same likelihood to use the pathways.

Figure 7: How Long Teton County Residents Have Lived in Jackson Hole



Almost a quarter of all the people surveyed were members of the non-profit *Friends of Pathways* organization (seen in Figure 8). There is no exact number of how many pathway users are members, so this number is impossible to compare to the path-using population. However it is not surprising that that many respondents are members. The same people who spend the time filling out the survey are the ones who would support a pathways promoting organization. Many of the 75% non-members did not know about the program left their email to learn more. Contact emails can be found in Appendix C.

Figure 8: Number of Friends of Pathways Members



Pathway Activity Summary

An important goal of this survey instrument was to identify the most common modes on the pathways and the most common purposes for using the pathways. This information gives the engineer or planner a sense of what the average person might be doing on the path and why they are there. This section describes the results from that inquiry and the calculations used to reach them.

One of the most common ways to compare the use of different modes and purposes for being on the trail is to use the number of trips done with each. The following data was collected on the surveys in order to calculate the number of trips each person took using each mode and for each purpose:

- Number of days per week he or she uses the path each season.
- Percentage of time spent on the pathways doing different activities.
(ex. walking, biking, cross country skiing, etc.)
- Percentage of time spent on the pathways for different purposes.
(ex. recreation, getting to work, going shopping, etc.)

Figure 9 summarizes how many trips are taken each week during each season. These values are sums from all of the survey responses. Table 3 shows the average number of trips per week during each season and standard deviation for each as well. As would be expected, summer has larger numbers of trips, and winter has much smaller numbers of trips. Spring and Fall are about equal.

Figure 9: Total Number of Trips per Week Each Season

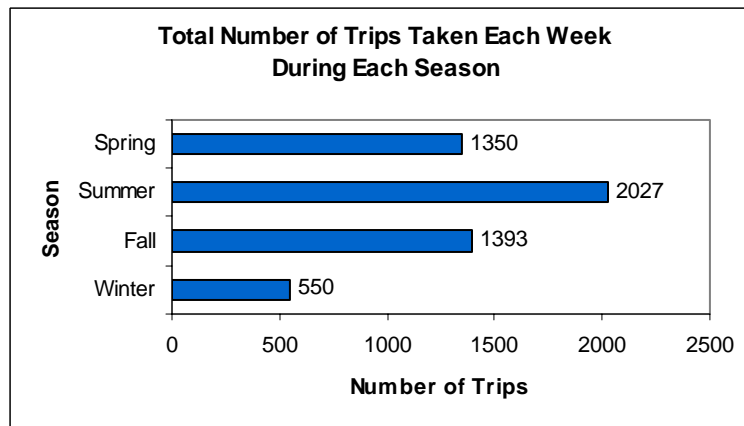


Table 3: Total and Average Number of Trips per Week Each Season

	Total	Average	St. D.
Spring	1350	3.2	3.7
Summer	2027	4.7	4.8
Fall	1393	3.3	3.1
Winter	550	1.3	2.3

Equation 1 was then used to calculate the total number of trips each person takes each year. Please note in this equation that the 12.9 multiplied by each variable is derived from the average number of weeks per month (4.3) and the estimated number of months per season (3). It is impossible to gauge every user's perception of how long each season is, especially in Teton County where the weather can change drastically every other week, so these standard constants were used to even timeframes out.

$$Y_i = [T_{su} + T_{wi} + T_{sp} + T_{fa}] * 12.9 \quad [1]$$

Where Y_i = average total number of trips per year for person i

T_{su} = average number of trips per week in Summer

T_{wi} = average number of trips per week in Winter

T_{sp} = average number of trips per week in Spring

T_{fa} = average number of trips per week in Fall

Next, the total number of trips each person takes each year was broken down according to the different type of modes people use. Equation 2 describes how the percentages of use with each mode are used in factoring out the yearly trips. The results from this can be seen in Table 10. Biking and walking stand out as the top two activities on pathways with more than 35,000 and 18,000 yearly trips respectively. This is interesting because walking and biking are most common during the warmer weather. The majority of use is then during the summer.

$$T_{ij} = P_{ij} Y_i \quad [2]$$

Where T_{ij} = number of trips per year for person i on mode j

P_{ij} = percentage of time the trail is used by person i for mode j

Y_i = average total number of trips per year for person i

(estimated from the number of times trail is used per season)

The same procedure was repeated again, this time breaking down the total yearly trips by the percentages of time trips were made for different purposes (Equation 3). The results from this calculation can be seen in Table 11. Trips for recreation greatly outweighed the other purposes with over 35,000 trips per year. However, based on interviews of pathway users filling out the surveys, there was a large interest in increasing the other types of trips taken. Many people said they would like to bike to work or to go shopping but they do not feel safe doing so. They pointed out that more pathways and better connections would allow them to do this. If changes are made it would be reasonable to expect a large shift in trip purposes to more utilitarian trips rather than all recreational.

$$T_{ik} = P_{ik} Y_i \quad [3]$$

Where T_{ik} = number of trips per year for person i for purpose k

P_{ik} = percentage of time the trail is used by person i for purpose k

Y_i = average total number of trips per year for person i

(estimated from the number of times trail is used per season)

Figure 10: Adult Trips per Year for Each Mode Type

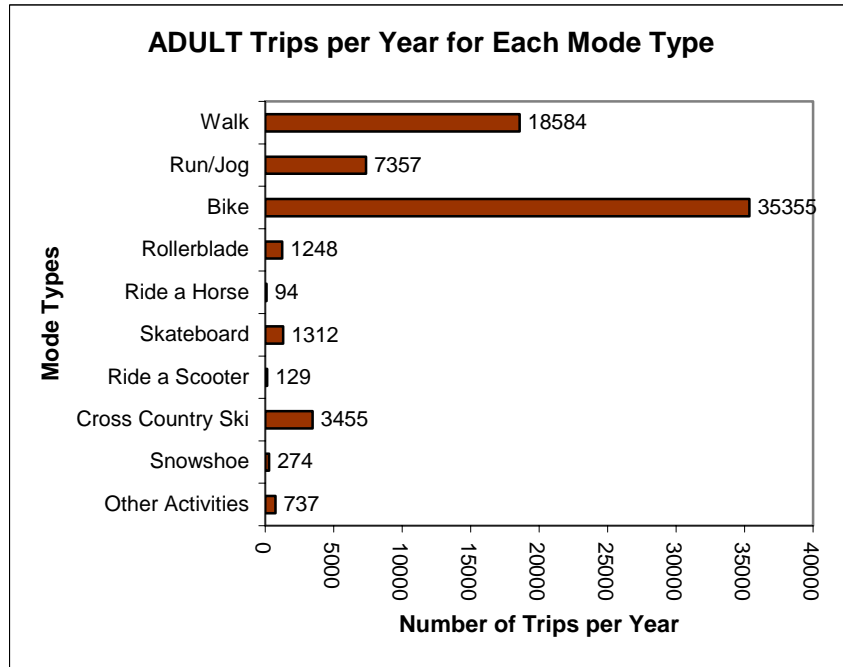
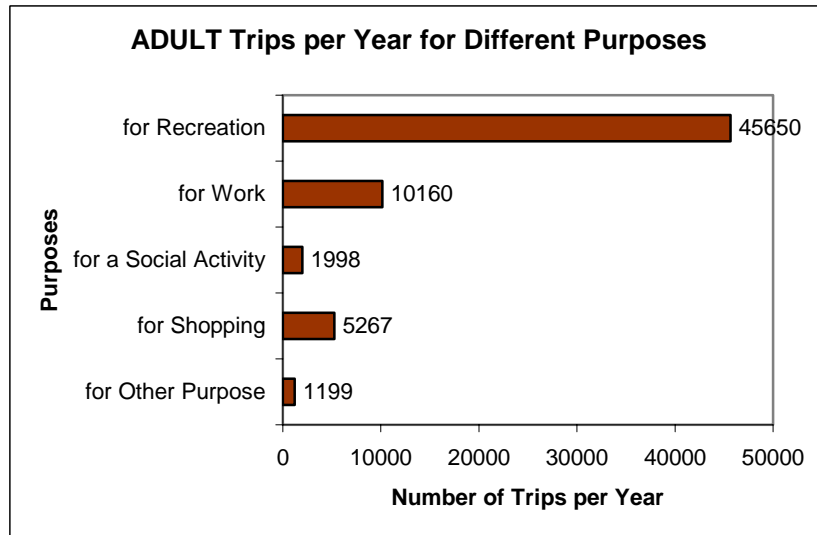


Figure 11: Adult Trips per Year for Different Purposes



The number of different mode and purpose trips per year for children were also calculated using a method similar to that described above. It was first assumed that the children in each household took the same number of trips as their parents. In reality, this is a conservative estimation. The 'number of trips per year per adult' was then multiplied by 1.5, or the state average children per household (US Census), to reach the 'total number of trips per year for all children in each household'. The total number of children's trips per mode and purpose were calculated using equations 2 and 3 and the percentages parents wrote for their children's activity.

The results can be seen in Figures 12 and 13. The same general trends seen in the adult graphs can be seen here but on a smaller scale. Children bike most often, followed by walking, and then 'other' activities. The 'other' category was a catchall category that included everything from riding in a burley to rollerskiing, so if each of them were broken down they would each be very small. Recreation based trips dominated purposes as well, and many parents noted in their pathway interviews that they would love to let their children bike to school but refused to let them because of the dangerous intersection with the pathway and High School Rd. Again there is a definite need and desire for more utilitarian trips, but lack of connectivity prohibits people from doing them. Expanding the pathways and connecting them to more communities would improve the purpose split.

Figure 12: Child Trips per Year for Each Mode Type

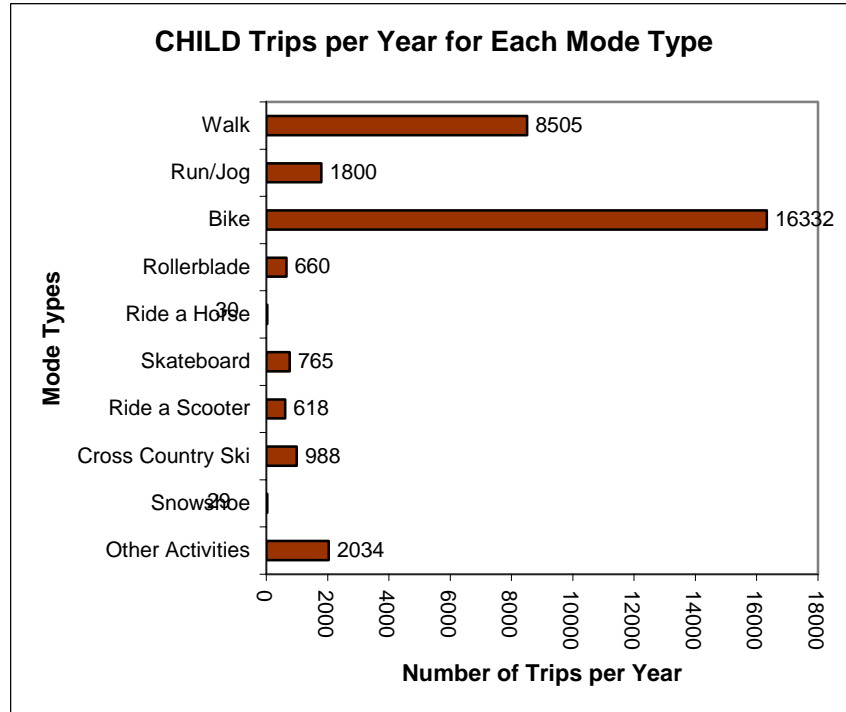
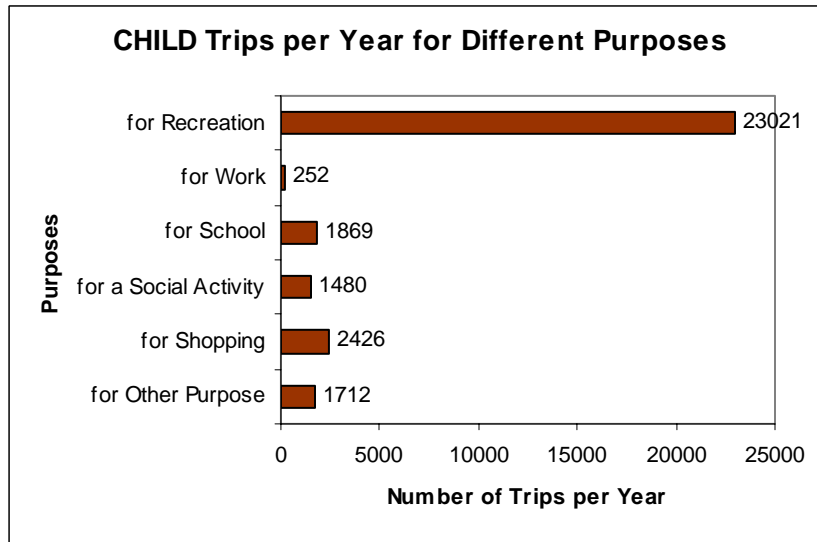


Figure 13: Child Trips per Year for Different Purposes



A logistic regress was conducted to identify user characteristics that might predict more pathway use (trips per year). Variables from how long someone lived in Teton County to what someone owned were compared with the number of trips taken per year. Unfortunately nothing stood out as a strong indicator of increased pathway use. Pathway users are a well-mixed group of people from all areas of life, ages, and with different wants and needs.

General Pathway Use

Once the specific number of trips for each mode and purpose were calculated it is important to identify when to expect these trips on the pathways and what types of groups to expect using the pathways together. This section also looks at how far users travel to get to the pathways.

The first area of interest is user group composition. The survey asked users to circle as many different groups as applied which gave the possibility of having multiple important user groups. Figure 14 details how many pathway users said they used the path in these different group settings. One and two person groups stand out along the rest with roughly 70% of users saying they commonly do both. Use with dogs is relatively low with only 34% reporting. Use with children is also low with only 19% reporting. This does make sense that while some families used the pathways together it was usually groups of adults or groups of children together. However this number may be a little lower than reality because many families with children were not able to stop or slow down in order to keep together and therefore they were not included.

Figure 14: User Group Compositions

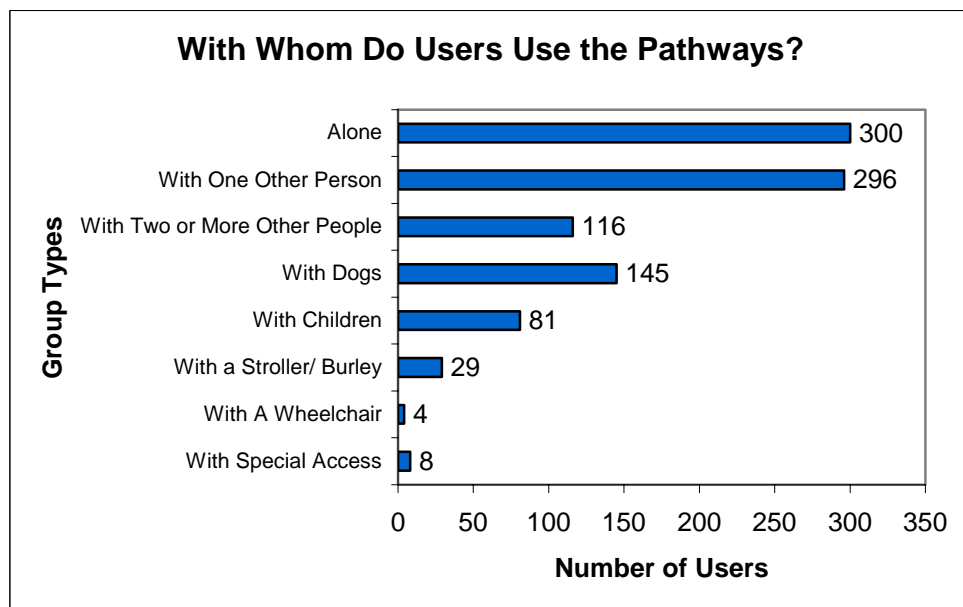
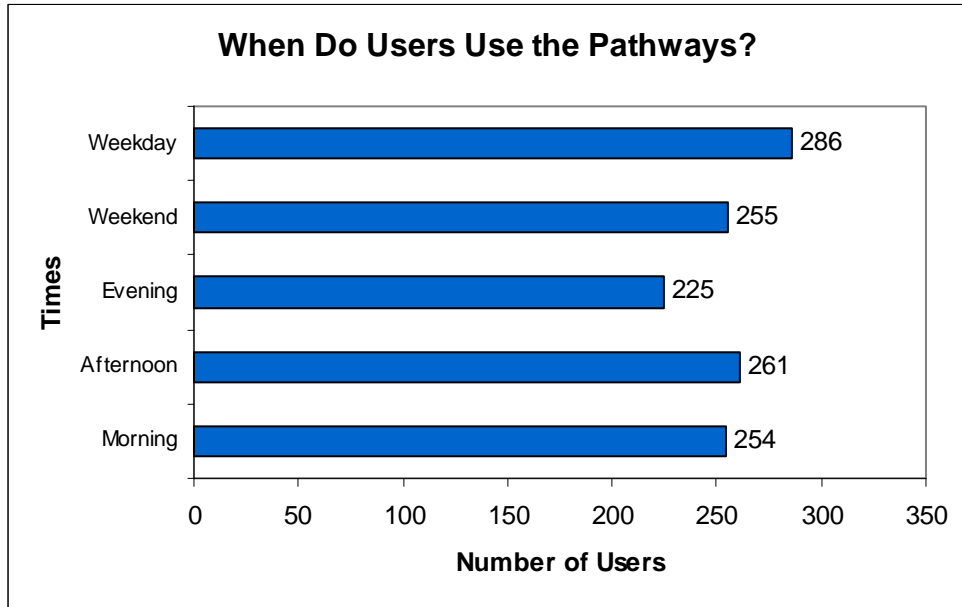


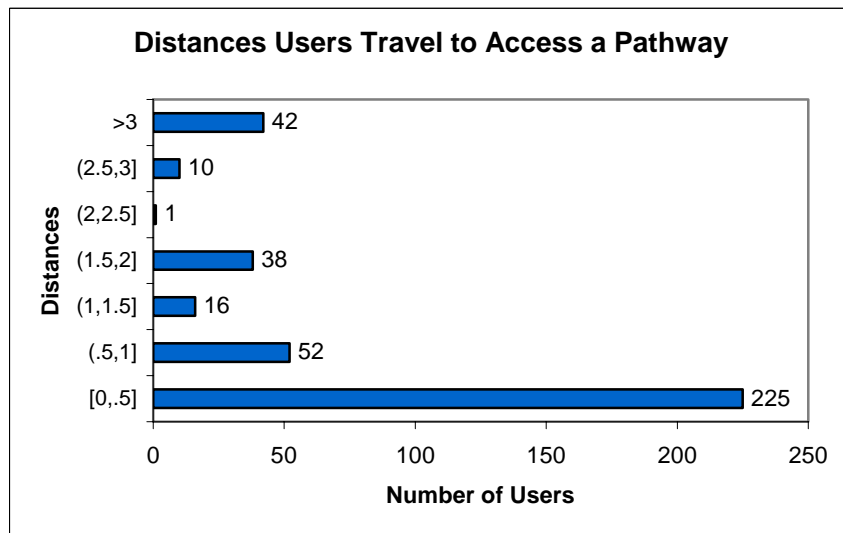
Figure 15 describes when users most commonly use the pathways. Again, this question asked users to circle all that apply. As can be seen the results do not vary greatly and are not statistically significant of each other. This means that at any point during the day or any day in general you can expect people to be using the pathways. This is extremely consistent with what was experienced while collecting surveys on the pathways. To get even more precise, the only times when the pathways were consistently empty were from 12-1pm and from 5-6pm.

Figure 15: When Pathways Are Used



Users do not travel far to access the pathways, as seen in Table 16. The majority (65%) of people travel 1 mile or less to access a pathway. Among that group is a significant population that lives right on the pathways. The 15% that travel between 1 and 3 miles are mainly the downtown Jackson residents who are traveling to the Russ Garaman Trail. The group that is greater than 3 includes people visiting from neighboring communities, which shows there is a positive image of Jackson Hole Community Pathways in other areas. These results lead one to conclude that if pathways are within less than 1 mile of more communities that more people would start using them.

Figure 16: Distances User Travel to Access a Pathway

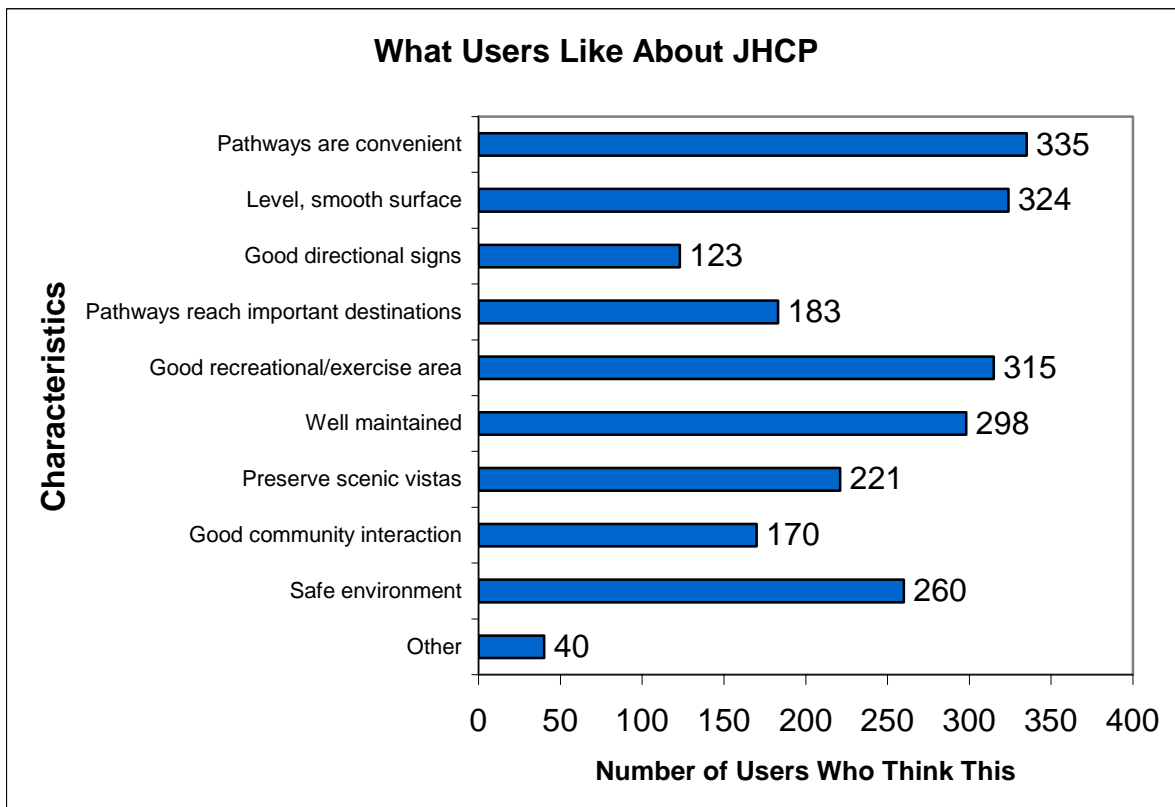


Pathway User Perceptions

When making new developments or changes to the pathways in general, it is important to understand how users perceive the pathways: Are they safe? What works well? What needs to be improved? Even if the pathways are well designed, if users feel a section is unsafe or if they don't like something on the pathways they will stop using it. Therefore the survey looked at these questions specifically to become aware of the community's concerns.

One of the first survey questions asked the pathway users what characteristics they liked about the pathways. The results can be seen in Figure 17. The top four most commonly chosen ones speak to the character of pathways in Jackson Hole in general. They agreed the best aspects of pathways were that they were convenient (78%), had a smooth, level surface (75%), were a good recreational area (74%), and were well maintained (70%). Planners and engineers can recognize that the public appreciates what has been done in pathway design so far. An interest fact is that more than 60% of the pathway users felt that the pathway system is a safe environment. While pathways are separated from vehicles, the constant interaction and conflict between different modes and speeds actually makes the pathways a likely place for a crash or fall. (Aultman-Hall and LaMondia) It is very positive to hear that although there is an inherent risk on the pathways the public feels comfortable and safe on them.

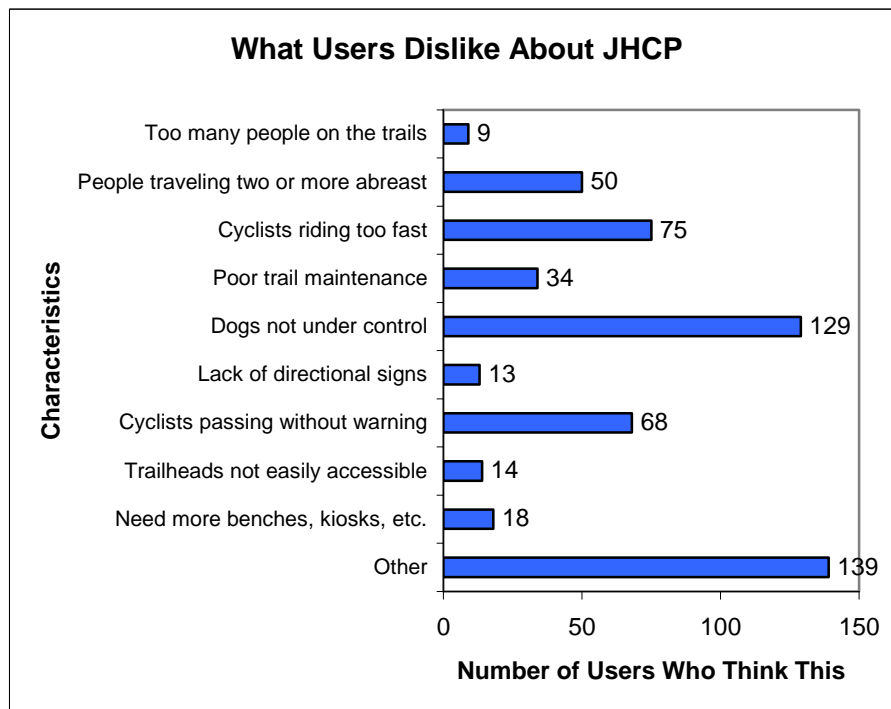
Figure 17: What Users Like About Jackson Hole Community Pathways



Users were also asked about what they did not like about the current pathway system. The focus on these responses actually had little to do with the actual path but more with the other pathway users. Overall these results were very positive for a number of reasons. First, the percentage of people with complaints was very small; the largest cause of problems, listed in the catchall 'Other' category, had only a 32% response rate. The written in responses for the 'Other' category mainly focused on dog and horse droppings on the pathways, and the entire list can be seen in Table 13. The next largest response was the 30% of those surveyed who did not like dogs that were not under control. After that, the biggest percentages were cyclists going too fast (18%) and cyclists passing without warning (16%).

A binary logistic regression was performed on these problem areas to fully appreciate which people had these problems. This type of statistical analysis identifies characteristics that have a statistically significant impact on a goal. In this case, dog ownership, walking with a dog, bike ownership, and bike riding were compared with how likely someone would be to choose either the dog problem or the bike problem. A 0.05 significance level was used for this test. The results showed that those who did not own a dog and those that did not walk with a dog were the ones to have a problem with dogs under control ($p=.001$ and $p=.011$, respectively). Similarly the results also showed that those who did not bike on the pathway were the ones to have problems regarding cyclists. The regression shows that these two problem areas, which are not supported by a majority to start with, are mainly between two distinct groups. Education on correct behavior and about the other group will hopefully clear up these problems.

Figure 18: What Users Don't Like About Jackson Hole Community Pathways



Once people described what they didn't like about the pathways network, they were then asked to come up with a solution to that problem. It was thought that this question would be a good step to help them think about their problem areas, and hopefully a good way to come up with creative solutions. The solutions are listed in the following tables as accurately and word for word as possible.

Table 4: Solutions to: Too many people on the trails

More Trails
More path options in high-traffic areas
Wider lanes in high-traffic areas; posted signs in congested areas asking in particular for bike-riders cooperation in respecting peoples space.
Wider trails/last week I was on a bike heading south and came upon three people with three dogs who had stopped to talk...a bike came towards me heading north...we all had to stop to avoid collusion. Therefore, if you want to stop and talk get off the pa

Table 5: Solutions to: People traveling two or more abreast

Pedestrians could walk 2 abreast on the right side of the yellow line
Guard rails near busy roads, Bells on bikes or some means of soft signaling
Dogs have a leash-single file (riding)
Education for users, painted lines on all pathways
More signs for rules
More pathways / trails
More attention to dogs! More courtesy of other trail users
Dog designated trails- otherwise dog free
Wider pathways?
Educate through newspaper/ TV
Remind cyclists to use bells so people get used to them
Education/ Signs
Dogs should not be allowed
More path so there is enough space for everyone!!
Signs
More miles of Path
More, Better Education
I don't mind 2 abreast, just move over when you see a family with kids coming!
Public awareness education, stressing pathway etiquette
Signs
Etiquette Signs
More public awareness on dogs
Designate some pathways for specific uses during specific days/times
More signage in congested/blind corner areas for people to slow down and respect all users. Those walking more than 2 abreast need to be aware of other users. People using MP3 players/Walkmans Need to be able to hear other users. Folks need to slow down
Wider lanes in high-traffic areas; posted signs in congested areas asking in particular for bike-riders cooperation in respecting peoples space.

I've nearly had head on collisions with people riding bikes on the wrong side of the yellow line several times.. maybe signs posted at trailheads, add caution thing to the cyclist ads in the paper

Educate people that the path is for multiple purposes and that common courtesy is also a matter of safety.

Realize that to many people is actually a good thing, at least the pathways are getting used. I think the problem is commuting vs. recreating. I tend to be going somewhere where as alot of people are just getting their dogs and kids outside. Wider path

People just need to be more aware.

Wider trails/last week I was on a bike heading south and came upon three people with three dogs who had stopped to talk...a bike came towards me heading north...we all had to stop to avoid collusion. Therefore, if you want to stop and talk get off the pa

1. Put a stop sign at the Westside intersection for cyclists. Cars try to wave you through and it gets tricky. There are stop signs further down at Bar J and Nethercott - not sure why they're there and not at Westside... 2. Dogs MUST be leashed on

Article or ad in the paper addressing some of the users concerns like mine. Or some sort of 'user's guide' sent out to residents or in the paper. Not a huge problem though. For the most part, I have no problems with the pathways and appreciate having them

Pathways should work closely with WYDOT to ensure all main highways have a path next to them. Pathways need to lead to the same areas cars go to (ie. a path up Broadway and along HWY 22. Educate people not to travel two abreast and recognize that pe

More pathways, particularly to the east side and downtown of Jackson would be useful.

Regular road width would help, but the best solution is to have a pedestrian dirt shoulder.

1) Need snow freeish path for commuting in winter 2)Apparently, some people need to be taught simple, polite consideration - Sharing

Table 6: Solutions to: Cyclists riding too fast

Speed Signs
MPH Signs
Radio or newspaper warning, more forethought.
Patrolled
Limit speeds of cyclists
You seem to be doing everything you can
Bicycle signs to slow down
Speed bumps
Some of the path does not seem like a great place to ride your bike fast- some people have very little tolerance for children on bicycles.
Alternating use days (bikes even days/ dogs odd)
Pathways to Downtown, Cyclists Speed Limits
Education; Bridge Across Snake River
Develop bikeways to center of town. Through Karns meadow?
Have designated time for mountain bikes on Cache Creek/ Putt Putt
Signs for slow riding
Bells on bikes
Bikers understand that it's not a speedway. Walkers, rollerbladers, have rights as well. For the most part everyone is polite.
Slow down give a verbal warning
Education/ Signs
Post signs: cyclists involved are ones going long distances

They need to yield/ slow down when descending mountain when coming upon hikers
Education
Separate paths
Cyclists on street or bare to left
Cyclists in this town don't obey the traffic laws on the street it will be highly difficult to institute any ways to make them slow down and be courteous
I have written countless letters regarding the issue of safe bicycle travel in and around the town of Jackson. In order to decrease downtown traffic the town has got to provide safe, user friendly alternative routes for bicycles and pedestrians. I have I
Designate some pathways for specific uses during specific days/times
Speed limits for cyclists - they're way too fast
Speed limit for bicycles
How do you make people more responsible for their dogs? They need to clean up after them AND keep them under control, on a leash. Also, bicyclists need to be respectful of people walking on the path.
More signage in congested/blind corner areas for people to slow down and respect all users. Those walking more than 2 abreast need to be aware of other users. People using MP3 players/Walkmans need to be able to hear other users. Folks need to slow down
Many bikes travel too fast and create hazards for kids.
Speed bumps maybe?
Educate people that the path is for multiple purposes and that common courtesy is also a matter of safety.
People just need to be more aware.
Make riders aware that moving horse manure off the pathway is considerate and why shouldn't they have to clean up as do dog owners?
Cyclists need to be educated as to how to use the pathway properly. They need to be reminded to let people know they are coming BEFORE they reach a person from behind, and also that there are curves and areas they must slow down for-- If they want to go
Education on trail etiquette. Enforcement of very slow speed limits for snowmobiles in heavily used and low visibility areas.
Winding trails?
Put more poop bag dispensers and trashcans between highway 89 and the middle school and on the stretch past the Presbyterian Church and Hwy 22. Put in a couple of bathrooms that work.
Really the dogs are okay its the owners who don't pick up their poop that makes me angry. And most of the bikers are okay I guess you just keep educating bikers or giving out citations
Very disappointed in the new leash law. I feel that this will eliminate my pathway usage in town completely. in turn, this will lessen my support for the pathways projects in town. I feel there are other issues and that dog owners are wrongly punished.
Regular road width would help, but the best solution is to have a pedestrian dirt shoulder.
Slow down the bikers and allow responsible dog owners to walk their dog off leash. I use the Pathways less now that the leash law was passed and do not support any expansion of the pathways until this changes.
Cite cyclists.

Table 7: Solutions to: Poor trail maintenance/ snow removal

Plow in the winder so we can walk/ run at least on some pathways without major ski traffic
Guard rails near busy roads, Bells on bikes or some means of soft signalling
Maintain trails more and perhaps a few suggesting signs to bikers- I don't think they know
Remove snow more often
Plow the pathway when the roads are plowed

Sweep at 3 Creeks and other places
Safe Intersection at smiths
Snow plow half, leave half with snow
Often, near development or building, there's a lot of dirt on the path. The developers should clean it up! Clean the pathways close to highway, would have been nice to have pathway further off the highway. I've seen tourists pull off the highway onto the pathway. I'm reluctant to let my kids go on the highway pathway by themselves.
Sweeper once a month to brush off rocks and other road debris that is on the trails.
Regularly scheduled maintenance on pathways, bike lanes and road shoulders. Leash law. Pathway users on pathways within WyDOT corridor should have right-of-way, as state law regulates.
Remove snow in the spring, when people are ready to transition from x-country skiing to biking/walking
Sweep the paths more often
Early and frequent sweepings.
Clean it.
Groomed trails in winter are much appreciated.
Regular road width would help, but the best solution is to have a pedestrian dirt shoulder.
1) Need snow freeish path for commuting in winter
Send out a cleaning crew once snow melts; Cite cyclists.
Could the Rafter J trail be kept brushed clean in summer? And in winter, is it possible to plow it? Even a one person width would be better than being forced to walk on the roads again.
Create a special tax for part-time residents to help provide \$ for more pathways. Add a tax to speeding and parking tickets for pathways.

Table 8: Solutions to: Dogs not under control

Leash law enforced
Leash always
Leash Law
More patrolling
Hopefully the leash law will help the dog issue
Dogs on Leashes
Leash animals
Leashes
Lease/ and Owners being aware
Dogs have a leash-single file (riding)
Have a leash on a dog at all times
You seem to be doing everything you can
Leashes
Leash Dogs Please
Education for users, leash laws for dogs on all pathways
Education and Time
Fines and Patrol
Alternating use days (bikes even days/ dogs odd)
Dogs must be leashed
More signs for rules
Leash Law

More attention to dogs! More courtesy of other trail users
Put all dogs on leashes and enforce a leash law. Build more trails and we will come.
No Dogs
Patrol: Fine dog owners w/ dog not under voice control
Leashes
Dog Control
Dog designated trails- otherwise dog free
Leash Dogs
Leash dogs
Cut the brush better around driveways
Leashes
Enforce leashing of dogs
Leashes
Dogs should not be allowed
Responsible animal users
Dogs should be leashed; bike etiquette/ safety reminders
More paths so there are enough space for everyone!!
Signs
Leash dogs, people pick up dog poop
Articles in paper encouraging pathway etiquette
Leash Law
Leashes
Enforce weeks
Leash Law
Leash Laws
More, Better Education
Leashing
Public awareness education, stressing pathway etiquette
Etiquette Signs
Dog Control
Put dogs on a leash
Often, near development or building, there's a lot of dirt on the path. The developers should clean it up! Dogs should be leashed, and the rule enforced. People should be told to stop on the side of the path. The RDOGS program has definitely raised the level of awareness, but just this morning when riding my bike to work I encountered 3 women with 4 unleashed large dogs on the Russ Garaman trail and had to completely stop in order to avoid a collision with them
Leashes required on pathways is a step in the right direction.
People need to be aware of not only their dogs, but other people's as well, and that will happen with good education (thanks PAWS!)
Enforce dog laws
Maybe signage on proper path etiquette. Especially for more than one person, or while fixing a bicycle. Leashes are great except that the dog is often on one side of path and walker on the other. Maybe a yellow line down the middle and a do not cross
Designate some pathways for specific uses during specific days/times
Dog walkers must be more aware of other users
Leash law.

More leashes available, comments in paper regarding responsibilities of dog ownership.
How do you make people more responsible for their dogs? They need to clean up after them AND keep them under control, on a leash.
The people with dogs, somehow change their attitude. They can let their dogs run free on trails, they don't need to on the paved pathways.
Dogs not allowed, many bikes travel too fast and create hazzards for kids.
Educate people that the path is for multiple purposes and that common courtesy is also a matter of safety.
Realize that to many people is actually a good thing, at least the pathways are getting used. I think the problem is commuting vs. recreating. I tend to be going somewhere where as alot of people are just getting their dogs and kids outside. Wider path
Make riders aware that moving horse manure off the pathway is considerate and why shouldn't they have to clean up as do dog owners?
Wider trails/last week I was on a bike heading south and came upon three people with three dogs who had stopped to talk...a bike came towards me heading north...we all had to stop to avoid collusion. Therefore, if you want to stop and talk get off the pa
Dog discipline, constraint. I have been bitten many times in my life and can't stand a dog jumping on me or barking while the owner says 'he's just friendly' or... dogs' unpredictable movements.
Dogs on leashes signs posting 'pathway etiquette'
Dogs MUST be leashed on
Put more poop bag dispensers and trashcans between highway 89 and the middle school and on the stretch past the Presbyterian Church and Hwy 22. Put in a couple of bathrooms that work.
Really the dogs are okay its the owners who don't pick up their poop that makes me angry. And most of the bikers are okay I guess you just keep educating bikers or giving out citations
I am not a dog owner, but I realize that its nice to have a place for dogs to go unleashed... maybe just provide signs that remind dog owners to be aware of cyclists approaching
Article or ad in the paper addressing some of the users concerns like mine. Or some sort of 'user's guide' sent out to residents or in the paper. Not a huge problem though. For the most part, I have no problems with the pathways and appreciate having them
Dogs must be leashed, fine people for dog doodoo.
More pathways, particularly to the east side and downtown of Jackson would be useful.
Crackdown on dog control
The leash law needs enforcement.
Educate dog owners about what 'dog(s) under control' means Enforcement of dog lease/control/poop laws
Obvious, aren't they?
Very disappointed in the new leash law. I feel that this will eliminate my pathway usage in town completely. in turn, this will lessen my support for the pathways projects in town. I feel there are other issues and that dog owners are wrongly punished.
In Rafter J, most dogs are very well behaved and fun to encounte

Table 9: Solutions to: Lack of directional signs

More signs
More Signage
More maps
More Signs!
More signs
Have signs indicating slow zone sections
The directional signs issue seems to be getting better as the summer progresses.

Table 10: Solutions to: Cyclists passing without warning

Simple verbal warnings
Advise Them
Bells on bikes or some means of soft signaling
Maintain trails more and perhaps a few suggesting signs to bikers- I don't think they know
A radio ad reminding cyclists to be courteous
Patrolled
Limit speeds of cyclists
Speed bumps
Education for users, painted lines on all pathways
Education and Time
Make people aware of trail user etiquette
Education
Education
Have designated time for mountain bikes on Cache Creek/ Putt Putt
Bells on bikes
Slow down give a verbal warning
Bells on Bikes
Bike etiquette/ safety reminders
Encourage bells: signage and free bells
Articles in paper encouraging pathway etiquette
Signs
Separate paths
Etiquette Signs
Biker etiquette, posters or pamphlets
Cyclists in this town don't obey the traffic laws on the street it will be highly difficult to institute any ways to make them slow down and be courteous
Designate some pathways for specific uses during specific days/times
How do you make people more responsible for their dogs? They need to clean up after them AND keep them under control, on a leash. Also, bicyclists need to be respectful of people walking on the path.
People just need to be more aware.
Cyclists need to be educated as to how to use the pathway properly. They need to be reminded to let people know they are coming BEFORE they reach a person from behind, and also that there are curves and areas they must slow down for-- If they want to go
Signs posting 'pathway etiquette'
At trailheads, if not too much of a nuisance, have notice telling bicyclists it is helpful if we know they are coming upon us and a simple 'on your left', etc. is much safer.
Post signs that instruct cyclists to let a walker/runner know they are passing.
And most of the bikers are okay I guess you just keep educating bikers or giving out citations
Request cyclists to ring a bell or announce their arrival - especially from behind
Cyclist education
Cite cyclists.

Table 11: Solutions to: Trailheads not easily accessible

More land for more trailheads
Trails going closer to downtown
More pathways
More of it
Connect Wilson to Jackson
I would like to see the town pathway extended from the new post office to Snow King or maybe even to Cache Creek trailhead without having to travel on any busy Jackson streets.
For certain activities, like dog-walking or rollerblading, close access to the pathway system is important so that you don't end up having to drive to a pathway trailhead. The major deficiency that I see is a lack of Pathway system through the Town and e
Create more pathways. GTNP should also provide safe pathways. Create a special tax for part-time residents to help provide \$ for more pathways. Add a tax to speeding and parking tickets for pathways.

Table 12: Solutions to: Need more benches, shelters, kiosks, etc.

Add bathrooms, water
Bridge Across Snake River
Install Benches
Please put a seating surface (rock/tree stump) on trail across from Hunter Lane so we can put on skates, skis, etc. without sitting in pathway
Put more benches in
Put more [benches in]
Building benches and shelters should not be a major problem
I would like to see more bike racks.
Obvious, aren't they?

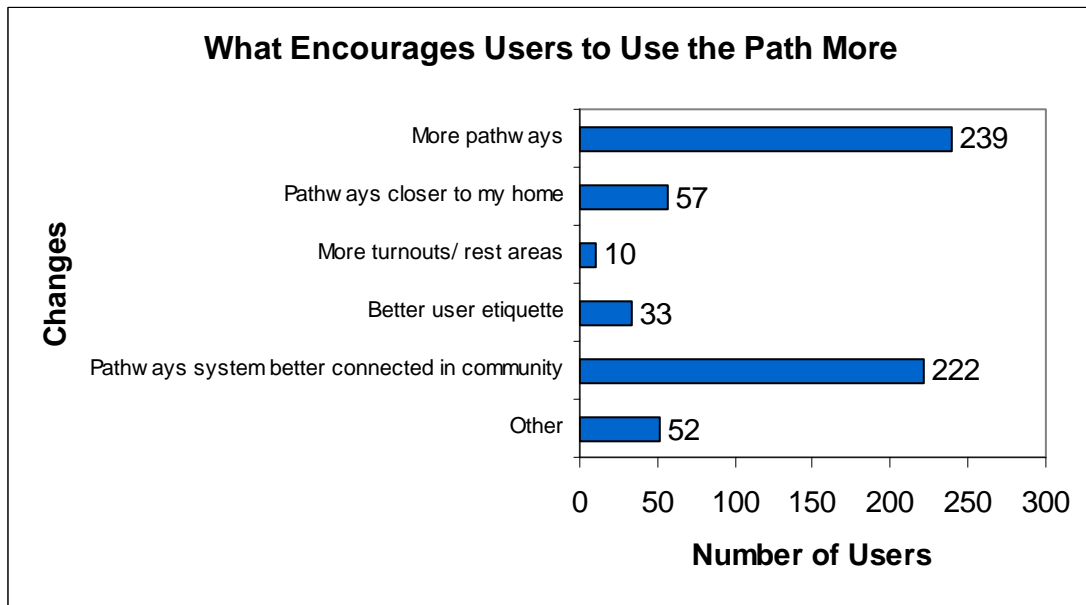
Table 13: Solutions to: Other

Please refer to Appendix E for the Other choices and suggested solutions.

Another area focused on was what would encourage more pathway use. The results from this question can be seen in Figure 19. Two areas of focus stood out from this question: 56% reported more pathways would help them use the path more, and 52% reported pathways connected throughout the community would also help them use the path more. This is consistent with the responses in the pathway interviews, where people said they would not only use the path more, but also for more utilitarian trips if the path were better connected to areas. Please see the *User Suggested Future Pathways* section for exactly where pathways users would like to see them. This is also consistent with the idea that most people travel less than a mile to access the path. More pathways and better-connected pathways to new areas would definitely encourage more use, especially from those who are not currently using the pathways.

It is also interesting to note which choices would not encourage more use. Throughout the survey and interviews people noted that user etiquette should be improved and that pathways should be closer to their homes, but in this question they did not stand out. Either more pathways and better connectivity are more important, or people have accepted these problems and have learned to deal so they do not need them to change for them to use the pathways more.

Figure 19: What Encourages More Pathways Use



Safety perceptions were the last focus area of its kind on the survey. Figures 20 and 21 describe Reported Fallings/Collisions and Intersection Concerns respectively. As noted before, the perception of pathway users is that they are very safe on the pathway. 9% reported having a collision or fall. While this percentage is not huge, it is definitely not insignificant either. There is no way to compare crash rates because there is no indication of how many crashes occurred each year.

Intersections were a concern for 32% of the surveyed pathway users. Again this percentage is not huge, but enough to warrant an interest in pathways/ major road intersection design. A list of dangerous areas can be seen in Table 15. The one that is sited most often is the intersection of High School Rd, Village Access Rds, and West Broadway. Especially during the school year it is very busy and unpredictable. Many parents would like to have their children bike to school but do not let them because of this intersection, as was indicated from the pathway interviews.

Figure 20: Reports of Falling or Colliding on a Pathway

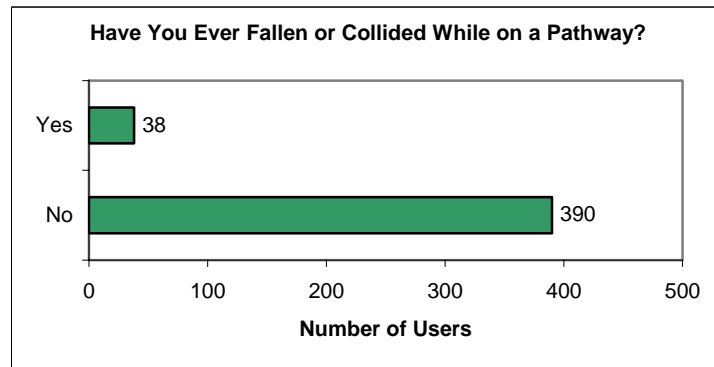


Figure 21: Reports of Intersection Concerns

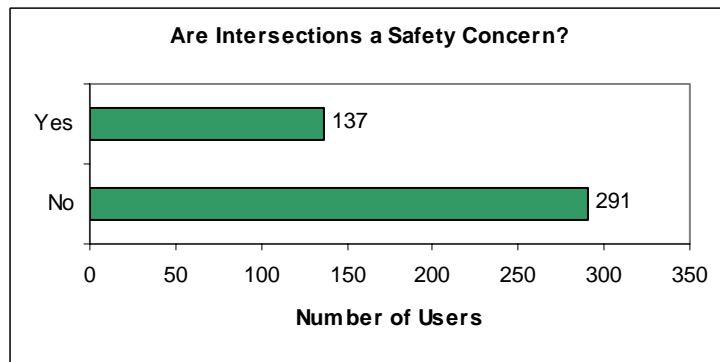


Table 15: Dangerous Intersections

HWY 89 South by Dump
Crossing 22
Small Rds/ Driveways along Paul Merritt Trail
High School Rd/ S. HWY 89
HWY 22
HWY 22
Only where there is no trail from new post office to virginain park and downtown
Gregory lane blind spots heading west
Crossing High School Rd.
South Park, mark for motorisits too
sometimes
Gregory lane crossing to school area
general
from HWY 22 to Indian Trails, Intersection at Smiths, Wilson Bridge
HWY 22 by new Science School, HWY 22 and Teton Village Rd Int, Snow King and Scott Lane, Snake River Bridge
High School Road, HWY 22
see survey- too long
Village Rd/ Cheney's House
Mountain Bikers going fast
On the way to teton village! Bar J Chuckwagon, etc.
HWY 22 section
Hidden Ranch Tunnel
All over- overzealous, fat, obnoxious, oblivious car drivers
Children
some tunnels from PO to Smiths
too long see survey
High School Road and pathway dangerous
Indian Spring
High School Rd
south of westside market [Moose/Wilson]
Please see survey- too long
too long, please see survey
High School Rd and HWY 22
driveways
When crossing TV rd with stroller
hwy 22
Westside business district (Aspens)
From Aspens to 22
Any roadway is!
Many driveways at start of Moose/ Wilson
driveways so frequent between Stilson and Pines

Jackson crossing HS road
Highway 22 coming from Indian Springs
Intersection on Hy 22 with path to school
Only because the surface changes and it is hard to get across on roller blades
Getting to the trailhead for kids is tough if you do not live on the north side of hwy 22
No specific locations, but I have encountered groups gathering at intersections
Where there isn't a direct pathway from wilson to jackson
High school road! See survey for complete answer
Cyclist do not stop at light by smith's
I always yield to vehicles but it still can be dangerous
Need to be careful at high school road
Indian Trails at Hwy 22
Game Creek
Maple Way is a huge safety concern when riding with children. In order to pass parked cars you need to merge with traffic. The intersection at Maple Way and Scott Lane is another safety concern.
Stretch to bridge from town along highway
Melody -- across from the polo field -- parking area is not adjacent to the south trail
Scott lane /snow King & Gregory In
Smith's and HS Rd
Highway 22 & the culvert under Hidden Ranch
But gettin better
Highway 22
WY-22 Indian Springs Trail need underpass
All of them, as drivers often do not watch for cyclists
Within WyDot corridor
Road crossings are alittle dangerous but most drivers are observant
Some aren't so well marked
At west side store off village road
Rafter J and High School Road
Feeder roads to Hwy 390
Too long- see survey
Village Rd Crossings
Only at intersections with highway 22
All locations
Teton View Lane, off of the Village Road...I live there and wish there was a sign before the pathway to remind me to stop and look for people on the pathway before I turn out onto the Village Road.
HIGH SCHOOL RD. AND 89 AT STOP LIGHT. VERY DANGEROUS CROSSING. BLIND TO MOTORISTS.
Village access rd
All along village Rd
Hwy 22 and path to middle school
Hwy 22, 89
Moose wilson (road crossings south of aspens), indian springs (intersection), etc.
High school road/drivers turning right not looking for cyclists
Hwy 22 between jackson and 390

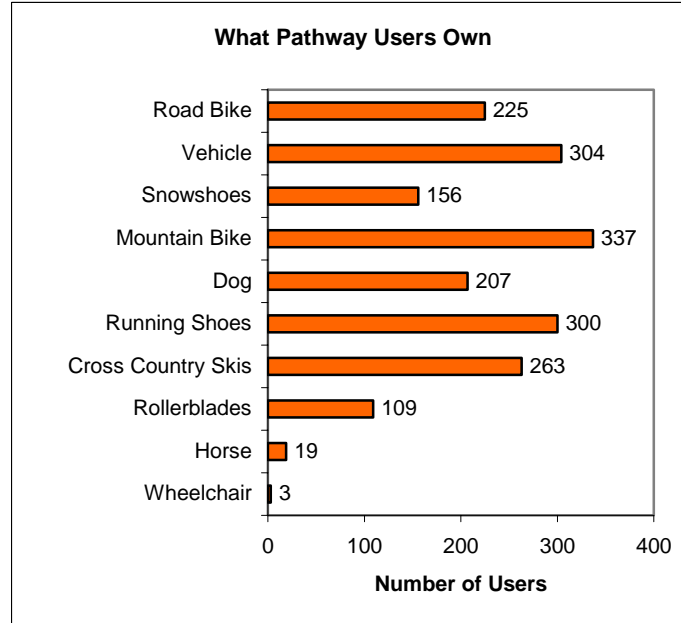
Game Creek- no lines marking the crossing
HWY 390. Drivers don't understand they have the right of way. It is extremely annoying to come to a stop for a vehicle at a crossing and have the driver wave you on. Trophy wives and part timers!
High School Rd.
Just in general
Village road....people coming out of the pines and aspens
Pines entrance
Old West Cabins to Henry's Path
Teton Village entry; bike lane is narrow & gravel, lots of tourists & trucks & drivers in a hurry
No specific location...just need to be careful
High School Rd - Cars Turning
Hwy. 89 and High School Road
Rafter J , too many road crossings and funky turns
Near the New Post Office
Turning onto the Village road from the Wilson School trail and then onto highway.
Turning left onto highway 22 from indian springs bike path
Gregory Lane Crossing, high school road intersection with 191
Bar J entrance
HW 22 by Indian Springs, HW 390 at the junction with 22
Nethercott crossing
High school road
All along the path next to Hwy 390
Westside
Just a worry for my children
All driveway crossings High School Rd. at Smith's
HS Road and Hwy 89

General Travel Habits

Information regarding the general travel habits of the pathway users, besides simply their pathway use, gives a better appreciation for what the population is doing and what they might be willing to do in the future. Data was collected and analyzed that focused on what pathway users own, why they/ why they don't walk or bike, where they feel comfortable walking and biking, and if they are getting their suggested 30 minutes of physical exercise each day.

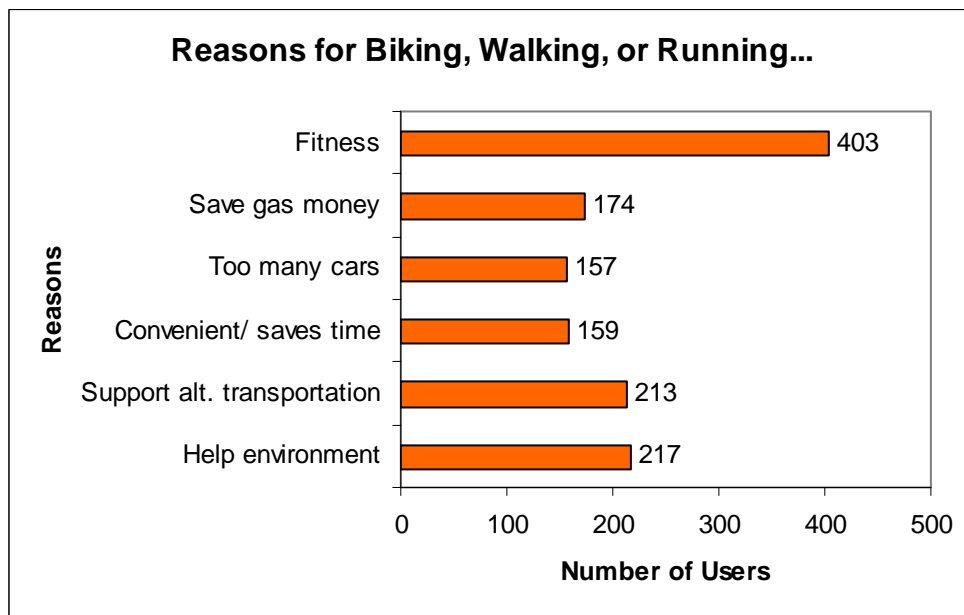
The survey was curious what pathway users owned. Did users own modes of transportation that they were not using? Was there a base of possible use that would be available for future pathway use? The answer is yes: pathway users own a variety of non-motorized modes of transportation. While they may not all be using them regularly, they have the opportunity to do so. It is very interesting to note that the most owned item is a mountain bike (which 80% own) and not a car (which 70% own). Running shoes, cross country skis, and road bikes are also owned in large quantities. Factoring together both road and mountain bikes, it turns out that close to 90% of pathway users own a bike compared to only 70% owning a vehicle. This suggests that the pathway using group is conscious of alternative modes, and hopefully future pathway users might adopt this way of thinking.

Figure 22: What Pathway Users Own



Pathway users were asked why they and why they don't ride their bike, walk, or run, whether it is on the pathway or not. Figure 23 shows that 94% stated that they bike, walk, or run for fitness, further suggesting that this pathway using group is very aware of health and the benefits of non-motorized transportation. The other choices were statistically insignificant from each other, which means that while people recognize their importance, their health is a key reason for putting in the little extra effort to bike, walk, or run.

Figure 23: Reasons for Biking, Walking, or Running



Reasons for not biking included because of rain/snow making it hard (50%) and because they did not have enough time (46%) as seen in Figure 24. These responses are encouraging because it says pathway users are interested in biking, walking, and running more but constraints out of their hands are their limiting factors. Many noted in the 'other' category that they wanted to do more but were just lazy sometimes. This response seems most realistic and hardest to admit especially because there are quite a few users who could bike, walk, and run that don't, and they left this question blank. It seems in this community most people are aware of the health benefits and know they would like to exercise more, so programs and incentives to give these people an extra push might be highly successful.

Figure 24: Reasons for not Biking, Walking, or Running

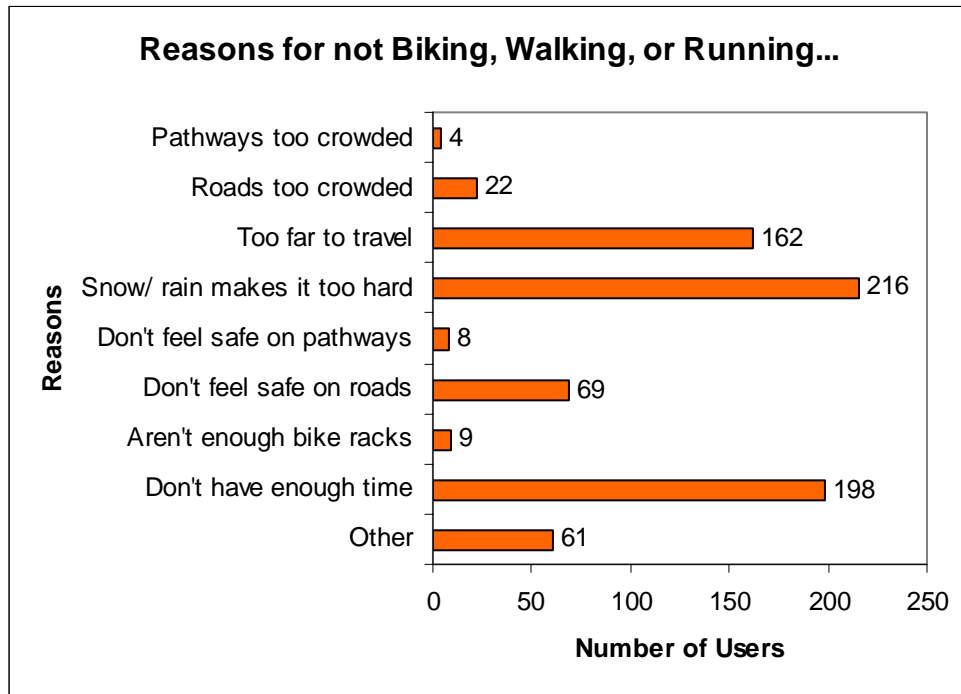
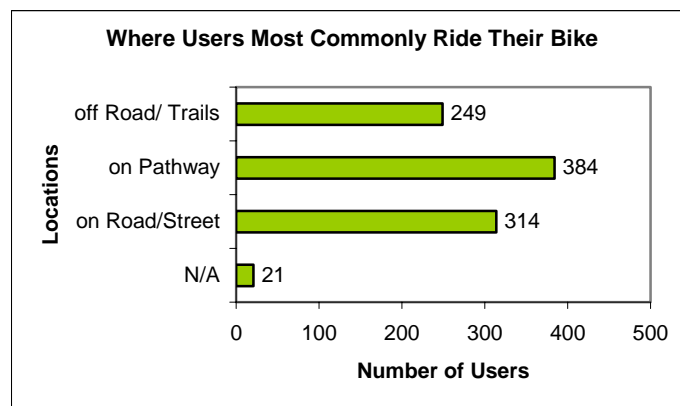


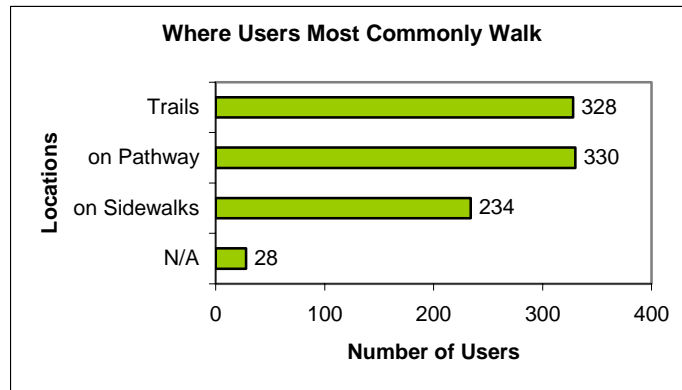
Figure 25 describes where users most commonly bike. Most cyclists stated they were comfortable on the pathway (94%) or on the street (77%). However, a reasonable percentage of users (about 20% of cyclists) were still not comfortable cycling on the roadway. This evidence supports the advancement of more complete biking friendly streets.

Figure 25: Where Users Most Commonly Ride Their Bike



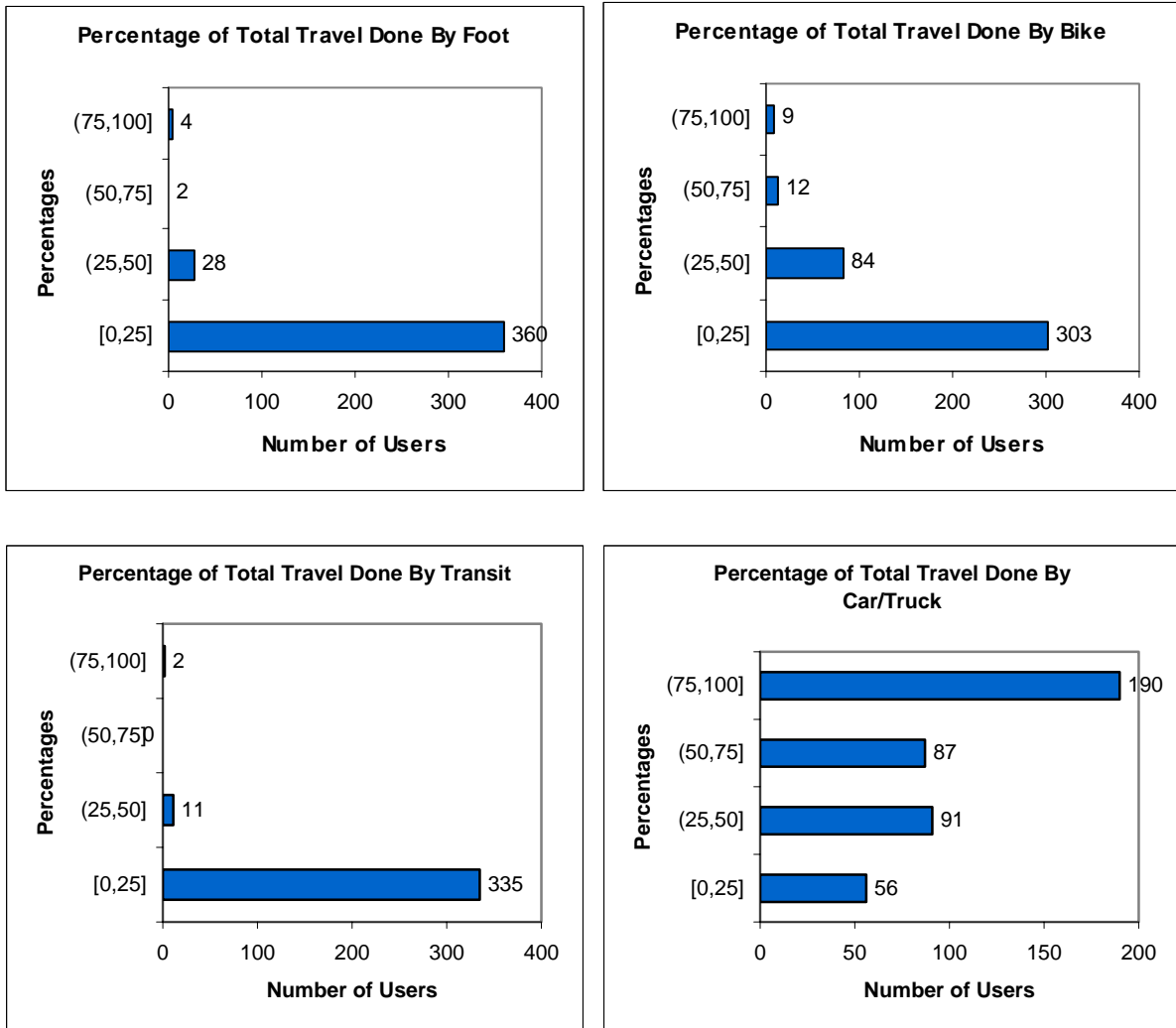
Pathway users were then asked where they most commonly walked. Figure 26 is especially interesting because it shows that sidewalks, a supposedly pedestrian only area, are where the least number of people actually walk. About 83% of pathway users use pathways and trails for their walking/hiking exercise. These results suggest that the current sidewalk system, which is incomplete and in disrepair, should be an area of concentration to encourage more walking. Users obviously want to walk, as they do on the pathways and trails, and having a pleasant, welcoming place for them to do so would attract more people too.

Figure 26: Where Users Most Commonly Walk



One of the survey questions that proved most difficult for respondents was asking them how much of their total yearly travel (in percentages) was done using their vehicles, transit, biking, and walking. The results from this question can be seen in Figure 27. For as positive the other pathway use responses were, the responses to this question make it evident how much still has to be done. Walking, biking, and transit riding all fell below 25% of all travel. In most cases it was very close to 0%. Unfortunately, the one that then took much more was driving a vehicle. Efforts on pathways can hopefully be used to shift this use.

Figure 27: Percentages of Total Travel By Different Modes



The US Government recommends that each person get at least 30 minutes of physical activity per day for at least 5 days per week. To see if Teton County's population was achieving this goal, the survey asked users how many days per week they got at least 30 minutes of exercise. The results are seen in Figure 28. Over 72% of pathway users are meeting this recommendation, and the average is 5.2 days per week.

To see if this trend was present for all age groups, the results were divided into the 3 age groups. The hypothesis was that as people got older their tendency for reaching 30 minutes a day for 5 days a week would drop. Figure 29 shows how well the trend continues for each age group, with a dramatic number of people getting 5-7 days per week of exercise. These results seem to conclude that the more pathways developed, the more people would have access, and the more people would join the population that filled out the survey.

Figure 28: Average Number of Days per Week Pathway Users Get At Least 30 Min of Exercise

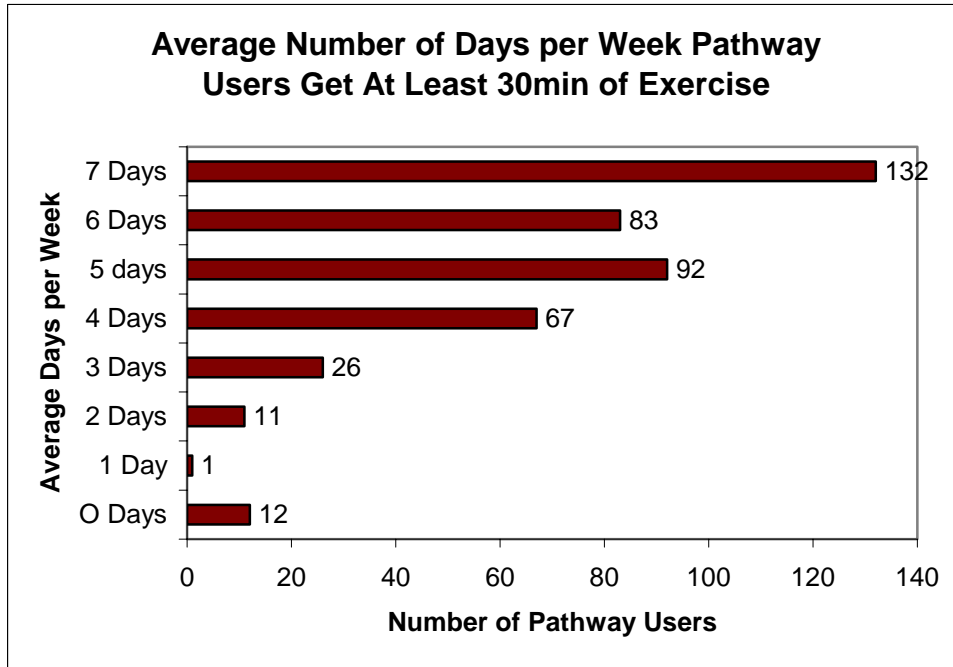


Figure 29: Average Number of Days per Week Pathway Users Get At Least 30 Min of Exercise

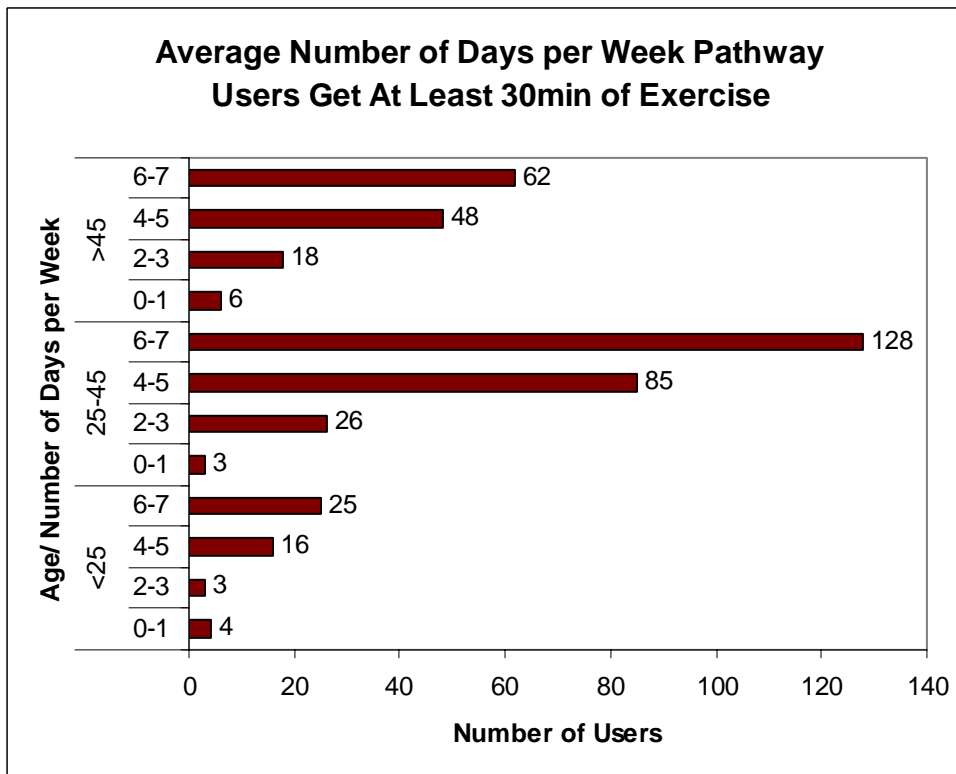
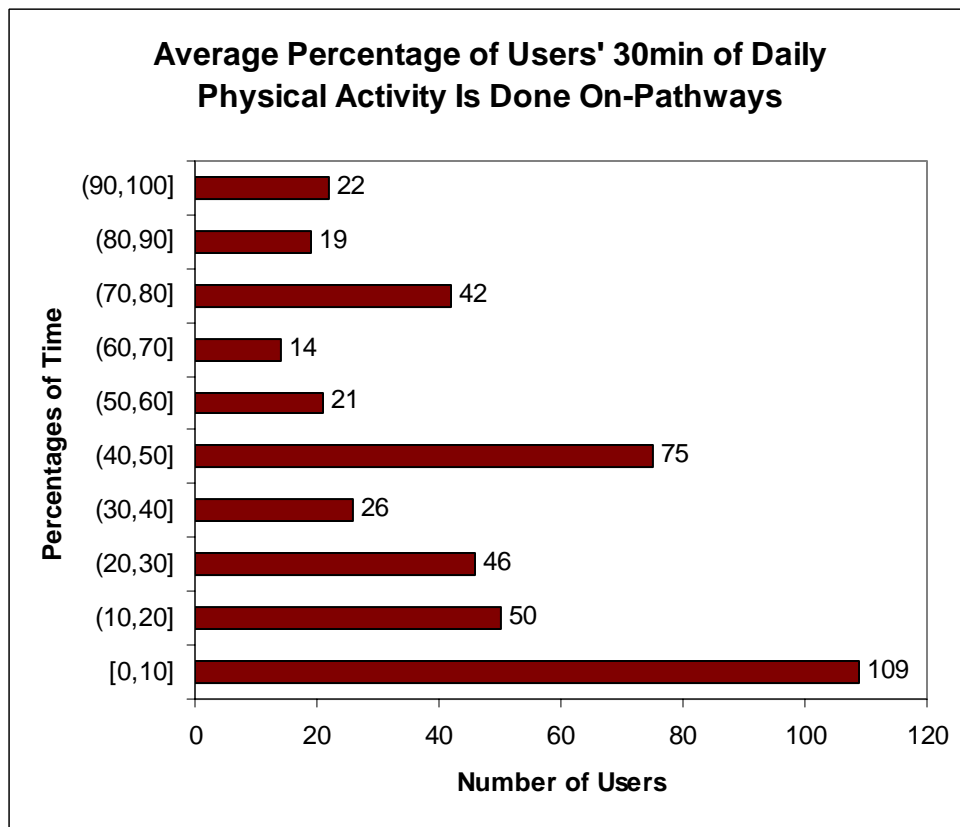


Table 16: Average and Standard Deviation Statistics for 30min/Day Activity

	Average	St. D.
Days per Week get 30min. PA	5.2	1.7
Percentage of PA on Pathways	39.4	30

Figure 30 shows the average percentage of users' 30 min of daily physical activity that was done on pathways. There is no general trend, but the average is 39.4% with a standard deviation of 30%. It was concluded that more pathways and better connectivity would encourage more people to use the pathways for their exercise.

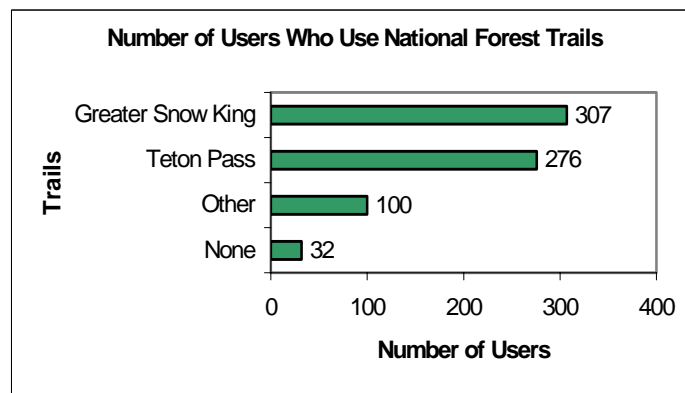
Figure 30: Average Percentage of Users' 30 min of Daily Physical Activity Is Done On-Pathways



Public Land Trail Use

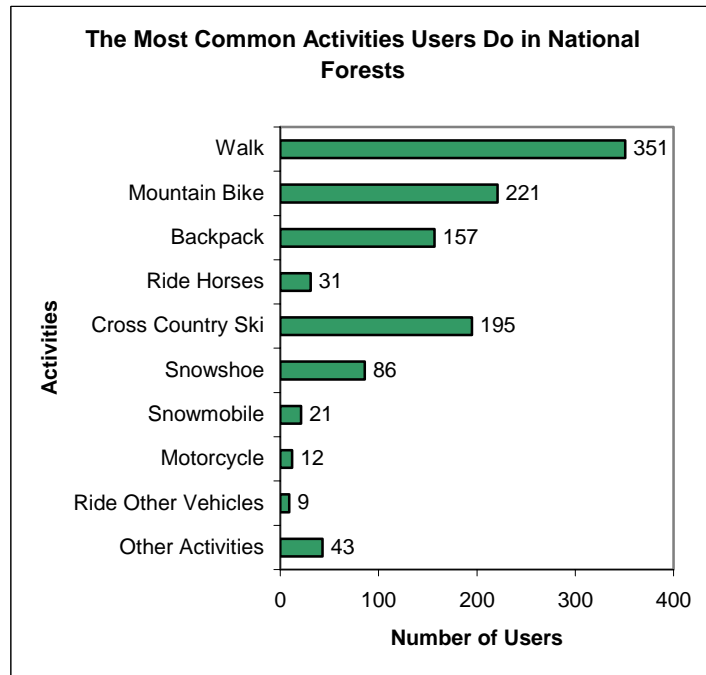
As noted in the previous section, many pathway users spent a good deal of time hiking and biking on the national forest trails in the surrounding area. Figure 31 describes where these people like to use the National Forests. Greater Snow King and Teton Pass are both popular areas by people from all over the county with 72% and 64% use, respectively. The other category included activity in both Grand Teton and Yellowstone National Parks as well as activity on the Jackson Hole Resort Area and the Gros Ventre wilderness. With this many pathway users access the National Forests it is very important that the pathway network connect to the major trailheads.

Figure 31: Amount of NF Trail Use



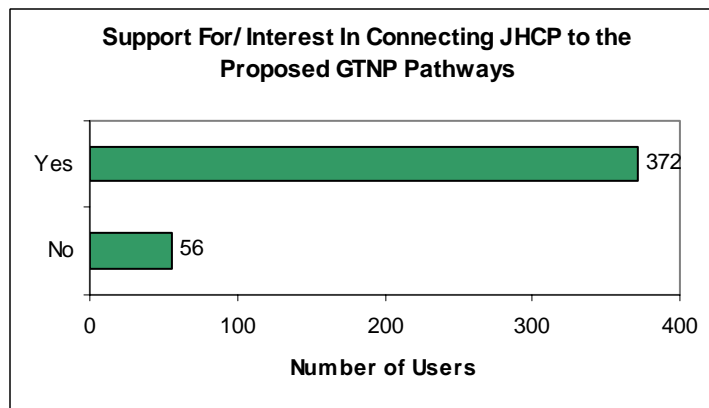
Pathway users were then asked what they do on the National Forest trails. The results of this question can be seen in Figure 32. Hiking was by far the most common with 88% of pathway using respondents claiming they do this activity. Mountain biking (55%) and cross country skiing (49%) were also popular and show how much the trail network is used not only by different modes but also during different times of the year.

Figure 32: Most Common Activities in NF



The last question concerning National Forest trails focused on whether pathway users would like the Jackson Hole Community Pathways to connect to the proposed Grand Teton National Park pathways. As seen in Figure 33, about 87% of pathway users wanted that access. In fact, many people, on their own, requested future pathways connecting to the park, seen in the next section. This percentage may be small even, as the 56 'No's include those people who left that section blank. Those that did circle yes, usually did so with intense, multiple circles not seen anywhere else on their survey, meaning they high supporting this idea.

Figure 33: Support for/ Interest in Connecting JHCP to the Proposed GTNP Pathways



User-Suggested Future Pathways

On the back of the survey booklets was a copy of the county pathways map, and survey respondents were asked to mark where they travel most, where they feel unsafe on the pathways, and where they'd like to see new pathways.

Most people circled the towns as to where they travel most, so that information was dropped. However a number of pathway areas were repeatedly circled as unsafe or needed in the future.

The most commonly suggested corridors for pathways are drawn on the county pathways map in Figure 34. The most requested routes included:

- Pathways connecting to Grand Teton National Park from Jackson and Teton Village (along both the Moose-Wilson Road and US Hwy 26-89)
- A pathway going along Hwy 22 between Wilson and Jackson
- A pathway connecting the Russ Garaman Trail to the center of Jackson
- A pathway completing the South Park loop
- A pathway connecting to Teton Village from Fish Creek (especially requested by Wilson residents)
- A pathway connecting to Teton Village from Moose/Wilson that is not along the current entrance
- A levee pathway along the east bank of the Snake River

The most commonly report unsafe areas are drawn on the county pathways map in Figure 35. The most reoccurring areas included:

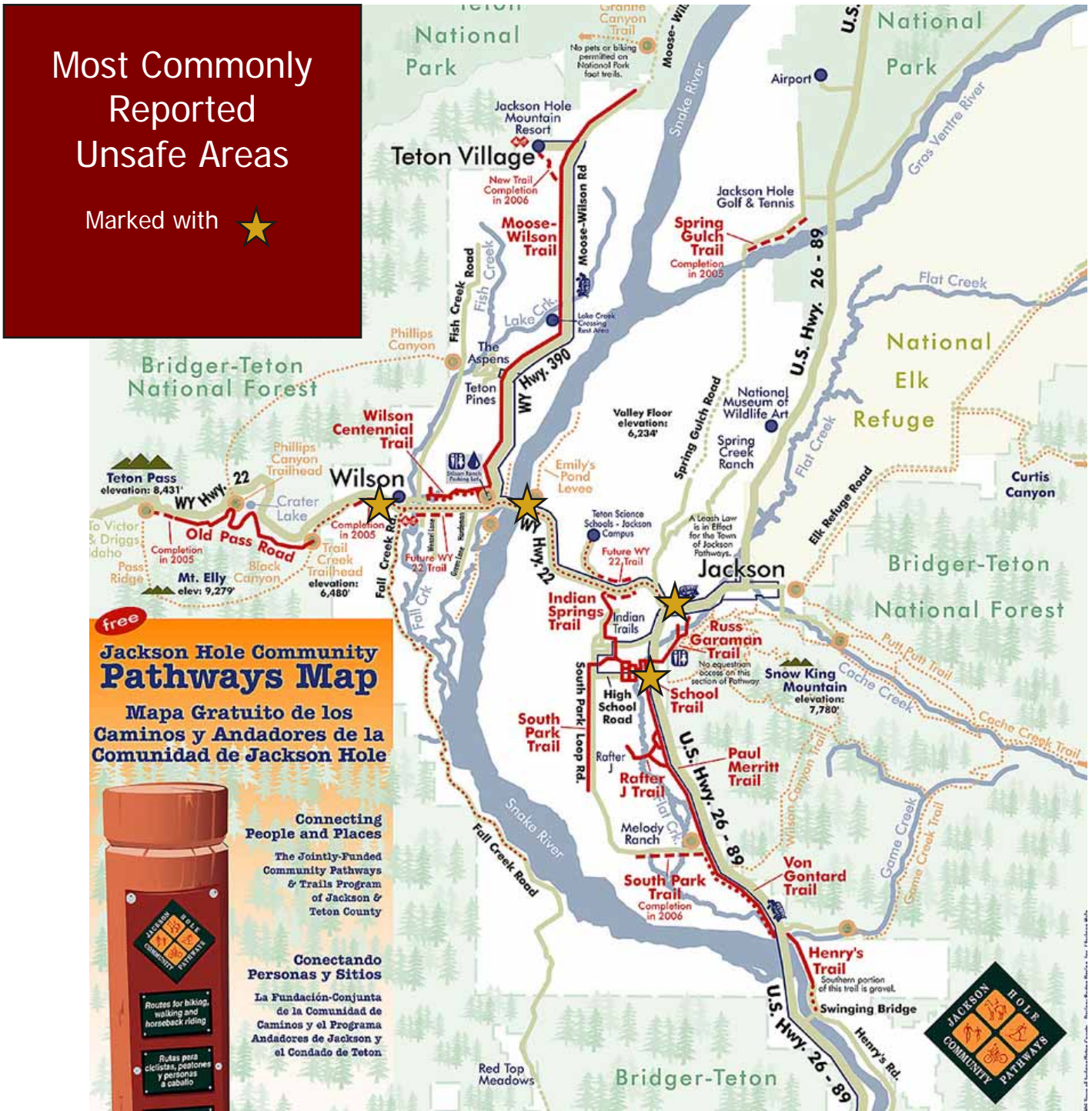
- The strip of land along Hwy 22 through Wilson for both pedestrians and bicyclists
- West Broadway (people noted in the pathway interviews that they avoided that area as much as possible)
- The Hwy 22 bridge over the Snake River
- High School Rd and West Broadway intersection

Figure 34: Most Commonly Suggested Future Pathways

Most Commonly Suggested Future Pathways
 Marked with 



Figure 35: Most Commonly Reported Unsafe Areas



Works Cited

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