
Sustainable Transportation to and from Big Sky, Montana Research Report 2021



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Glossary

Barrier - Obstacles or challenges that prevent or disincentivize a particular behavior

Commuting – Regular, routine, consistent travel from point-to-point for work

Externality - A side effect or consequence of an industrial or commercial activity that affects other parties without being reflected in the cost of the goods or services involved

Incentives - A tangible or monetary reward used to encourage the use of sustainable transportation

Praxis – An intersection between theory, action, and reflection; An orientation towards deciding policy and decisions based on ideas and pragmatic possibilities.

Skyline Bus – A non-profit bus system moving citizens between Bozeman, Montana, and Big Sky, Montana

Sustainable transportation – Any form of transportation other than single-occupancy vehicles (busing, carpooling, biking, walking, etc.)

Social Behaviorism - Attempts to explain humans in terms of external physical stimuli, responses, learning histories, and (for certain types of behavior) reinforcements in a social or cultural context

Transportation Demand Management – Framework for evaluating transportation policies and strategies that change travel behavior

Executive Summary

This study attempts to address the question: “What are commuter’s perceptions with commuting to and from Big Sky?” In the Fall of 2021, eleven graduate students from Montana State University’s Master of Public Administration program, their professor Dr. Paul Lachapelle, and Matthew Madsen from the Western Transportation Institute worked together to create a research project to help define the needs of the community, describe the impact on quality of life, and understand the financial initiatives in the Gallatin Valley related to commuting to Big Sky. Research has been conducted in the past via the Big Sky Transportation Study for the Big Sky Chamber of Commerce that found that more discussions from stakeholders are needed (2017). Further research can provide more understanding of alternative local travel options.

Purpose & Context

Gallatin County has had a 25% increase in population since 2010 and 50% of workers in Big Sky commute. The only route to Big Sky is via the often-treacherous US Highway 191. As Gallatin County and Big Sky continue to grow, the road is seeing a lot more use. The use of sustainable transportation is imperative to decreasing traffic, wear and tear on the road, and minimizing environmental impacts. As the community continues to grow, more research is needed to provide accurate and useful data.

Due to the rapid growth within the Gallatin Valley, the impact on workforce commute has sparked an interest in how Montana can effectively encourage and support the use of sustainable transportation for commuters and create infrastructure for such use in Montana.

Transportation demand management is a praxis framework with both conceptual and practical elements for designing, implementing, and evaluating transportation policies which are targeted at the demands of transit users. Throughout this report, terms such as sustainable transportation, commuting, barriers, and incentives are used. Sustainable transportation is defined as methods of travel outside single occupancy vehicles including, but not limited to, public transportation options, private busing offered to employees, or carpooling in a personal vehicle with two or more people. In the context of this study, sustainable transportation includes use of the Skyline Bus or carpooling with two or more people for your commute to and from Big Sky. Commuting is defined as a regular, routine, consistent travel from point to point for work. An incentive is something that encourages or motivates someone to do something whether it be cash, gift cards, or other rewards. Barriers are defined as obstacles or challenges that can prevent or disincentivize a certain behavior.

Methods

Sampling was done in a purposive manner to ensure the people interviewed were relevant to our research. In order to recruit suitable interviewees, flyers were posted in Big Sky and on the Big Sky SNO Instagram page, along with the use of word of mouth. Through this interview recruitment, a total of 26 interviews were conducted. The data collection involved creating a survey instrument with interview questions about commuting and use of sustainable transportation options. Email was used as the sole method of communicating and coordinating with participants. The data were collected through one-on-one interviews using readily available virtual meeting software such as Zoom, WebEx, and Microsoft Teams. These modes were selected based on the ease of access for interviewees and to automate the transcription process. These transcripts were edited for identifiable content and for clarity before being coded to find

prominent themes which were prevalent across the sample and are described in the results section.

Results

We identified three major categories as important to interviewees' commutes to and from Big Sky:

1. Barriers to using Sustainable Transportation
2. Incentives for using Sustainable Transportation
3. Recommendations to Incentivize use of Sustainable Transportation

Under the first Category, Barriers to using Sustainable Transportation, we identified two main themes, and seven sub-themes as follows:

Theme #1: Safety

Safety concerns were organized in the two sub-themes of safety concerns with carpooling and safety concerns with Skyline bus.

Theme #2: Inconvenience

Sub-themes of the inconvenience barrier include location of bus stops, schedule of bus stops, bus seat vacancy, freedom of having own vehicle and employer scheduling and task conflicts

Under the second Category, Incentives for using Sustainable Transportation, we identified four main themes and sub-themes as follows:

Theme #3: Safety

Safety was also identified as an incentive to use sustainable transportation. Several interviewees mentioned the safety benefits of carpooling and/or riding the Skyline Bus for their commute to Big Sky.

Theme #4: Convenience

Convenience as an incentive rather than a barrier was referred to during several interviews. These incentives were divided into two subthemes; the benefits of not having to drive and the benefits of using a company carpool or bus if provided.

Theme #5: Financial

Another theme that was identified as an incentive to use sustainable transportation involved financial benefits. Interviewees discussed the savings they receive by not having to drive their own car. They save money by purchasing less fuel and having reduced maintenance costs due to fewer miles on their vehicles.

Theme #6: Environmental

The other major theme identified by interviewees as incentives to use sustainable transportation is the reduced impact on the environment.

Under the third Category, Recommendations to Incentivize use of Sustainable Transportation, several suggestions from the interviewees include financial incentives and the need and responsibility for employers to promote the use of sustainable transportation.

We offer several recommendations which could increase the frequency of interviewees sustainable transportation use based on the data collected. The five recommendations from this research are as follows:

1. Encourage employers to offer financial incentives for using sustainable transportation.
2. Encourage employers to create sustainable transportation options for their commuting employees.
3. Promote independent carpooling systems and third-party ride-share opportunities.
4. Improve the reliability and frequency of existing mass transit modes.
5. Continue research about the motivations and limitations of Big Sky commuters with an emphasis on encouraging greater use of sustainable transportation.

Purpose and Context

What was once a rural valley, Gallatin County has since been transformed into the second most populated county in Montana, and has more than doubled since 1990, according to the U.S. Census Bureau (Lutley, 2021). A 2019 report from the University of Montana Institute for Tourism and Recreation Research states that Gallatin County is the most lucrative county in the Montana for nonresident spending, much of which is contributed to by travelers to Yellowstone National Park, the first US National Park alongside the tourism and second homeowners in Big Sky, Montana, which boasts the largest ski area in North America (Grau, 2021).

With the growth of the tourism and real estate market comes the ever-expanding need for accommodations, services, and resources that support these industries. According to a 2019 Big Sky Economic Profile, 70 percent of Big Sky homes are secondary residences, and the median home value is over \$1 million, leaving little room for affordable and workforce housing (Pyszka & Pedigo, 2019). About half the town's workers commute from Bozeman, Belgrade and West Yellowstone, with 70.1 percent of the Big Sky employment industry based in tourism and hospitality and 10.9 percent in the construction and real estate industry. All of the workforce commute and resources are transported on U.S. Highway 191, a two-lane windy mountain road, alongside the Gallatin River in a deep canyon that shared with a major semi-trucks route and Yellowstone National Park tourists in the summer and ski vacation tourists in the winter. The road was described by interviewees as "horrendous particularly when it snows, it's easy 4 to 10 cars off the road" (I6), and not having "enough plows in this state to keep up with our roads" (I28), and often "people full of road rage and tailgating (I14)." Another interviewee added, "Every year I've gotta leave 10 or 15 minutes earlier because there's more traffic every single year... It's shocking the increase in traffic" (I6).

This growth's impact on workforce commute has sparked an interest in how Montana can effectively encourage and support the use of sustainable transportation for commuters and create infrastructure for such use in Montana. This study focuses primarily on those who regularly commute from the Gallatin Valley to and from Big Sky, Montana and is in partnership with Montana State University and GoGallatin, a local sustainable transportation program through the Western Transportation Institute at MSU. Such research aims to address the question 'what are commuters perceptions of their commute to Big Sky.' This study also assists to understand this commuter population, to report back to Big Sky area employers and the community-at-large to leverage sustainable transportation change as employees are traveling on a dangerous road daily, which may induce stress, anxiety, and contribute to unsafe driving conditions.

Sustainable transportation can be defined by the use of the Skyline Bus or carpooling with two or more people to commute to and from Big Sky for work and is a vital aspect of reducing communities' contribution to climate change as well as to enhance the mental, physical, social, and emotional well-being of those who partake. Oftentimes sustainable transportation carries with it many notions, and stigmas, as well as barriers that may limit one's use. Barriers can be defined as obstacles or challenges that can prevent or disincentivize a certain behavior. Therefore, this research dives into the commutes of those traveling to and from Big Sky to uncover these barriers as well as the potential incentives that would motivate the use of sustainable transportation in the future. Incentives could be monetary in nature, or rewarded in other ways, to encourage someone to do something.

Research for the study was performed by 11 members of the Master of Public Administration program at Montana State University under the guidance of Professor Paul Lachapelle and Matt Madsen of the Western Transportation Institute. The study

was conducted in October and November 2021 and utilizes resources available through the GoGallatin Program and the Sustainability Network Organization (SNO), a sustainable advocacy group based in Big Sky. Collection and coding of data from interviews were done by students along with report preparation as part of the graduate class.

Literature Review

Transportation Demand Management (TDM) is a praxis framework guiding this research with both conceptual and practical elements for designing, implementing, and evaluating transportation policies. It's primarily used as a way to craft strategies to modify commuter's travel behavior due to its emphasis on managing transportation demand instead of supply (Ferguson, 1990; Winters, 2000). TDM consists of a number of possible strategies with the assumption that any best solution is dependent on the context, and that the greatest efficacy results from a flexible approach (Ferguson, 1990). Each of the strategies articulated in TDM affect how transportation users:

1. Engage local partners to understand goals and opportunities,
2. Establish a program to measure performance,
3. Be willing to engage in difficult conversations to develop new programs,
4. Set challenging but attainable targets and specify a time frame,
5. Set disincentives for parking,
6. Implement designs for encouraging transit use,
7. Commit to a plan long-term and establish accountability and progress measures (Transportation Efficient Communities 2017).

Often, the mechanism used to change the behavior of commuters is positive or negative reinforcement using incentives or barriers (Ison & Rye, 2008; Greenwald 2019). The use of incentives and disincentives to modify behavior originated from social behaviorism but was quickly applied to a number of social fields, including transportation. In this research, incentives are defined as anything which encourage or motivate someone to behave a certain way and barriers are defined as obstacles or challenges which prevent or disincentivize a certain behavior. Specifically, this research is interested in incentives which encourage the use of sustainable transportation and the barriers preventing its use.

Sustainable Transportation

The complicated and sometimes contentious nature of vocabulary surrounding sustainable transportation reflects not only the intricacies of policy research across variable spatial definitions, but the multifaceted network of drivers, mechanisms, conditions, and inputs implied in the concept as well (Mead, 2021). The UN Secretary-General's High-Level Advisory Group on Sustainable Transport (2016) defines sustainable transport as, "the provision of services and infrastructure for the mobility of people and goods—advancing economic and social development to benefit today's and future generations—in a manner that is safe, affordable, accessible, efficient, and resilient, while minimizing carbon and other emissions and environmental impacts" (p.10). Movement, so necessary to meet economic and social development challenges, comes with an associated cost and sustainable transportation conceptualizes increasing gains while minimizing inputs (Wang & Ge, 2019). Understanding negative transportation externalities to move transport toward sustainable practices can start with a bottom-up exploration of realized transportation behavior and underlying factors in conjunction

with user expectations (Loo & Tsoi, 2018). From there, specific policy instruments can be coupled to existing transportation behavior to create holistic change.

Given the breadth of motivations for transportation, demographic and spatial parameters were defined for rigorous inquiry. Put another way, to focus the study and maximize the findings, the demographic subject and transportation parameters of the subjects were narrowly defined. For the purposes of our study, sustainable transportation was defined as methods of travel outside single occupancy vehicles including, but not limited to, public transportation options, private busing offered to employees, or carpooling in a personal vehicle with two or more people. The nature and spatial definition of transportation was delineated to commuters coming to Big Sky, Montana for employment (or volunteerism) from their abode within Gallatin County and Yellowstone County, Montana. Commuting in this context is defined as a regular, routine, consistent travel from point to point for work. Commuting to and from Big Sky, Montana is especially important to examine due to its geographic location and the demographics of the surrounding communities in Gallatin County.

Demographics

Gallatin Valley is a county located in south central Montana. According to US Census Bureau data from 2020, the Gallatin Valley has a population of about 118,960 people and covers an area of 2,631 square miles (Montana Department of Commerce, 2020). Gallatin County has 5 major towns/cities within it: Bozeman, Belgrade, Manhattan, Three Forks and West Yellowstone. There are two unincorporated areas with a significant population: Big Sky and Four Corners. Bozeman has a population of 53,293, Belgrade has 10,460, Manhattan has 2,086, Three Forks has 1,989 and West Yellowstone has 1,272 (Montana Department of Commerce, 2020). Big Sky has a population of 2,767 and Four Corners has a population of 3,406 (GCEM, 2020). The major highway that connects Belgrade to West Yellowstone is U.S. Highway 191 which is also how people commute to Big Sky from surrounding cities/towns in Gallatin County.

According to GCEM, the Gallatin Valley has had a 25% increase in population since 2010. According to the Transportation Investment Generating Economic Recovery Program (TIGER, 2017), about 83% of Big Sky workers commute from other locations with more than 1,400 commuters coming from the northern part of Gallatin County. “Traffic volumes [are] expected to increase in Big Sky at an estimated 4.34% per year (historic growth of 4.7% per year)” (TIGER, 2017). According to the American Automobile Association (AAA) the yearly cost of commuting to Big Sky from Bozeman is between \$8,140 and \$12,960 (TIGER, 2017). Yellowstone National Park, a major tourist attraction in Montana, estimates that more than 1 million vehicles used U.S. 191 to visit the park in 2016 alone (TIGER, 2017). “From 2018 to 2019, employment in Big Sky, MT grew at a rate of 3.36%, from 2.05k employees to 2.12k employees.” (DataUSA, 2021). “2.66% of the workforce in Gallatin County, MT have "super commutes" in excess of 90 minutes” and “1.39% of the workforce in Big Sky, MT have "super commutes" in excess of 90 minutes” (DataUSA, 2021).

A survey implemented by the Center for Health and Safety Culture in partnership with the Small Urban and Rural Livability Center at Montana State University’s Western Transportation Institute found that 76% of 341 MSU employees surveyed would like people to use alternate forms of transportation than single occupancy vehicles (Center for Health and Safety Culture, Western Transportation Institute Montana State University, 2018). “The purpose

of this survey is to characterize the culture within several Bozeman workplaces regarding support for commuting alternatives to the single occupancy vehicle” (Center for Health and Safety Culture, Western Transportation Institute, Montana State University). While this survey does not explicitly use commuters from Bozeman to Big Sky as their sample, it does paint a picture of how a portion of the community in the Gallatin County view commuting alternatives.

The economy of Big Sky, MT employs 2.12k people. The largest industries in Big Sky, MT are Accommodation & Food Services (770 people), Retail Trade (241 people), and Health Care & Social Assistance (187 people), and the highest paying industries are Professional, Scientific, & Technical Services (\$82,738), Finance & Insurance, & Real Estate & Rental & Leasing (\$63,500), and Transportation & Warehousing, & Utilities (\$52,250) (DataUSA, 2021).

One of the most widely used alternative transportation modes to Big Sky from Bozeman is the Skyline Bus. The Skyline bus system is “a year-round bus service, providing economical, efficient, and eco-friendly travel in Big Sky Montana and between Big Sky and Bozeman” (Skyline Bus, 2021). The Skyline Bus operates 335 days a year from Bozeman to Big Sky and within Big Sky. The bus operates 7 days a week except in the shoulder season which is from September 27 through November 21 when it runs Monday through Friday. There are 45,000 rides given from December through April each year. The Skyline routes connects with the Streamline bus system making it easier to access bus stops. The Skyline has been funded by the Montana Department of Transportation because of work done by the Western Transportation Institute since 2006 (Skyline Bus, 2021). The Gallatin County Big Sky Transportation District was established in 1991, the service called Snow Express was the transit system that operated from 1991-2006 until the district received funding for the new bus system, the Skyline (Skyline Bus, 2021).

Methods

Sampling

Sampling of our interview subjects was done in a purposive manner. According to Bryman (2012 p. 418), "the goal of purposive sampling is to sample cases/participants in a strategic way, so that those sampled are relevant to the research questions that are being posed." Those surveyed were employees that commute to Big Sky for work on a regular basis, and employers of those companies. To market the research, a flyer was produced and posted in Big Sky at a variety of businesses, public restrooms, and bulletins. Interested parties were then directed to contact an email address that was used exclusively for this project. In order to ensure the identity of the interviewees remain anonymous, each participant was given a unique code that would replace their name whenever mentioned in the transcript. Semi-structured, qualitative interviews were used in order to obtain responses from the interviewee in their own words in order to better understand their opinions and perceptions. After interviews were completed, all participants were sent \$20 in downtown dollars as a thank you for their contribution. Twenty-six interviews were conducted during a three-week period by eleven interviewers.

Data Collection

Interviews were conducted with a wide range of volunteer participants involved with aspects of commuting to Big Sky as either commuters themselves or as employers of workers who frequently commute. To collect data, interviews were mainly conducted via the video conference function on Microsoft Teams. Some circumstances made it necessary for certain researchers to use different platforms, such as Zoom or WebEx. Microsoft Teams was the preferred method, though, because of its built-in recording and transcript features. Email was used for most communications between researchers and interviewees. A consent form was emailed to each interviewee, as well as the final survey instrument, complete with all the questions the researcher was to ask in the interview.

For the purpose of this research project, qualitative data was collected through one-on-one interviews that were then transcribed and coded, and then relevant information/responses to the questions were extracted. The survey instrument itself contained questions that revolved around current commuting experience, personal experience with sustainable transportation, barriers and incentives related to sustainable transportation usage, and a set of demographic questions. Before the interview began, the interviewee was asked to consent to both participating in the interview and the recording and subsequent transcription of the interview (See Appendix A: Survey Instrument). The survey instrument and research question were sent and approved by the MSU Institutional Review Board (IRB). A total of 26 interviews were conducted.

Then the sample interviewees were paired with a researcher and scheduled for an interview, the researcher was given responsibility for communication with the interviewee regarding the interview. An email was sent to the interviewee prior to the interview to confirm the scheduled time frame along with the consent form to review, and the meeting link.

Upon the start of the interview, the researcher would confirm with the interviewee that they had read and understood the consent form. Obtaining verbal consent through this confirmation, the researcher began to record and transcribe the interview. Along with sending out the consent form, an introductory statement at the start of the survey was read to each interviewee. In this statement, some important terms specific to the survey were defined for the

interviewee to allow for consistency in their understanding of these terms. Also in this statement, verbal consent from the interviewee was once again obtained to record and transcribe the interview.

After consent was obtained, the interview was recorded and transcribed. The survey instrument questions are based on whether the interviewee was an employer or an employee. Additional follow-up questions were given to interviewees depending on if they were self-reported as employer or employees.

Once the interview was complete, the researcher ended the meeting and the transcript and recording of the interview was downloaded. These files, once ready, were moved into the Microsoft Teams shared page into their respective folders. Finally, each transcript was edited by the researcher who conducted the interview. This editing process was intended to eliminate any evidence of the interviewee's identity, changing their name to their assigned number (e.g., I1, I2, etc.) and clean up any mistakes in the transcript as well as unnecessary verbiage that may distract from the data (filler words like um, like, etc.).

Following the editing of the transcripts, the interview text was sent back to the respective interviewees for their review. This allowed the interviewee to ensure there was nothing left in the transcript that the interviewee did not want to be used in the final report. If any changes were requested, the researcher would make those changes and make sure anything requested to be omitted would be left out of the final report.

Data Analysis

Following the editing of the transcripts to make them as accurate and streamlined as possible, the transcript is coded using a coding scheme that was developed collaboratively by all researchers. This process is meant to differentiate specific data points that were being found consistently in the interviews. The main categories that were color coded in the transcripts were barriers to using sustainable transportation, incentives to using sustainable transportation, and recommendations to incentivize use of sustainable transportation. Each of these categories includes more specific themes that were also color coded.

Using color coded transcripts, quotes deemed relevant to the categories were narrowed down to be used as qualitative data for the final report. An iterative process was then used as the class collectively discussed the most prominent codes. These prominent codes, thus, are the themes presented in the results section.

Results

Throughout the interviews, three major categories were identified as important to interviewees' commutes to and from Big Sky. These three categories are barriers to using sustainable transportation, incentives for using sustainable transportation and recommendations to incentivize the use of sustainable transportation. Each of these categories were divided into themes and then further divided into subthemes if needed. Each subtheme contains quotes from the individuals who participated in this study.

Barriers to using Sustainable Transportation

One of the crucial topics that was identified during interviews were the barriers that prevented interviewees from using sustainable transportation. These barriers applied to the use of the Skyline bus as well as opportunities for carpooling from both employers and individuals. The two major themes connected to these concerns included safety and inconvenience as major barriers.

Safety

Safety concerns were divided into two subthemes: apprehension about carpooling and unease with riding the Skyline bus.

Safety concerns with carpooling

Interviewees expressed concern for safety during carpooling with references to personal safety around strangers as well as weather and traffic issues. A suggestion of vetting carpool passengers was made as one possible way to address this concern.

- *One is that the drive is so dangerous. I would prefer to be the one behind the wheel and in control, because I trust my driving ability more than a lot of my coworkers. I'm 41 years old, I'm the old guy. My carpool consists of people younger than me, so I want to be the one driving (I6).*
- *(The challenge with carpooling is) getting people more comfortable with meeting people. That way it is kind of, I mean as a woman and driving by myself, I'm not going to pick up a random stranger. So, if there is some sort of vetting or way that I could ensure my safety (I10).*
- *Something that literally changes my mind about whether I should carpool or not, is whether I think that person is a safe driver or if they're gonna make good decisions, and if they are going to handle the road conditions and traffic conditions safely. (I9)*
- *I don't trust strangers very much. I don't carpool very often because of that as well (I27).*
- *I've also carpooled here and there. Obviously, COVID really threw a monkey wrench into that system ... with COVID, you know that the logistics of carpooling are not very realistic (I34).*

Safety concerns with Skyline Bus

Similar concerns for safety were raised by interviewees when discussing their use of the Skyline Bus. The following remarks were made about feeling unsafe around other passengers on the bus and their faith in the bus driver's ability to travel safely on bad roads.

- *One of the times I was on the bus, there was a couple of drunk adults on the bus, and it was not the most fun time... It was the passengers that may have been the issue, not really the bus (I14).*
- *Another hurdle is the canyon is quite a dangerous drive. And I don't have a ton of faith in bus drivers. I feel safer driving myself and with my driving skills and in my vehicle that I know is safe (I27).*

Inconvenience

Barriers to using sustainable transportation that exist due to convenience of use are included below. These concerns were divided into subthemes including challenges with riding the Skyline Bus; location of bus stops, the schedule of bus stops and limitations on seat availability. There were also challenges with work schedule and work duties and the desired freedom of having your own vehicle for personal use.

Location of bus stops

Many interviewees indicated concern about the location of bus stops in Bozeman and other surrounding communities. There were several comments about the inconvenience of having to travel several miles to reach a bus stop, sometimes in the wrong direction. A few suggestions were made to add stops in various locations such as West Yellowstone or at the mouth of Gallatin Canyon.

- *Then, for a local employee, like myself, if I were to take the Skyline, I would have to figure out how to get to the Gallatin Valley Mall, which is the closest stop to my house... Certainly 'cause if I needed a ride in the first place, it would be difficult for me to even get from my house to the Mall (bus stop) So I would be way more inclined to just call around and find a carpool option (I6).*
- *There's not an easy transportation between here and Big Sky and West (Yellowstone). Especially the times that I need to be going. I think if it were to be developed it would be highly utilized just with the way that Big Sky is like, not just an employment destination, but a tourist destination. If it extended even farther down to West, most of the residents who are year-round in West don't have vehicles. ... Regardless, you have to drive your own car in Bozeman to meet at a public transportation location (I28).*
- *The biggest thing with the buses, I think because they're not really centralized. It's not convenient, whereas if there was a park and ride at the mouth of the Canyon in Gallatin Gateway. It would be so much more convenient to take a bus to Big Sky and back. So, it's not really a matter of financial incentive, it's really just the opportunity to have ... reliability and confidence. Confidence in the system (I30).*

- *I've also found that the best place for me to park to get on the Skylink bus is in Four Corners, so I'm still having to drive 15 or so minutes to catch the bus (I34).*
- *No, I did not ever take Skyline to or from initially. I don't think it was offered. And then in the end its also possibly because I live where I do. It does not stop here. I would have to go into Big Sky to hop on the bus to get there (I36).*

Schedule of bus stops

The schedule of bus stops was discussed by several interviewees and was identified as another subtheme under convenience. Some interviewees felt that the amount of bus stops created too long of a commute while others felt there were not enough stops throughout the day for them to get home at a reasonable time if their schedules changed at work.

- *I guess my biggest thing would be the time. Like the timing of it. I mean, I don't know if it runs every 15 minutes or every half hour. I saw a bus schedule the other day and it just seemed kind of intimidating (I4).*
- *I attempted to (take the bus). It wasn't on schedule. I think there were two times. One time it wasn't on schedule. And I was just standing in the Gallatin Valley Mall parking lot waiting for something that wasn't going to come and got another ride. And then the other time I went to the bus stop and then found out that the bus stop had been changed. But I don't know how I missed the email or something like that. I tried and miscommunication left me transportation-less. So, I'm 0 and 2 for riding the bus... Then from the mall to the Meadow. Then, I would get out at the Meadow and take a different bus from the Meadow to the security gate at the YC. And then I would get out there and get on a different bus that took me from the security gate to the base lodge. Then from the base lodge I would need to figure out how to get from the base lodge to my office. That's like a two-and-a-half-hour process. ... In theory, that option exists to where everybody at the YC is offered free public transportation, but logistically it's nothing I'm interested in. ... I guess one thing that might help is just to have clearer communication for the bus availability and scheduling and process. As of right now, it's a couple emails here and there, and there's a bus schedule somewhere such as an email link, but it would be nice if they made that a little easier to track down. Which HR might be working on that right now (I6).*
- *It's just a matter of having to wait forever for the bus to come back through to pick you up. Like, you know... Honestly it would just suck. I mean, you could probably read a whole novel waiting... The time-consuming nature of multiple stops, that's the big one (I24).*
- *I could take the bus but the bus leaves so much earlier, that it usually makes sense for me to drive right and get the extra like 45 minutes to an hour of sleep (I25).*
- *I feel one of the main reasons I don't like to use it is because of the timeframe when I get off work. Depending on the client that I have, I can get off of work around noon, or the latest like four or five o'clock. So, my flexibility in my work schedule and the*

structure of the bus don't mix very well. Like I want to be able to make it home as early as I can, if I get off work at noon, I don't want to have to wait in Big Sky until four or five o'clock when the buses leave. I want to get home at my earliest convenience (I27).

- *HR does provide you with a punch pass if you want it to encourage more people to commute. Unfortunately, it just does not work. You know I found punching out at 5:15. That means I'm waiting for the 7:00 o'clock bus and getting home at 9. And my bedtime is like 8:00 or 8:30. If I have to turn around and leave again at 4:45 in the morning and it also turns you know roughly an hour drive when the roads are good, and it's not packed with people into like an hour 40 or an hour 45 each way. ... You know it's not something I can use for the work commute 'cause they just don't have a bus that gets me there (on time) (I34).*
- *The Skyline bus, the schedule it takes too long, so it requires multiple stopping points before it would drop me off at a location that I could actually get to work. It's a little too time consuming (I40).*

Bus seat vacancy

Another major theme that occurred throughout the interviews was a problem with buses being full. The quotes below demonstrate some of the inconvenient experiences interviewees have had while trying to use sustainable transportation for their commute to work in Big Sky.

- *One of my co-workers was commuting from Bozeman and we were working so late that he missed the 6 o'clock bus. Then, the 9 o'clock bus was full and so we had to wait in Big Sky until 11 o'clock. ... I feel like I would be waiting up to an hour a day and stressed about making it to the bus on time. Or, if the bus is full, then you have to wait for the next one (I4).*
- *I've used the bus one time. ... Interviewer: And what was that experience like? Oh! You know what, I never made it on the bus. I planned to use the bus, got there and the bus was still waiting. She (the bus driver) told me it was full and that I couldn't get on it. And she was not going to be on time at all. Also, the bus driver wasn't very kind. So, I ended up just driving myself and that was my one and only effort. I clearly did not return to try and use the bus again after that (I27).*
- *If I'm trying to get on the 3:15 bus, guess which two buses are just packed on a regular basis? The 3:15 and the 5:15 so if I can't get on the 3:15... I've lived here long enough that honestly, I've used the bus less and less. I can find a ride home generally, but I don't like having to rely on that. I like being a little more self-sufficient, you know (I34).*

Freedom of having own vehicle

Several interviewees commented on the convenience of having their own vehicle to run errands and the freedom to leave work early. Other reflections included the need to pick up and drop off children at school.

- *It's very hard to be able to have a life after work or hold relationships. I've had two relationships fail because you're not able to say, hey, we can go for a run and grab dinner after work. Because I'll be like, yeah, let's shoot for 6 and then I don't get home till 8. So, it's taking a toll on your personal life honestly (I4).*
- *I also drive myself because I have a daughter and in the event that I'm up in Big Sky and her school calls and they're like you know you gotta come get your daughter right now, I've got my car and I can just be out the door and on the road back to go get her (I6).*
- *Yeah, but that being said, like everyone you know, people have things they have to do. People have to pick up their kids. For me personally, some days I have something to do after work, so I want to go for a run or leave a little early to go to the gym or something like that (I7).*
- *You know the busses are kind of limited with their time and how many bus stops they have. Versus like you know, it seems like most people like the freedom of, you know, being able to hop in their car and leave and go wherever they want (I11).*
- *We also have a 6-year-old son that one of us has to leave by a certain time every day to make sure that we get home for him ... both of us are managers as well, so our jobs kind of demand for us to be there late sometimes. ... The thing for us is childcare and being where we need to be when we need to be there. And so our personal vehicles allow us to. ... the hours that (the work van) operates doesn't work for my schedule (I24).*
- *And honestly, since I have a car, it's kind of nice having the flexibility and being able to make that choice. 'Cause you know, some days I'd rather leave a little early and get home a little earlier. Spend time with my family (I26).*
- *I prefer to be independent. If I do need to stop at the grocery store on my way home, then I can, or if I need to stay later at work, I can (I28).*
- *I really wanted the freedom of having my car because then I needed to run errands when I was in Bozeman also (I36).*
- *With me being the project manager, I don't (use the company carpool), I ride by myself because I sometimes I have to go to multiple places and stuff like that (I40).*

Employer scheduling and task conflicts

Other convenience concerns that became apparent during interviews were problems with work schedules and work duty conflicts. Many interviewees have variable work hours or needed to be at multiple locations throughout the day. Others are required to bring equipment and tools with them to complete their day-to-day tasks and therefore need to bring their own vehicle.

- *I bring too much stuff to work to bring on a bus feasibly (I3).*
- *We usually need our cars for work. If we were doing water quality monitoring we needed to have separate cars to bring items back and forth (I5).*
- *With my schedule, I'm only going one way and if I was picking up a friend from Bozeman, they have to find a different way back (I10).*
- *My hours vary a lot, during season I'm usually there at least six days a week at least 10 to 12 hours a day. ... Just how varying my schedule is and how long my hours are and when I need to be there and how long I need to be there as well as weather. ... No one has the same schedule as mine really so it's a bit challenging in that sense (I14).*
- *Yeah, the nature of construction is you need to have a vehicle (I15).*
- *It is tough in the winter with ski equipment. I think the skyline has a place for skis on the outside, but you know you want your boots and your bag and your helmet to be inside and drive with you (I24).*
- *I mean my schedule is just so variable though like the times that I've looked at the streamline, it takes a long time to come from the east side of Bozeman versus driving to get to Big Sky. But it's like every hour... And it's just basically imprecise enough like I would have to get to work 45 minutes early or if I missed one in the afternoon because they got down late from then waiting around for 45 minutes and afternoon like it's just worth the time to me to be home with the fam (I30).*
- *I need my car there because I have to do some compliance checks or I have to drive around (I31).*
- *If I am picking somebody up I have to travel up to maybe a half a mile to a mile in the wrong direction (I34).*

Incentives for using Sustainable Transportation

Another major category identified by interviewees were incentives that exist for commuters to use sustainable transportation. Many of these incentives paralleled those identified as barriers such as safety and convenience. Other incentive themes included financial and environmental reasons to use sustainable transportation. The following quotes are classified according to these four themes and then further divided into subthemes.

Safety

Several interviewees mentioned the safety benefits of carpooling and/or riding the Skyline Bus for their commute to Big Sky. Some of these benefits include less cars on the road and trained bus drivers in control rather than tired commuters.

- *Company providing that to the patrol so that we don't have to rely on the Streamline is a pretty and it you know, once we're in the club, it goes directly to our locker room, so there's no stopping and transferring of people or anything time consuming, so that's pretty good incentive, and it's got good snow tires on it, so it's a safe, free ride to work ... (if there was more carpooling) I think there would also be less accidents because there would be less people that are on the road (I24).*
- *It seems like in general that drivers are safe and responsible. You know, I had talked to him (the bus driver) quite a bit too, and most of them have a lot of experience driving buses and I would say... there's always a risk that there could be an accident, even if they're not at fault or something, but I would say it's just as safe, if not safer than driving a car in my opinion... Driving myself in the evening, especially if it's dark. I mean, there's always the possibility of falling asleep or something like that then, or if I've had a rough day or something and I'm just really tired. I honestly feel a little safer having someone else drive (I26).*

Convenience

Convenience as an incentive rather than a barrier was referred to during several interviews. These incentives were divided into two subthemes; the benefits of not having to drive and the benefits of using a company carpool or bus if provided.

Benefits of not having to drive

The benefits of not having to drive included everything from fewer accidents due to fewer cars on the road to more free time for the commuter to read books. One interviewee even mentioned the relief of being stress-free when arriving at work because they did not have to deal with driving.

- *I think it (sustainable transportation) would be good, especially for the Gallatin Valley, or for the Big Sky Valley because that road can get super busy. That would be nice if more people carpooled more of the time, so there'll be less traffic. People would save more money, and there would be less emissions if everyone carpooled (I3).*
- *It's just less cars, single occupancy vehicles on the road, less traffic, less probability for accidents, which happen all the time in the canyon, since it's only 2 lanes, as well as the opportunity to make friends and meet people or network, or like oh, you work here? Just like even downtime of if you're not being the one driving and you are on a bus, then you can listen to podcasts, read, or study if you are in college, or learn a new language (I4).*
- *So, when you are using public transportation, you're not in control, so you can read. You can listen to more podcasts. You can work. So not having those options, I definitely just kill a bunch of time, useless time (I10).*

- *They were discouraging of carpools last year, because of Covid, and we just kind of did it anyway because it's a lot more pleasant to have someone to talk to. ... Interviewer: What kind of incentive would it take for you to consider other modes of sustainable transportation outside of carpooling? I think it would be all logistics. If things were smooth, I wouldn't need any incentive so I didn't have to drive, and I could just space out that whole time (I16).*
- *It's so much less nerve racking to not have to drive ... so having the bus not only would save money, but it would also save everybody just that little stress. I mean, it's pretty stressful what we do when we get there and to come up there already fully caffeinated and jacked because some guy was flashing his brights at us for half an hour on the way up (I34).*

Benefits of using company carpool/bus

Several employers in Big Sky provide an incentive to carpool or ride the bus. These incentives were described by interviewees as providing a vehicle for employees to use for their commute and compensating volunteer drivers in a carpool situation. Several of these incentives appeared to be due to parking reasons.

- *That was just within Moonlight that we were trying to start offering incentives for carpooling, and that that had to do with parking concerns (I9).*
- *Yes, we get per diem and then obviously we're carpooling and you know either one of us can drive. We'd rotate that or you know. Obviously we're both getting the same per diem, just sharing money for gas and expenses like that... I think it's a win win for everybody in that situation when, you know, we carpool. ... I've worked for previous companies that have work vehicles that you know, instead of having all the employees drive themselves up, everybody generally meets at a location such as four Corners and you know you can fit four to five people in a vehicle that goes you know up and back (I11).*
- *Due to parking constraints and the Canyon we do a significant amount of busing for our crews. All our laborers, subcontractors and trades people. So we run a lot of buses on a daily basis... All the trades I'd say. 90% of them currently are probably bussing up on a daily basis. I guess it's for congestion, but primarily because of lack of parking (I15).*
- *(Referring to employee volunteer driven company van) A further drive time, so that's incentive for them to want to drive the van, and it usually kind of turns into a little bit of overtime for them... (I24).*

Financial

Another theme that was identified as an incentive to use sustainable transportation involved financial benefits. Interviewees discussed the savings they receive by not having to drive their own car. They save money by purchasing less fuel and having reduced maintenance costs due to fewer miles on their vehicles.

- *Either a bus pass or a set schedule or a little bonus if you show that you, I'm not fully sure how it works. If you get a number of punches when you get on the bus or if you decide to take the bus X amount of times per season, then you can get like \$500 bonus if that company is on board with sustainable energy and transportation. ... We have a company car and we do have a gas pump on property that we don't have to pay for, we just use gas fobs (I4).*
- *Save mileage on the car. 'cause I've owned this vehicle since August of last year and there's already 40,000 miles on it (I7).*
- *I spend at least 60 to \$100 a week on gas (I14).*
- *A six-month bus pass and that ends up being a lot cheaper than gas and car maintenance and all that (I26).*
- *CHP is a federally funded clinic and so they reimburse mileage. So, they understand that if you're traveling, there is wear and tear on your vehicle and a cost. ... The overall rate of pay is a little higher and mostly because it requires people to commute. They incentivize people to commute by offering a higher rate of pay (I28).*
- *And that's if I have to drive myself, you know. And like with COVID, I drove myself a lot... I mean, I would love to not be spending several hundred bucks a month just to go to work (I34).*

Environmental

The other major theme identified by interviewees as incentives to use sustainable transportation is the reduced impact on the environment. The following quotes demonstrate the positive impacts interviewees felt using sustainable transportation has on the environment.

- *I definitely care about the environment and climate change. This has been one of the biggest personal challenges for me in that realm. I feel pretty guilty working for a conservation organization but then driving 40 miles every day back and forth (I5).*
- *Another one might be making people aware of the impact that all this commuting has on the environment. I know that Big Sky snow is working on their Big Sky climate action plan and they have quantified the carbon footprint of the commute (I6).*
- *Luckily, a lot of up-and-coming workers, just out of college workers want to carpool because they are more sustainably minded and they don't wanna drive separate vehicles if they don't need to (I9).*
- *It is the biggest emission factor for Big Sky as a town, it's a huge emission factor for us as a resort (I10).*

- *You can see where people have gone off road or you can see where there's been accidents and people leave their bumper behind. I think it would cut down on a lot of trash. It would cut down on a lot of the disrupting of the ecosystem throughout the park (I23).*
- *There's not enough room to Park 50 cars. If everyone would carpool, it would make the job site better. Plus, it would be better for the environment 'cause there's less cars on the road (I24).*
- *Like supporting and using mass transit. Just to have one less car on the road and also environmentally (I26).*

Recommendations to Incentivize use of Sustainable Transportation

Many interviewees mentioned possible ways that employers could incentivize the use of sustainable transportation. Several of these suggestions included financial incentives such as gift cards for frequently using the Skyline bus and carpooling with coworkers. Others emphasized the need for employers to promote the use of sustainable transportation.

- *It's like mainly education, outreach and helping to reduce some of the operational issues associated with making commuting happen. ... Just providing information about the buses and making that more readily available (I5).*
- *I think that one thing that would help would be a gas card for people who are driving the car, which is a hard thing to track and make official. Yeah, that would probably be one thing that might incentivize people to carpool more or to volunteer to be the one to drive. Because everybody wants to save a couple bucks (I6).*
- *gift cards to around town maybe. Maybe like an extra shift meal at the restaurant or something... I don't think it would be unreasonable to have. Restaurants within the community that care as well, like offering or like helping maybe giving us at a discount (I9).*
- *I think not only offering skyline cards, but promoting the use of them, so encouraging the use though gift cards or prizes. You know discounts for participating in public transportation and also then promoting carpooling. So many people do want the convenience of, you know, driving their own car ... even if it's stressed at the workplace, you know, encouraging employees to do that, or if it's through, Go Gallatin (I10).*
- *I think one incentive to possibly get people on the bus more is to actually create a point system. Where every time they get on the bus they get 50 points or whatever it is, and when they accumulate enough points they get a gift card or a gas card or something of that nature. I think that would influence younger populations and I could be wrong, but when I was younger, money was always super tight and I would have done a lot of things like that. I was thinking of groceries and gas. Anything like*
- *that would have prompted me probably to use (sustainable transportation) (I36).*

Conclusions

We outline limitations and proposed recommendations for future action informed by the qualitative data gathered in this study aligned with Transportation Demand Management (TDM) as the praxis framework.

Limitations

Careful consideration of the research design revealed three primary limitations that may have impacted the results of the study. First, this research was highly condensed into a short time frame. From conception to completion, this project took place over a four-month period. The abbreviated time frame limited the scope of the sample and sampling strategy used in the study. Despite the short time period, the data collected illustrates a slice of perceptions from the commuter population and is useful to make pragmatic policy recommendations.

Second, certain limitations regarding the sampling size and strategy need explication. When the literature review began, the completion of data collection was about three months' time, which impacted the total sample size. The resulting sample is small compared to the number of participants that commute daily to Big Sky. The sampling strategy may have introduced sampling bias as well. Participants were interviewed using a convenience/snowball strategy whereby respondents self-selected into the research and then asked to identify any other people that met the criteria of the study as possible participants. Potential interviewees were notified of the study through advertising and outreach efforts by Big Sky SNO, flyers distributed at the Gallatin Gateway Inn Skyline stop, and press coverage in the local Big Sky newspaper, *The Lone Peak Lookout*. The offer of a reward (\$20 gift card) could have also affected which individuals chose to participate. Because of the sample selection, this research will not estimate to what degree the sample is representative of the Big Sky commuter population but does offer a rich and detailed data set of the commuter experience, which is perhaps a novel contribution. While this research will hopefully add to the body of knowledge about Gallatin Valley commuters and improve policy decision-making, it is certainly not comprehensive.

Another potential source of sampling bias could be attributed to the widespread use of technology throughout the research process. Participants were contacted via email, and interviews were conducted online or by phone. This was a deliberate choice to simplify the interview process and to allow for automatic transcription, but it excluded people without computers or internet access from participation.

Lastly, there were limitations in data collection and subsequent analysis, specifically regarding inter-coder reliability and coding consistency. Again, time constraints were an underlying factor. For the sake of efficiency, each interview data point was coded by the same interviewer and codes were crossed check in a group setting. Another aspect of the coding process was its' iterative nature. The data was first coded inductively to determine categories and their properties. That same data was then re-coded deductively using those identified categories; again, this process took place through both an individual and group process. While this process isn't necessarily a limitation to the results of this study, it is worth noting as it pertains to research replicability.

Recommendations

Throughout the interviews, many interviewees offered suggestions that would incentivize and/or increase sustainable transportation use. Many of the suggestions aligned with the findings in Transportation Demand Management (TDM) research. Additional TDM praxis also offers recommended best practices that could apply to transportation planners contemplating the challenges of sustainable transportation to Big Sky, Montana. We offer the following five recommendations:

1. Interviewees identified many **financial incentives** that would promote increased use of sustainable transportation including shift meals and gift cards for meals to restaurants in Big Sky, gift/gas card raffles, prizes based on point systems for sustainable transportation participation, and deferring the cost of bus rides with Skyline gift cards. Interviewees seem to suggest that financial incentives can change commuter behavior when used strategically with other initiatives to improve sustainable transportation use. This is a small, actionable step employers can take to promote the use of sustainable transportation in their own businesses and provides an excellent opportunity within the wider community to support such efforts as well.
2. One common theme from the interviews was the specific **role of Big Sky employers to create and promote sustainable transportation options** within their businesses as well as the efforts within businesses to support carpooling. For instance, there was discussion of van pooling, private busing for workers, and the provision of company vehicles explicitly for employee carpooling. These are examples of current efforts of the business community in the Big Sky community to support sustainable transportation accessibility and usage.
3. There were also remarks about promoting **independent carpooling systems and opportunities**. One sky patroller noted that as soon as they found other employees with similar work schedules, carpooling schedules and communication threads were the next logical step for them. These granular efforts would be further enhanced with employer-supported and/or organized ride sharing platforms and third-party platforms like GoGallatin. Employer-sponsored carpooling systems and opportunities could be employee carpooling meet-and-greet events, educational meetings to discuss current sustainable transportation options, or incentivized driver safety training. These recommendations are again supported by peer reviewed TDM research (Ford et al., 2018; Yeganeh et al., 2018; Gwilliam,1997).
4. Interviewees noted the **current transit system could be improved, specifically reliability, route options, and frequency of routes** being top concerns. While there have been tremendous steps taken over the years with Big Sky transit improvements, further enhancement of sustainable transportation could yield big results. County administrators as well as municipal and community leaders could work with transportation planners to increase the frequency of Skyline services with an emphasis on key commuting times, specifically morning and evening routes when commuters start and leave work. The current system was described as ineffective at providing consistent, reliable transit for commuters. Improving the frequency of rides and stops was described as a key barrier to commuters using sustainable transportation (ex. if

the Skyline offers greater convenience to travelers, there is a greater incentive to use the existing transit systems). We note the quality of existing modes of mass transit within the larger transportation system is also identified as a major variable within TDM (Dorsey, 2005).

5. **Future research** can and should address the following questions:
 - a. How could repeat studies of the same population validate the perceptions about sustainable transportation and the Big Sky commute identified here? Are the findings of this study replicable in larger qualitative studies?
 - b. What would a longitudinal study of commuters reveal? Do the recommended incentives change commuter behavior, and are the changes to behavior short-term or longer lasting? How does sampling in the shoulder season versus the busier summer and winter influence results?
 - c. Which interventions and policy strategies most effectively influence commuter knowledge, attitudes, and behaviors in terms of sustainable transportation support and use?
 - d. Is there a difference in Big Sky commuter participation in sustainable transportation offered privately through employers or public transit options?
 - e. Is there an equitable distribution of sustainable transportation use among different demographics of Big Sky commuters?

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Appendix A – Survey Instrument

Commuter's Perceptions with Commuting to and from Big Sky, Montana

Thank you for being a participant in our interview regarding sustainable transportation and commuting to and from Big Sky, Montana. We are graduate students studying public administration at Montana State University researching commuting habits and sustainable transportation in the Gallatin Valley in coalition with GoGallatin. Sustainable transportation is a vital aspect of reducing communities' contribution to climate change. The survey will consist of questions surrounding incentives, barriers, perceptions, and behaviors that influence the public's participation in sustainable transportation as well as demographics.

Some terms you will hear throughout the interview include sustainable transportation, commuting, incentives, and barriers. In the context of this study, *sustainable transportation includes* use of the Skyline Bus or carpooling with two or more people for your commute to and from Big Sky. *Commuting* can be defined as a regular, routine, consistent travel from point to point for work. An *incentive* is something that encourages or motivates someone to do something whether it be cash, gift cards, or other rewards. *Barriers* can be defined as obstacles or challenges that can prevent or disincentivize a certain behavior.

Your verbal consent aligns with documented consent in the approved Institutional Review Board (IRB) form. Your responses may help us learn more about the long-term effects of single-occupancy motor vehicle transportation on the environment and how sustainable transportation can reduce these effects. Your participation in this survey is voluntary. Do you consent to have your audio and video recorded? You are free to turn your camera off if you choose. You may refuse to take part in the research or exit the survey at any time. You are free to decline to answer any question you do not wish to answer for any reason. There are no foreseeable risks involved in participating in this study other than those encountered in day-to-day life.

Your identity will remain anonymous as your responses are not linked to your identity when stored electronically. We will ensure your information will be kept confidential. At any point during this interview, feel free to ask the survey administrator any questions. As noted in the consent form, we will be recording and transcribing these interviews. You will receive a copy of transcript to review for accuracy and any text can be edited or deleted per your request. You will receive a copy of the final report and will be invited to a final presentation.

If you have any further questions after this interview is conducted at any time about the survey, research, or procedures, I can provide you with the contact information of the research supervisor or the contact for the IRB research manager.

Thank you again!

Things to know prior to interview:

Is this person an employer or employee?

What is the size of the business?

- *Businesses 1-25 employees - Employers & Employees*
- *Businesses 25-100 employees – Employers & Employees*
- *Large Businesses 100+ employees – Employees, & Key Informant Interviews with HR Directors*

1. Tell us about your commute to and from Big Sky

Prompts for both Employers and Employees:

- *Can you describe what your commute is like?*
 - *How many days/week do you commute?*
 - *How long does your commute usually take?*
- *How does you commute usually go?*
- *Do you like to listen to music or podcasts?*
- *How do you feel about your commute?*
- *How do you feel during your commute?*
- *What does an average week of commuting look like for you?*
- *When does your commute begin?*
 - *What time do you wake up? How long does it take for you to get ready?*
- *When does your commute end?*
 - *Do you go straight home? Do you take the same route? Do you stop for gas or food?*
- *Do you own a car that you could use reliably for transportation to/from Big Sky?*
- *Did you move to Montana or the Gallatin Valley for a job in Big Sky?*
- *What time are you expected to arrive at work? How flexible is this?*

Prompts for just Employers:

- *In what ways are you concerned about your employees' commute?*

Prompts for just Employees:

- *In what ways do you think your employer is concerned about your commute?*
- *If yes – in what ways are they concerned?*

2. Have you ever used sustainable transportation (ST) for any commute outside of Big Sky? If yes, what was that experience like?

Prompts for both Employers and Employees if yes:

- *What type of sustainable transportation did you use?*
- *What was that experience like?*
- *Why did you choose this form of sustainable transportation?*
- *Where were you going?*

3. Have you ever used sustainable transportation for your commute to and from Big Sky? If yes, what was that experience like?

Prompts for both Employers and Employees if yes:

- *What type of sustainable transportation did you use?*
- *What was that experience like?*
- *Why did you choose this form of sustainable transportation?*
- *Where were you going?*

- *How do you access your sustainable transportation?*
 - *How many days per week do you utilize ST (like Skyline Link to the Peak) per week? Per month?*
 - *What location do you normally begin/end your trip?*
 - *How do you get to the beginning location?*
 - *How far is it to that location?*
 - *How do you get to your final location?*
 - *How far are you traveling from the end location?*
 - *How long have you commuted this way?*
 - *How far do you live from a bus stop?*

4. If uses ST: What challenges do you face when using sustainable transportation? Are there challenges that prevent you from using sustainable transportation more?

5. If they do not use ST: What are the main challenges that prevent you from using sustainable transportation?

Prompts for both Employers or Employees:

- *What are your feelings about sustainable transportation?*
 - *What are the benefits of sustainable transportation?*
 - *What are the drawbacks of sustainable transportation?*
- *What factors into your decision to commute the way you do?*
 - *Family, parking, weather, opportunity costs (time, money), reliability, traffic*
- *Do you feel that the current public transportation system is handicap/ADA accessible?*
- *If your current form of transportation is not available, what alternatives would you use?*
- *What time of day do you commute to/from Big Sky?*
- *When at your work location in Big Sky do you need to travel within the Big Sky area within working hours?*

6. What kinds of incentives currently exist to promote your use of sustainable transportation?

7. What kinds of incentives do you think *should* exist to promote your use of sustainable transportation?

Prompts for both Employers and Employees:

- *Discuss these as possible incentives: employer-provided subsidies, reimbursements, partial payments, or pre-tax payroll reductions)?*
- *Is telecommuting ever allowed?*

Prompts for just *Employers*:

- *What motivates your desire to provide alternative transportation for employees? What do you get out of it?*
- *What are you willing to invest? Does partnering with other businesses/orgs/grants to ameliorate the cost affect your decision?*
- *What do you think it would take to get commuters to use alternative transportation?*
- *Does your business allow for telecommuting?*
 - *If not, how could this be incorporated?*

Prompts for just *Employees*:

- *What do you see as benefits of using public transportation (e.g. improving community and physical health and equity)?*
- *What are your thoughts regarding public transportation and its carbon footprint?*
- *How much money do you spend on gas per week?*
- *Would saving money on gas entice you to take the bus?*
- *Please describe the effect of travel conditions on your commute?*
- *What incentives provided by your employer would encourage you to use transit more often?*

8. Can you describe your ideal commute?

9. General Demographic Questions

- What is your age?
- What is your gender?
- Where do you live?
- What is the highest degree or level of education have you completed?
- What is your annual household income?
- **RESPONSE IS OPTIONAL:** What is your salary range? IE are you the primary/sole earner in your household?
- Tell us about your employment situation? How many hours per week do you work? Seasonally or year-round?

Concluding Questions / Statements

Is there anything else you would like to share with us? Any questions for us?

We're looking for additional people to engage in our research. Can you recommend anyone that would like to participate in our survey?

We will be in touch via email (unless you prefer another method). You will receive a copy of transcript to review for accuracy; any text will be edited or deleted as per your request. You will receive a copy of the final report and invited to the final presentation. Thank you again for your participation!

Appendix B – Interview Transcriptions

Full transcripts of the interviews are available upon request.

To put in a request for the full transcript, please email Paul Lachapelle at paul.lachapelle@montana.edu or Matthew Madsen at matthew.madsen@montana.edu