

Patti Cobb

From: Emil Almberg <almberg@basineng.com>
Sent: Friday, January 19, 2024 5:29 PM
To: Jennifer Lee, Patti Cobb
Subject: Council Report

Here's a quick draft

Had Aultman meeting last week with NDOT
-Water plans going into State Drinking Water for Review

Finalizing Central Ely Sewer Plans
-Hope to have package on the street for bidding in the next few weeks

Waiting for return comments from NDEP on Bell Water plans

Working with Mike on how to proceed with Lead/Copper rule due in October

B J.

Emil W. (B.J.) Almberg, Jr., P.E./P.L.S.
Principal



Consulting Engineers & Land Surveyors

1070 E. Aultman St
Ely, NV 89301
(775) 296-0701 cell
(775) 289-9800 office
almberg@basineng.com

January 23rd, 2024

Addressed to the Following:

Members of the City Council

Terrill Trask | Council Member Seat 1
Kurt Carson | Council Member Seat 2
Samantha Elliott | Council Member Seat 3
Jim Alworth | Council Member Seat 4
Jerri-Lynn Williams-Harper | Council Member Seat 5

City Mayor Nathan Robertson
City Attorney Leo Cahoon

LETTER OF RESIGNATION
for January 25th 2024 City Council Meeting
re: City Council Agenda Item # B - 12

To All This May Concern:

I really wanted to attend in person but have committed to a prior engagement during this hour. I'd like to make a specific request if I may, that this letter is read aloud during the meeting, and would also ask that this letter be filed as an addendum to be included with the meeting minutes on public record. I would respectfully ask that this agenda item remain open for discussion so that all of what I'm about to present is fairly published on record in its full context.

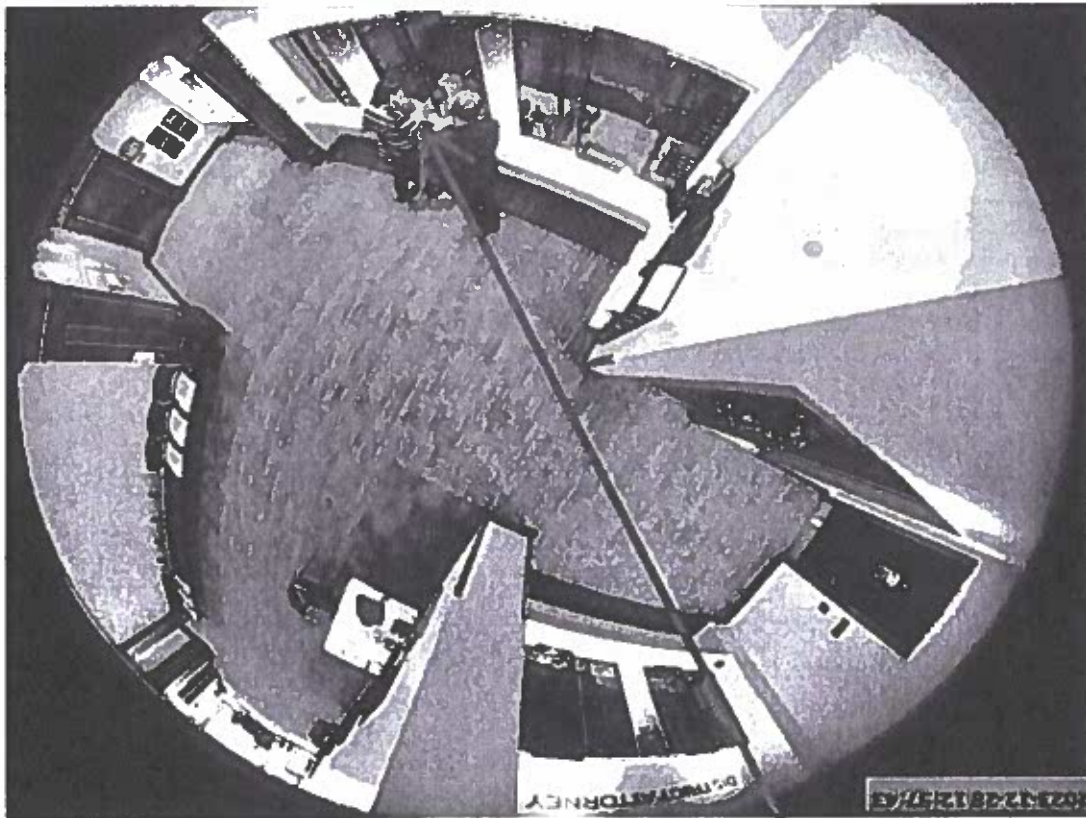
I want to extend my sincere offering of gratitude to every single member on this council for your trust in me to have voted unanimously to extend this opportunity to serve on the Regional Planning Commission (RPC) a 5th year. I've honorably served on this commission since its onset after having served a 1-year term on the City Planning Commission prior. It's truly been an honor and I can't begin to express how much it means to have had the support of all of you. However due a series of events that has unfolded, I've lost interest and don't feel my contribution to serve in this capacity is an effective use of my time and energy any longer.

If you are to vote this day January 25th 2024, regarding my termination of the RPC for not taking an oath and signing the document, I think it's important that you are provided the full context of events leading to this.

First off I feel this effort to have me removed from the the RPC to be very calculated and should be looked into further whether or not this is a act of retaliation by those involved (see attached letter dated January 2nd 2024 sent to Nichole Stephey and cc to District Attorney James Beecher). I have served on the RPC for 5 years and evidently over the course of the last year without an official oath on record. I have taken the oath to serve on this commission without question in the past and have no issue with renewing this oath when the timing is appropriate and presented to me in a respectful and professional manner. I find it all too suspicious that we are only now talking about this, TWELVE MONTHS into my term with an apparent missing oath.

It was my understanding that the document I was asked to sign the beginning of 2023 by Building Department Manager Jennifer Drew-Lesher, was the official oath. But now I'm being told there are two oaths. As detailed in City Attorney Leo Cahoon's letter dated January 11th 2024, which I received upon my return from vacation (honeymoon), the 22nd of January, it's become my understanding that a good 4 months into this term had passed before elected public official White Pine County Clerk Nichole Baldwin was instructed in late April (2023), to reach out and advise a signed oath must be furnished to her office as well. Months into the 2023 year, I was informed that this administration accidentally overlooked the administrative process for a re-appointment term back in December 2022, thus my re-appointment was not scheduled to vote until April 2023. To be honest, I too somehow overlooked that my term expiration came and went, but It is the responsibility of this administration to keep atop of these administrative matters.

It has now been twelve months in total and seven months since County Clerk Nichole Stephey was informed of the needed oath and signed document but yet, Mr. Leo Cahoon allows me only a single weeks' time to provide a signed oath, the very week I happened to be out of the country enjoying my honeymoon vacation. There was No call/No email; only a certified letter. I think it's important to distinguish who dropped the ball in this matter, and likewise, give credit where credit is due. My latest term prior to this one, expired in December (2022). However, I continued to serve on the RPC as a courtesy and as you know without pay (I am a VOLUNTEER) until further guidance would be furnished. If any of you on this council were "confused" as to why you were being asked to vote on my re-appointment in April and not December (2022) as it should have been, it is strictly due to Nichole Stephey's failure to follow through with these things in a timely fashion, but somehow this failure has been diverted and aimed at me in a very personal manner.



This is me with my hand raised giving an Oath, which was misrepresented as a procedural step during the marriage licensing process. County Clerk Nichole Stephey put one of her employees up to this, to sneak a document into a procedure completely unrelated to what we came for.

In the above screenshot image, if you look closely, you can see my hand raised in the air. I'd like the opportunity to explain what this is about. This was me giving a supposed Oath for what we were led to believe pertained to our marriage. My (now) husband and I were told during the paperwork process for our marriage license, that this was "the last thing" we must complete in the marriage license process, an oath. A bit confused, as we had always understood a marriage oath was done before the Justice of the Peace. I continued anyway as I was directed by the attendee. The woman who was put up to this by her boss Nichole Stephey presented two documents before us and then proceeded to advise that I raise my hand and read the first document aloud first. As it became increasingly evident this had nothing to do with the process we came in for, I then asked her mid-way, "What does this have to do with our marriage?" I could hear Nichole Stephey laughing in her nearby office all the while. In a bantering manner, the woman hastily grabbed the two documents as fast as she could and placed them beneath the desk. She replied to say that she thought I wanted to do this for "the commission" while there was no mention or discussion about a commission at any time during the process. I had to ask at that point if we were done as we were left a little confused as to what we were expected to do next in the process. The woman responded "yes you're done," as she quickly shuffled away to hide in a preposterous fashion. I consider myself a light-hearted easy going individual with a well-rounded sense of humor myself. I know funny and by no means was this funny, for a group of ladies to desecrate such an important day for a couple in such a dishonorable manner. This is a group of women in my age bracket that are expected to conduct themselves in a professional manner, that work as the front face representatives at our county courthouse, caught in action, acting like a bunch of bully teenagers. I WANT IT STATED ON RECORD, this is the real reason I refused to sign a document that day on December 28th 2023, when my to-be husband and I went into that courthouse to obtain a marriage license.

Minutes passed before I returned to the clerks window myself to inquire about how I may obtain the video footage of what just occurred. After waiting for some time at the clerks window, I had to sound the bell to get an attendees' attention because all of the girls were too busy discussing and laughing in Nichole Stephey's office about what they just did. They thought this was funny. I must profess, I don't believe it could be any more synchronistic than this, that this would happen when this just so happens to be exact kind of unprofessional misconduct I've been exposing, within what should be revered as a top-tier professional position within our government. It is crucial that we start holding these officials accountable. Nichole Stephey should have been reprimanded for not only participating but even instructing her employees, to engage in this level of misconduct. The responsibility to enforce professional conduct of this office would be befall upon the duty of DA Mr. James Beecher. Interestingly however, even after having been informed about the occurrence, he seems more interested in grasping at any straw to have me removed the first chance he thought is permissible. On January 2nd, my newly-wed husband sent an email to Nichole Stephey and DA Beecher. DA Beecher was indeed informed about what occurred, but to date, my husband has received no apologies; not even the decency of a reply. It seems the only reaction to the email is to quickly remove me from the RPC in retaliation for calling out the unprofessional conduct at the clerks office on December 28th.

I have also learned that while I was out of country for the January 17th RPC meeting of which I did in fact inform Jennifer in advance I would not be able to attend, I was removed as Vice Chairman. I find this again a calculated act at which those involved knew I would not be in attendance for.

I surely didn't expect or wish to announce our marriage in this manner and frankly, our preference would have been to keep it a little more low-key than this. But since it is professed on record, I'd like to say that in spite of the atrocious manner in which we were treated at the clerks office during the marriage licensing process, the day couldn't have ended better, with all else considered. From this day forward, the initiative to tackle these issues of questionable governmental ethics, accountability, and transparency is where I will devote the large part of my time and energy. We must preserve and protect the rights of the people, The Constitution, and restore public trust in these important leadership roles. It's time to pull in the reins of this government over-reach and the abuses that all of us have become witness to. I don't see anything of greater importance than this, if I may be of service at this critical point in time. Please consider this my official Letter of Resignation from the Regional Planning Commission.



I wish all of you the very best and a sincere thank you for your service as members of The City Council.

Respectfully,

Leah Brown

EMAIL RECIEVED BY BOTH PARTIES

Neither DA James Beecher or County Clerk Nichole Stephey has had the decency to respond.

From: Blake C <bdjcook98@gmail.com>

Date: Tue, Jan 2, 2024, 9:57 AM

Subject: Professional conduct

To: wpclerk@whitepinecountynv.gov <wpclerk@whitepinecountynv.gov>, <nicholestephey@whitepinecountynv.gov> <nicholestephey@whitepinecountynv.gov>

Cc: jbeecher@whitepinecountynv.gov <jbeecher@whitepinecountynv.gov>

Dear Nichole,

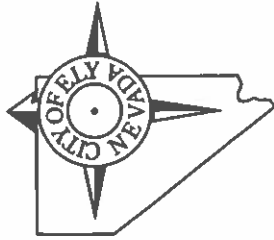
I would like to express my dissatisfaction regarding mine and Leah's visit at the County clerks office on Dec 28th. First off I'd like to thank the representative for her courteous attention she provided with helping to fill out the marriage license for both I and Leah.

Now regarding your professional conduct. At the end of filling and paying for the marriage license Leah was presented with another form in conjunction with our visit. During that process we both became quite confused and ultimately quite frustrated that Leah was being presented with another form and oath completely unrelated to our visit with absolutely no explanations to its content before hand!

This may seem to you as a matter of fact but in my eyes this tainted an otherwise joyous occasion. I've had to endure the last few days listening to Leah complain about our visit and why as a matter of professionalism you simply could have come over and asked if this would be a good time for Leah to sign and take the oath regarding the RPC. This simple courteous gesture on your part would have been the appropriate action and would have save my time responding to our visit and frustration over the last few days.

With all due respect,

Blake Cook



CITY OF ELY

501 Mill Street Ely, Nevada 89301
City Hall (775) 289-2430
Fax (775) 289-1463
Cityofelynv.gov

Real Property that is located on the southwest corner
of Belfort Avenue and Center Street, Ely, Nevada and
is 1.18± Acres of Land.

City of Ely
Real Property Sale
Bid Tabulation

APN: 001-121-01

| Bid Items | <u>Bidder</u> | Highest Bid for Property |
|--|---|---|
| Bid (Minimum Bid \$12,000.00) | David Weaver, White Pine Construction, NV License 30998 \$14,017.00 | \$14,017.00 |
| Detailed Plan for residential increase | Build a single-family home with an attached RV garage. See Attached | Detailed Plan provided |
| Time Frame for Completion | One to two years (weather permitting) | Time Frame of one to two years provided |

Present for Bid Opening: City Clerk Lee and Administrative Assistant Cobb

The City of Ely is an equal opportunity provider and employer.

January 24, 2024

To: City of Ely

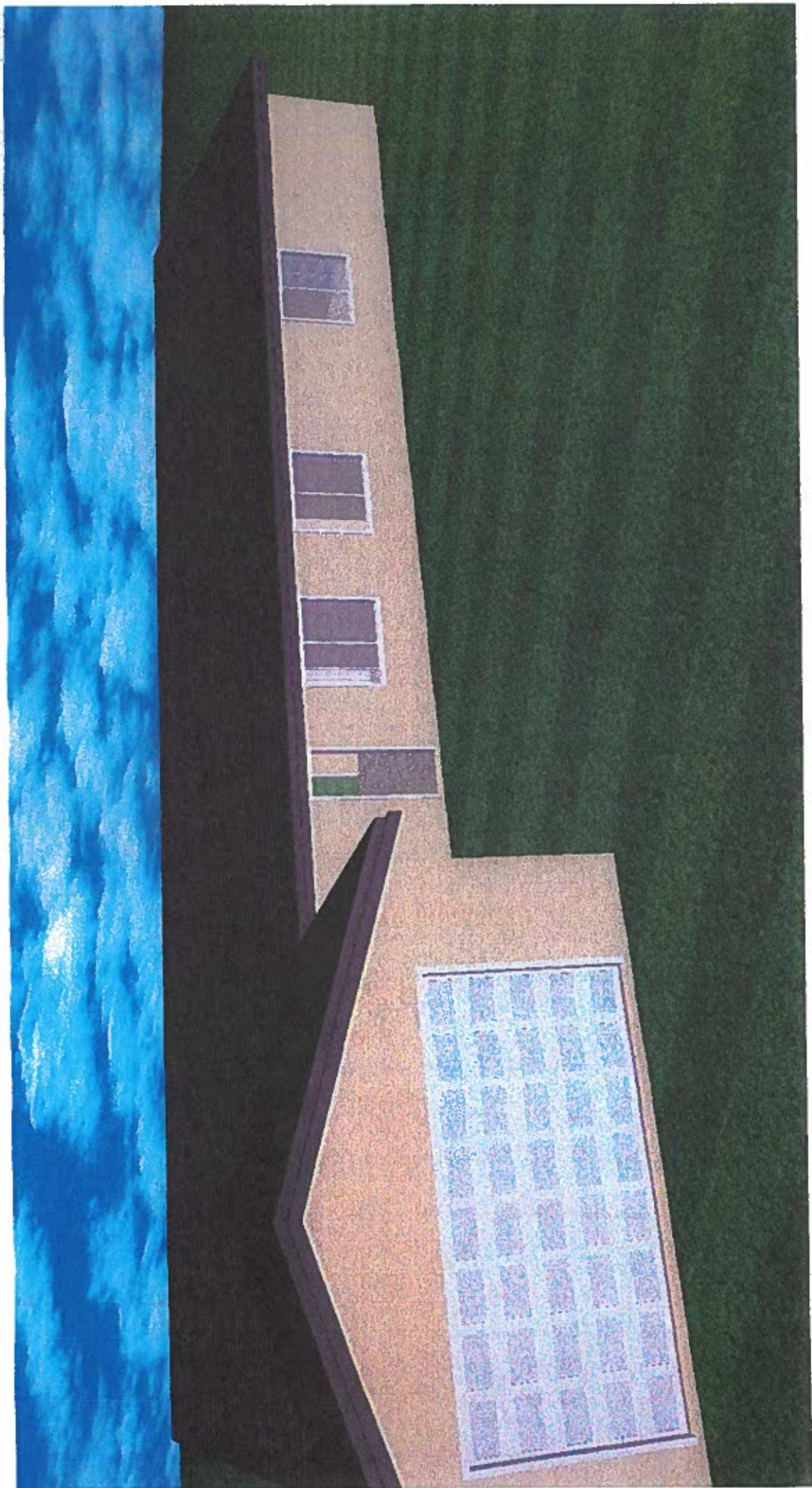
Fm: David Weaver, White Pine Construction, NV Lic. 30998

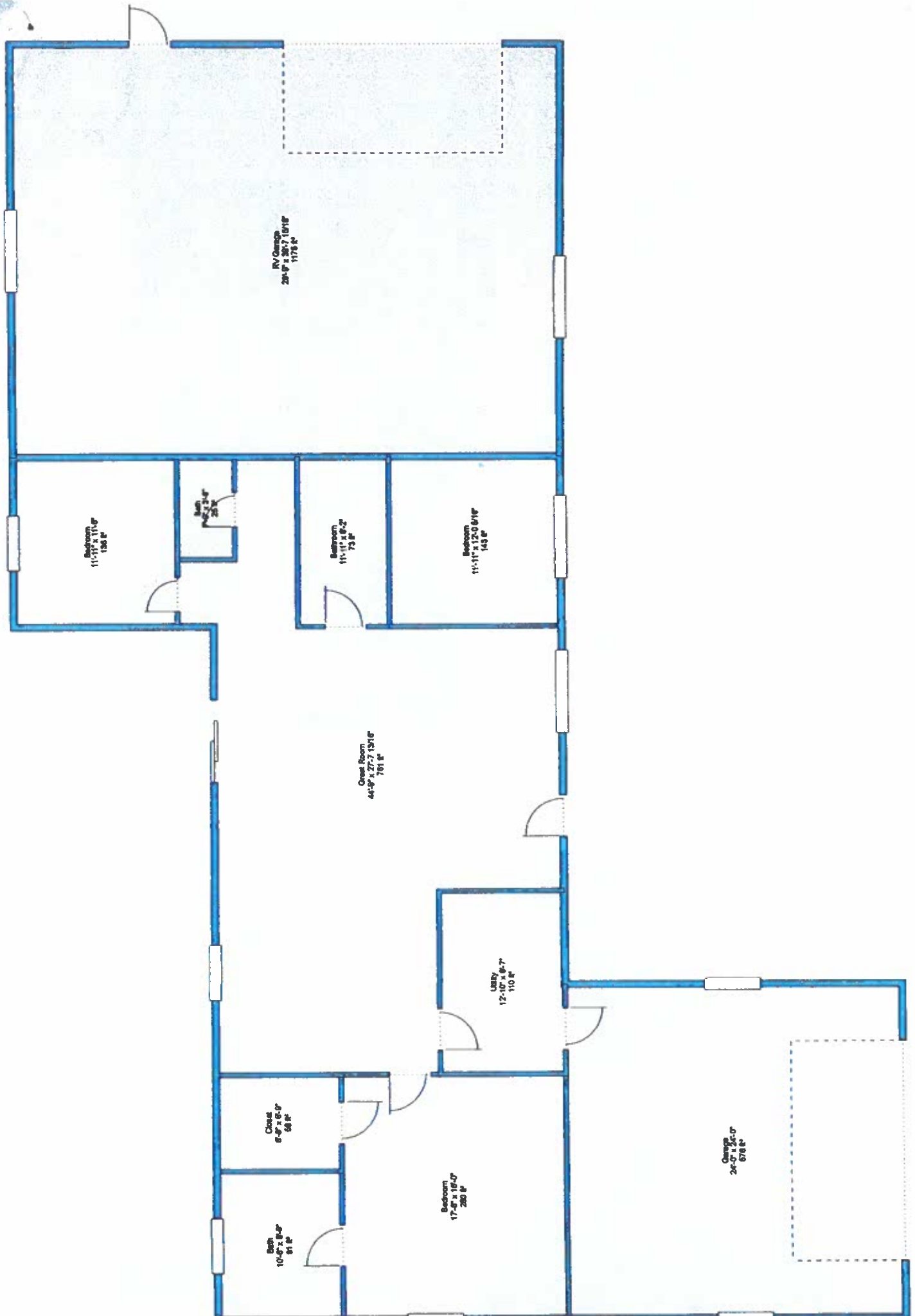
Re: Property on Belfort Parcel #001-121-01

I would like to bid \$14017.00 (Fourteen Thousand Seventeen Dollars) for the above property.

Build a single-family home with attached RV garage.

Time line ^{or 2} 1 year (weather permitting)





RECEIVED

JAN 24 2024

BY:

1:15 PM

Jennifer Lee
City of Ely

Jennifer Lee

From: Jennifer Drew <JDrew@whitepinecountynv.gov>
Sent: Wednesday, January 24, 2024 3:03 PM
To: Leo Cahoon
Cc: Jennifer Lee; Nichole Stephey; Nathan Robertson; Ross Smillie
Subject: FW: Supplemental Documents from January RPC Meeting

Good Afternoon,

After reading the letter submitted by Leah Brown, regarding her placement on the January 25th Agenda of the City Council, I would like to clarify the facts of any involvement I was said to of had with this matter, as well as to speak to the innocence of others.

First of all, I have NEVER asked Leah Brown, or anyone else for that matter, to sign an oath of any kind. I do not even possess a copy of the oath, as I know it is not my position to administer the oath to any Regional Planning Commission Board Member. I clearly pointed this out in my response to Leah in the email copied below.

Secondly, I was unaware that Leah's term was even up in January of 2023, or that she had been reappointed in April. I usually receive a copy of letter that is sent out to any Board Member, notifying them of their term expiration, by the County Clerk. I have no letter on file notifying me of such, so I certainly would not have been offering up any kind of oath (even if I were able to) for a position I did not know expired.

Third, Leah did notify me on January 5th that she would not be able to attend the January RPC meeting, as shown in her email copied below. This was information that only I had, as the Clerk of the Board. It had not been disclosed to either the City or County Attorney until the day of the meeting. There was no conspiracy as to the timing of the letter sent out by Attorney Cahoon, as even I did not know if Leah was out of town for a day, a week, a month....the email did not disclose that information.

Lastly, the elections of a new Chairman and Vice Chairman were conducted in an open meeting. There was no pre-calculated plan as to whom would be appointed to what position. Nominations were made during the meeting. I feel that perhaps the Board was nominating for these positions based on who was present at the meeting to willingly accept the position. So, again, no malice was presented during the election of these positions.

Leah Brown has been a good Board Member during her time of service, and I have always greatly appreciated her service to the Board. However, I cannot sit by and let these mistruths spoken of myself, the Attorneys, and the Board Members go unanswered. This is the sole reason for my email. I have no vendettas to fill or ill-will toward Leah, I only wish for the facts to be presented honestly and correctly.

Best Regards,

JENNIFER DREW-LESHER

Management Assistant
White Pine County/City of Ely Building Dept
501 Mill Street
Ely, NV 89301
Phone (775) 289-6500 Ext. 214
Fax (775) 289-1463



Fri 1/5/2024 11:55 AM

This next rpc

To Jennifer Drew

 You replied to this message on 1/5/2024 12:03 PM.

Hey Jennifer. I thought I'd let you know in advance I will be out of town for this month's RPC meeting so I won't be able to make this next one.

Have a super nice weekend 😊

Leah Brown

From:

Sent: Tuesday, January 23, 2024 7:01 AM

To: Jennifer Drew <JDrew@whitepinecountynv.gov>

Subject: Re: Supplemental Documents from January RPC Meeting

Will do. Thank you so much Jennifer.

Leah B.

On Mon, Jan 22, 2024, 11:19 AM Jennifer Drew <JDrew@whitepinecountynv.gov> wrote:

Good Morning Leah,

Welcome back! I hope you had a great time! I hear congratulations are in order....I'm happy for you!! I am in need of a good, long vacation myself, but I don't think it is going to happen for a while. It is very sad about Rod. He was sick and gone in less than a week.

I do not have a copy of the signed oath. Those are done by Nichole at the Clerk's Office, and need to be done each time your term is renewed. I know you are on the agenda for Thursday's City Council Meeting, so if I were you, I would make an appointment to talk to the Mayor and explain that you have been out of the Country while all of this was taking place, and that you will go take the oath immediately, if that is your desire to do so.

Congrats again, on your marriage!!

JENNIFER DREW-LESHER

Management Assistant

White Pine County/City of Ely Building Dept

501 Mill Street

Ely, NV 89301

Phone (775) 289-6500 Ext. 214

Fax (775) 289-1463

From:

Sent: Monday, January 22, 2024 8:03 AM

To: Jennifer Drew <JDrew@whitepinecountynv.gov>

Subject: Re: Supplemental Documents from January RPC Meeting

Thank you Jennifer!

Good morning and happy Monday. I just returned to the states to learn a lot of action took place while I was gone.

Just shocking about Rod ❤️. That is so thoughtful of you to honor him with flowers like you did Carol 🥺

On another note, might you have a copy of the Oath I signed awhile back? I'm not sure I saved a copy for my own records.

Thank you so much,

Leah Brown

On Fri, Jan 19, 2024, 4:20 PM Jennifer Drew <JDrew@whitepinecountynv.gov> wrote:

Attached are the documents presented during the RPC Meeting on Wednesday.

Thank you,

JENNIFER DREW-LESHER

Management Assistant

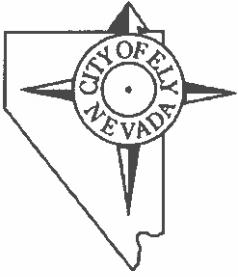
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Ely, NV 89301

Phone (775) 289-6500 Ext. 214

Fax (775) 289-1463



CITY OF ELY

501 Mill Street Ely, Nevada 89301

City Hall (775) 289-2130

www.Cityofelynv.gov

January 25, 2024

Public Works Director Update:

I am out of town for the meeting, but wanted to update on a couple of items.

- Water/Sewer Department's dump truck has been repaired and has been put back into service as of January 17, 2024.
- The pumper truck used at the Wastewater Treatment Plant Lift Station will be returned next week.

If you have any questions, I am available by phone.

White Pine Chamber of Commerce

Ely City Council Monthly report for January 2024

- The Chief Executive Officer of White Pine Chamber of Commerce is proud to serve the City of Ely, its residents as well as business and property owners by serving on the Redevelopment Committee. Member Robertson looks forward to working with Councilman Trask and the other committee members in responsibly distributing Redevelopment funds for much needed revitalization projects.

- The white Pine Chamber of Commerce is now serving the City of Ely further by taking over the Downtown Visitor Center after another agency dissolved their role in operation of this much needed service that supports commerce throughout the city and county.

A visitor center is a vital resource for thousands of out-of area-visitors as well as locals that rely on a centralized information hub. The Chamber now employs two additional part-time employees to provide this service out of our downtown office location.

- The Chamber of Commerce is happy to report that White Pine County continues to have the lowest unemployment in the state. Based on informational meetings the CEO has with the US Chambers of Commerce the economic outlook for 2024 is projected to be a positive and robust year.

- The White Pine Chamber of Commerce is also proud to continue developing its services for members and increase the support offered to small businesses and appreciates the City of Ely's assistance in furthering that mission.

White Pine Waterpower, LLC

2023 Supplemental Study Reports

Related to the NPS Request for Study Dispute Resolution

Prepared for Ely City Council Members

January 25, 2024

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Section 1:

Supplemental Key Observation Points and Photo Simulations to the Visual and Aesthetic Resources Study Report (July 16, 2023)



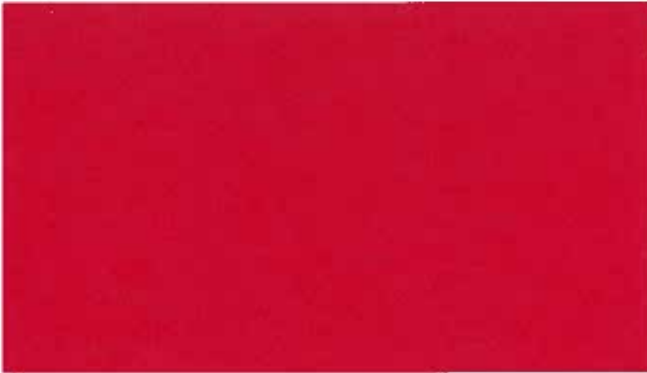
Supplemental Key Observation Points and Photo Simulations to the Visual and Aesthetic Resources Study Report

White Pine Pumped Storage Project

White Pine Waterpower, LLC

White Pine County, Nevada

July 16, 2023



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Appendices

Appendix A. White Pine Pumped Storage Photosimulation Supplemental Report, Mott
MacDonald dated May 5, 2023

Acronyms and Abbreviations

| | |
|---------------------|--|
| BLM | Bureau of Land Management (U.S.) |
| DLA | Draft License Application |
| FERC | Federal Energy Regulatory Commission |
| FLPMA | Federal Land Policy and Management Act of 1976 |
| GIS | Geographic Information System |
| GPS | Global Positioning System |
| KOPs | Key Observation Points |
| NEPA | National Environmental Policy Act of 1969 |
| NNR | Nevada Northern Railway |
| NPS | National Park Service |
| Project | White Pine Pumped Storage Project |
| RMP | Resource Management Plan (Ely District Office) |
| Study Report | 2021 Visual and Aesthetic Resources Study Report |
| Supplemental Report | Supplemental Visual and Aesthetic Resources Study Report |
| USFS | U.S. Forest Service |
| VRI | Visual Resources Inventory |
| VRM | Visual Resource Management |
| WPW | White Pine Waterpower, LLC |

1 Introduction

White Pine Waterpower, LLC (WPW) added new key observation points (KOP) and developed new photo simulations to supplement the *Visual and Aesthetic Resources Study Report*, dated January 17, 2022 (Original Report) based upon consultation with the National Park Service (NPS) and the Nevada Northern Railway (NNR) relating to the NPS study dispute request it filed with FERC on May 18, 2022. (WPW, NPS, and NNR are collectively referred to herein as, the parties)

This report (Supplemental Report) describes the process WPW utilized, and results derived from the additional data WPW collected on potential visual impacts from both previously identified and new KOPs along the HiLine rail line that are closer to or within the boundary of the White Pine Pumped Storage Project (Project) than those presented in the Original Report. Additionally, this Supplemental Report also describes collected data on potential visual impacts relating to the NNR's inactive Mainline. The parties consulted and agreed on the KOPs and the photo simulations that are included in this Supplemental Report.

This Supplemental Report is not intended to change or alter the observations and conclusions drawn in the Original Report. This Supplemental Report describes the development method and provides the photo simulations resolving one issue of the NPS study dispute and the ongoing consultation among the parties.

1.1 Background

WPW filed a Draft License Application (DLA) with the Federal Energy Regulatory Commission (FERC) on February 17, 2022, which provided agencies and other stakeholders the opportunity to review the proposed Project and provide comments. WPW received comments from the United States Bureau of Land Management (BLM), City of Ely, FERC staff, McGill Ruth Sewer-Water General Improvement District, Nevada Division of Wildlife (NDOW), NNR, NPS, White Pine County, and several individuals.

After reviewing NPS comments on the DLA and appended study reports, WPW consulted with the NPS and the NNR via email and telephone, and conducted an in-person meeting in Ely, Nevada on August 2, 2022, to discuss the NPS comments. After the August 2022 meeting, WPW continued consultation with NPS and the NNR to identify and refine potential additional KOPs, to collect photographs, and to finalize an approach to supplement the Original Report.

1.2 Project Description

WPW is proposing the licensing, construction, and operation of the Project in White Pine County, Nevada, approximately 8 miles northeast of the City of Ely. The Project is a 1,000-megawatt, closed-loop, pumped storage facility that would require the construction of two new water reservoirs joined by conduits, as well as an underground powerhouse and associated generation, pumping, and transmission equipment. The Project will be located entirely off-stream, meaning neither the upper nor lower reservoir will intercept a perennial surface watercourse. WPW will pump groundwater to initially fill the reservoir system and to fill the required annual make-up water for evaporation losses under permits held by White Pine County.

1.2.1 Proposed Project Facilities

The upper reservoir will be situated on top of the Duck Creek Range in a generally oval shape. The upper reservoir will have walls ranging from approximately 165 feet above-grade on the east to 87 feet above-grade on the west. The walls of the upper reservoir will be a ring dike or rock-filled embankment, with generally gray color stone (this will look like small boulders ranging in size from 2-5 feet), with a maximum surface area of approximately 60 acres. An 8- to 10-foot-tall chain link fence will surround the upper reservoir. No exterior artificial lighting will be present at the upper reservoir unless required (and only for) safety purposes. Any such lighting will be dark skies compliant.

The upper reservoir is not within the line-of-sight at any of the KOPs from either the inactive Mainline or the HiLine rail line that are included in this Supplemental Report. As a result, depictions of the upper reservoir are not included in this Supplemental Report.

The lower reservoir will be situated in the Steptoe Valley along Highway 93, in a generally oval/rectangular shape. The lower reservoir will have walls approximately 123 feet above-grade along the west and will be at-or below-grade to the east. The walls of the reservoir will be an earth dam on three sides (like other earthen embankments in the area), with a maximum surface area of approximately 80 acres. An 8-foot-tall chain link fence will surround the lower reservoir. No exterior artificial lighting will be present at the lower reservoir, unless required (and only for) safety purposes. Any such lighting will be dark skies compliant.

The Project includes a 345-kilovolt switchyard and an approximately 25-mile-long transmission line to connect to the existing Robinson Summit Substation. The switchyard will be located east of Highway 93 and the lower reservoir and will contain equipment enclosed within a 10-foot-high, chain-link security fence. The transmission line is anticipated to have H-frame support structures, averaging 125 feet tall with approximately 1,000-foot spans between the structures. The H-frame support structures will likely be weathered steel with multiple wires. Most of the transmission line will follow a cross-country route adjacent to an existing transmission line and along an existing energy corridor. WPW is proposing one aerial crossing of Highway 93 and one aerial crossing of Highway 50. No exterior artificial lighting will be present at the switchyard, unless required (and only for) safety purposes, or associated with the transmission line. Any such lighting at the switchyard will be dark skies compliant.

1.3 Project Area

The areas adjacent to or within the Project boundary are dominated by sagebrush scrub in the lower elevation areas and pinyon-juniper woodland in the higher elevation areas. A riparian woodland occurs in the vicinity of the eastern edge of the Project area. Chaparral habitat types also occur in the Project area in intermediate elevation range areas. Seasonal cattle grazing occurs throughout the general Project area.

The lower reservoir and switchyard are located within the Steptoe Valley. The areas near or adjacent to the Project boundary that are within the Steptoe Valley include desert landscape, cultivated and irrigated agricultural fields, a major residential area (Cross Timbers), existing transmission and energy corridors, many overhead electrical distribution lines, an existing regional transmission substation (Gonder Substation), two gravel pits, construction laydown yards, a mine

tailings repository, a major transportation corridor (US Highway 93), rail lines, and the Bristlecone Wilderness and Heusser Mountain on the western horizon. Several other industrial and commercial structures and features are also visible.

2 Methodology

WPW developed the Original Report to support FERC licensing of the Project. WPW developed the Original Report in accordance with the BLM Manual Handbook 8410-1, Visual Resource Inventory (BLM 1986) and the BLM - Ely District Office Resource Management Plan. WPW included the Original Report with both the DLA it submitted to FERC on February 17, 2022, and the Final License Application (FLA) submitted to FERC on February 27, 2023.

On May 18, 2022, the NPS filed a study dispute with the FERC requesting WPW modify the Original Report to include additional KOPs and photo simulations. Specifically, NPS requested that WPW select and analyze additional KOPs along the NNR HiLine and develop additional photo simulations of Project facilities as seen from the passenger trains within and adjacent to the Project boundary. NPS also requested WPW add additional KOPs and develop photo simulations on potential visual impacts to the inactive Mainline due to NNR's proposed rehabilitation and reopening of those tracks. The parties consulted extensively from July 2022 through June 2023 on identifying appropriate KOPs and developing mutually acceptable photo simulations. The parties also agreed to include several of the developed photo simulations in a visitor use and experience survey so that riders of NNR train excursions could comment on how potential changes in the viewshed would impact their rider experience.

This Supplemental Report includes a description of the previously identified and the new KOPs along the inactive Mainline and the HiLine rail lines of the NNR that are closer to or within the Project boundary than those presented in the Original Report and includes the developed photo simulations resulting from the parties' extensive consultation.

2.1 Identification of KOPs

Initially, the parties agreed to obtain additional photographs from eleven KOPs that were within and/or adjacent to the Project boundary. Of these eleven KOPs, nine were in addition to the KOPs included in the Original Report. These eleven KOPs are identified below in Table 1 and included in Figure 1.

Table 1 – Identification of Initial KOPs

| HiLine | Mainline |
|---------|----------|
| KOP 4 * | KOP 11 |
| KOP 5 * | KOP 13 |
| KOP 12 | KOP 15 |
| KOP 14 | KOP 18 |
| KOP 16 | KOP 20 |
| KOP 17 | |

* Also included in the Original Report

After reviewing the photos and potential renderings of the Project features as viewed from these KOPs, the parties agreed to reduce the number of KOPs to seven.

- The parties determined that the views from KOP11 and KOP20 were too distant from the Project features to add any value as photo simulation pictures and removed them from the list of viable KOPs.
- The parties determined that the view from KOP12 and KOP14 of the Project features were obstructed by natural features and removed them from the list of viable KOPs.

Of the seven remaining KOPs, WPW created eight supplemental photo simulations. Six of these photo simulations are panoramic and two are single frame shots.

2.2 Description and Location of KOPs

The parties identified the following seven KOP locations to provide a perspective of the Project facilities as seen from the NNR passenger trains and to simulate the potential train rider visual experience. The parties selected these KOPs to provide representative views of existing conditions and to depict changes to the viewshed that will likely occur from the Project.

2.2.1 KOP 4: NNR HiLine Route Near the Upper Reservoir Access Road Crossing

KOP 4 is located along the NNR HiLine tracks, approximately 1.3 miles south/southwest of the Project. From this valley position of relatively low elevation, partial foreground views of the Project area and Schell Creek Range are present. The view represented is typical of the visual experience traveling northeast from Ely along the NNR HiLine route within its scrub-shrub desert landscape, with the railroad tracks being the only prominent introduced feature visible from this location. KOP 4 provides the most direct line-of-sight perspective of the upper reservoir access road from the NNR train rider's experience.

2.2.2 KOP 5: NNR HiLine Route - Star Platform

KOP 5 is located along the NNR HiLine tracks, at the Star Platform for the NNR Star Train, approximately 3.3 miles south/southwest of the Project. From this low elevation, unobstructed ground views are present of the Project area. Light from nearby developments, including the Town of McGill and the Gonder Substation can be seen at night.

2.2.3 KOP 13: Highway 93 and the NNR Mainline Crossing

KOP 13 is located at the intersection of Highway 93 and the NNR Mainline Crossing and is approximately 1.0 mile north/northwest of the Project. From this valley position of low elevation, relatively unobstructed views of the Project area, Schell Creek Range, and surrounding desert landscape are present. Highway 93 and an existing transmission corridor are also prominent features.

2.2.4 KOP 15: Lower Reservoir Access Road/NNR Mainline Crossing

KOP 15 is located at the intersection of the NNR Mainline Route and the lower reservoir access road from Highway 93; it is approximately 0.5 mile west of the lower reservoir. From this valley position of low elevation, relatively unobstructed views of the Project area, Schell Creek Range, and surrounding desert landscape are present.

2.2.5 KOP 16: NNR HiLine Route East of the Lower Reservoir

KOP 16 is located along the NNR HiLine tracks, immediately adjacent to and east of the Project's lower reservoir. KOP 16 is the closest in proximity KOP to the Project's lower reservoir.

The current westerly view from this KOP is an open view of the Steptoe Valley. This view includes desert landscape, cultivated and irrigated agricultural fields, a major residential area (Cross Timbers), existing transmission and energy corridors, many overhead electrical distribution lines, an existing regional transmission substation (Gonder Substation), two gravel pits, construction laydown yards, an active open-pit copper mine, a mine tailings repository, a major transportation corridor (US Highway 93), and the Bristlecone Wilderness and Heusser Mountain on the western horizon. Several other industrial and commercial structures and features are also visible. The current easterly view from this KOP is relatively unobstructed views of the Schell Creek Range and surrounding desert landscape.

2.2.6 KOP 17: NNR HiLine Route Southeast of the Lower Reservoir

KOP 17 is located along the NNR HiLine tracks, adjacent to and southeast of the Project's lower reservoir.

The current westerly view from this KOP is an open view of the Steptoe Valley. This view includes desert landscape, cultivated and irrigated agricultural fields, a major residential area (Cross Timbers), existing transmission and energy corridors, many overhead electrical distribution lines, an existing regional transmission substation (Gonder substation), two gravel pits, construction laydown yards, an active open-pit copper mine, a mine tailings repository, a major transportation corridor (US Highway 93), and the Bristlecone Wilderness and Heusser Mountain on the western horizon. Several other industrial and commercial structures and features are also visible. The current easterly view from this KOP is relatively unobstructed views of the Schell Creek Range and surrounding desert landscape.

2.2.7 KOP 18: NNR Mainline Route

KOP 18 is located along the NNR Mainline Route approximately 1.75 mile south/southwest of the Project. From this valley position of low elevation, relatively unobstructed views of the Project area, Schell Creek Range, and the surrounding desert landscape are present. The current view also includes existing transmission and energy corridors and an existing regional transmission substation (Gonder substation).

2.3 Photographic Inventory

After the parties agreed upon the eleven selected KOPs, WPW conducted field work and completed a digital photographic inventory of these KOPs. WPW took photographs at each KOP utilizing high resolution equipment in consultation with a qualified photographer. WPW recorded GPS location points for each camera viewpoint and collected multiple overlapping site photographs at each KOP. For each KOP, WPW also recorded information related to GPS, camera, and ground truth.

2.3.1 Photographic Field Work – August 11 - 12, 2022

WPW took 135 photographs between August 11-12, 2022, from the approximate locations of the originally agreed upon eleven KOPs. See Figure 1.

Before starting the photographic field work, WPW determined the height from the top of the rail to the proximate middle of the passenger car window as measured at the NNR Depot, so that the pictures could be consistently taken from the rider's height perspective (about 8'). WPW took each picture at each KOP location from a stable platform at the same proximate 8' height from the top of the rail. WPW also recorded for each photograph the GIS coordinates, camera angle, and altitude.

The photos taken at each KOP location during this field work used both a 14mm and 24mm focal length lens setting, at 30-degree radial increments. See Figure 1. Before taking each picture, WPW checked the camera for horizontal level utilizing a bubble level attached to the top of the camera.

2.3.2 Photographic Field Work – September 7 - 8, 2022

WPW took 312 photographs between September 7-8, 2022, from the approximate locations of the originally agreed upon eleven KOPs. See Figure 1.

For the KOPs on the HiLine route, WPW took photographs from an NNR flatcar. For the KOPs on the inactive Mainline route, WPW took photographs at 8' above the rail (to proximate the rider view height). Representatives from the NNR were present and cooperated with WPW in the taking of the photographs from the HiLine. WPW recorded the GIS coordinates, camera angle, and altitude for each photograph. WPW took individual photographs at each KOP location utilizing both a 24mm and 50mm focal length lens setting. WPW took photographs at 20-degree radial increments to support the development of panoramic photo simulation depictions within the agreed upon compass range. Before taking each picture, WPW checked the camera for horizontal level utilizing a bubble level attached to the top of the camera.

2.4 KOP Camera Lens Focal Length and View Angles

The parties agreed on the camera angles and the camera focal length lens settings for the photos from each KOP from which WPW developed the photo simulations. The parties also agreed to utilize only the photographs taken with the 50-millimeter (mm) camera focal length lens to develop the photo simulations.

The camera view angles the parties agreed upon for the initial views from the seven KOPs selected for photo simulations on the HiLine route and the inactive Mainline route are identified below in Table 2 and are included in Figure 2.

The parties also consulted on Project features depicted on the initial photo simulations (such as the inclusion of temporary and permanent structures), after which, WPW finalized the camera view angles to be used for the final photo simulation pictures. The final camera view angles are identified below in Table 2 and are included in Figure 3.

Table 2 – KOP Photo Simulation Camera View Angles

| KOP # | Rail Line | Single/ Panoramic | Initial Camera View Angle - Left | Initial Camera View Angle - Right | Initial Camera View Angle Center | Final Camera View Angle – Left | Final Camera View Angle – Right | Final Camera View Angle Center |
|--------|-----------|----------------------|---|--|---|--------------------------------------|---------------------------------------|---|
| 4 | HiLine | Panoramic | 60° | 180° | 120° | 60° | 180° | 120° |
| 5 | HiLine | Panoramic | 260° | 100° | 360° | 288.5° | 100° | 14.25° |
| 13 | Mainline | Single | | | 159° | | | 159° |
| 15 | Mainline | Panoramic | 60° | 240° | 150° | 48° | 240° | 144° |
| 16 | HiLine | Panoramic | 200° | 360° | 280° | 202.8° | 360° | 281° |
| 17.1 * | HiLine | Panoramic | 260° | 360° | 310° | 240° | 360° | 300° |
| 17.2 * | HiLine | Panoramic | 20° | 120° | 70° | 22.5° | 142° | 82.25° |
| 18 | Mainline | Single | | | 40° | | | 40° |

* The photos taken at KOP 17 are separated into two separate panoramic views.

2.5 Photo Simulations

The photo simulations are realistic and representative visual depiction of the proposed Project features within its existing context and from the perspective of NNR riders. WPW utilized a visualization team from Mott MacDonald to organize the underlying photographs through computer generated renderings. Mott MacDonald utilized standard industry practices to verify the accuracy of the views. The general procedure for creation of a photo simulation involved compositing a scaled, geo-referenced model of existing and proposed conditions with a photograph. Mott MacDonald entered the camera data that WPW collected in the field into software that digitally replicates the 3D world at scale and prepared a GIS Spatial Model. Mott MacDonald then rendered the model into an image and overlaid it on top of the photograph from each KOP view location.

During production of the photo simulations, a few of the camera angles required slight modification to adjust the alignment for true north (instead of magnetic north) and to allow for greater clarity of the Project area depiction. These modifications do not affect the quality of the photo simulations and expand upon the originally agreed upon angles to include additional Project features.

The manner of data collection, photo processing, camera matching, photograph and panoramic rendering, view specifics, modifications and other steps taken in creating these photo simulations are detailed in the *White Pine Pumped Storage Photosimulation Supplemental Report*, dated May 5, 2023. See Appendix A.

Additional notes regarding the photo simulations.

- For KOP 16 and KOP 17-1 where the interior of the lower reservoir is depicted, photo simulations of both a high-water view (maximum operating water level) and a low-water view (minimum operating water level) were included. The lower reservoir will cycle between the low and high-water levels depending upon usage. The parties agreed that both views were necessary to give an accurate representation of the visual depiction of the Project.
- The rock riprap and earth fill that make up the lower reservoir embankments, pads, and spoil piles were colored to match local source materials.
- WPW used only daytime photos for the development of the photo simulations. The parties agreed to not utilize evening and nighttime photographs as such photos did not allow the view to clearly distinguish Project features.
- Haze was present when WPW took the photographs. WPW made no modifications to the haze in the photos as it represents the actual visual conditions an NNR rider would experience at the time WPW took the photos.

3 Discussion

These photo-simulations are in addition to and supplement the existing photo simulations that WPW previously developed for the Original Report.

Analysis of impacts to visual and aesthetic resources is subjective because the qualities that create an aesthetically pleasing visual character vary from person to person. The effects of Project construction and operation on visual and aesthetic resources are often based on consideration of existing scenic quality, existing landscape character, presence or absence of introduced features (roadways, transmission lines, fences, agriculture, etc.), and the potential effect of the Project as either a new or additional visual modification.

3.1 Potential Construction and Operational Impacts

Construction activities will likely create short-term visual and aesthetic impacts associated with activities, including the presence and visibility of construction equipment, materials, and personnel; construction staging and laydown areas; and vegetation clearing. Construction activities were not included in the photo simulations due to the temporary nature of the visual disturbance and significant variability in construction activity. Construction activities change daily and during the various phases of construction. For example, the construction of the lower reservoir will require 1.5 years of visible construction activities of the total five to seven years of expected Project construction work. As such, no single moment during construction can be representative of the potential visual impacts. In the respective photo simulation depictions, the lower reservoir, laydown pads, and spoil piles represent conditions expected immediately after construction is completed and are not shown as being reclaimed with top-soil and vegetative cover designed so that the Project features will blend in with the surrounding desert landscape.

Operations will likely create visual and aesthetic impacts from above-ground Project features, including the upper and lower reservoirs, switchyard, and transmission line. Additional information is presented by KOP as follows:

3.1.1 KOP 4: NNR HiLine Route Near the Upper Reservoir Access Road Crossing

During construction, Project activities will likely be visible. The view from KOP 4 is approximately 1.3-mile distant from the Project and the topography provides only partial views.

A simulation of the view from KOP 4 that would be expected immediately after construction is completed is depicted in Figure 4 (existing view) and Figure 5 (photo simulation view). The lower reservoir is not visible from KOP 4. KOP 4 includes a thin brown line representing the upper reservoir access road. This brown line is an accurate representation of the view of the upper reservoir access road as an NNR rider would see it.

3.1.2 KOP 5: NNR HiLine Route - Star Platform

During construction, Project activities will likely be nearly imperceptible from KOP 5 due to the approximate 3.3-mile distance from the Project.

A simulation of the view from KOP 5 that would be expected immediately after construction is completed is depicted in Figure 6 (existing view) and Figure 7 (photo simulation view). The Project transmission line follows an existing transmission corridor that already contains large H-frame structures. There will be no expected artificial lighting at the Project after construction is complete, other than lighting that may be needed for specific safety concerns or during emergencies and will be designed to comply with dark-skies guidelines.

3.1.3 KOP 13: Highway 93 and the NNR Mainline Crossing

During construction, Project activities will likely be visible due to the approximately 1.0-mile distance and topography that will provide relatively unobstructed and clear views of the Project area.

3.1.4 A simulation of the view from KOP 13 that would be expected immediately after construction is completed is depicted in Figure 8 (existing view) and Figure 9 (photo simulation view). The rock riprap and earth fill that make up the lower reservoir embankment and spoil piles were colored to match local source materials. KOP 15: Lower Reservoir Access Road/NNR Mainline Crossing

During construction, Project activities will likely be visible due to the approximately 0.5-mile distance and topography that will provide relatively unobstructed and clear views of the Project area.

A simulation of the view from KOP 15 that would be expected immediately after construction is completed is depicted in Figure 10 (existing view) and Figure 11 (photo simulation view). The rock riprap and earth fill that make up the lower reservoir embankment and spoil piles were colored to match local source materials.

3.1.5 KOP 16: NNR HiLine Route East of the Lower Reservoir

KOP 16 is along the NNR HiLine tracks and immediately adjacent to and east of the Project's lower reservoir. KOP 16 is the closest proximity KOP to the Project's lower reservoir. During construction, Project activities will likely be visible due to this proximity that will provide relatively unobstructed and clear views of the lower reservoir.

A simulation of the view from KOP 16 is depicted in Figure 12 (existing view), Figure 13 (photo simulation view – high-water level), and Figure 14 (photo simulation view – low-water level). The lower reservoir liner material, rock riprap, and earth fill that make up the lower reservoir embankment are colored to depict specifications of the liner material and to match local source materials. In the photo simulation, the interior of the lower reservoir is depicted including both a high-water view (maximum operating water level) and a low-water view (minimum operating water level). The lower reservoir will cycle between the low and high-water levels depending upon usage. The lower reservoir is shown representing conditions expected immediately after construction is complete with the security fencing and access road visible.

3.1.6 KOP 17: NNR HiLine Route Southeast of the Lower Reservoir

KOP 17 is along the NNR HiLine tracks and adjacent to and southeast of the Project's lower reservoir. Photo-simulations of KOP 17 were divided into two separate panoramic views: a) KOP17-1 represents views in a northwesterly direction of the Project's lower reservoir and transmission facilities, and b) KOP17-2 represents views in an easterly direction of the Project's switchyard and tunnel access portals.

During construction of the lower reservoir, Project activities to the northwest will likely be visible due to the relatively unobstructed and clear views of the area of the lower reservoir.

Construction of the Project switchyard and tunnel access portals will likely be visible to the east from KOP 17 due to the relatively unobstructed views of the switchyard and tunnel access portals. Once WPW completes construction, the switchyard pad will obstruct the line-of-sight views from KOP 17 of the tunnel access portals for NNR excursion riders.

A simulation of the view from KOP 17-1 is depicted in Figure 15 (existing view), Figure 16 (photo simulation view – high-water level), and Figure 17 (photo simulation view – low-water level). The lower reservoir liner material, rock riprap, and earth fill that make up the lower reservoir embankment are colored to depict vendor specifications of the liner material and to match local source materials. In the photo simulation, the interior of the lower reservoir is depicted including both a high-water view (maximum operating water level) and a low-water view (minimum operating water level). The lower reservoir will cycle between the low and high-water levels depending upon usage. The lower reservoir is shown representing conditions expected immediately after construction is complete with the security fencing and access road visible.

A simulation of the view from KOP 17-2 is depicted in Figure 18 (existing view) and Figure 19 (photo simulation view). The switchyard pad rock riprap and earth fill were colored to match local source materials. The switchyard is shown representing conditions expected immediately after construction is complete, and prior to being reclaimed with top-soil and vegetative cover designed so that the switchyard pad will blend in with the surrounding desert landscape.

3.1.7 KOP 18: NNR Mainline Route

KOP 18 is located along the NNR Mainline Route approximately 1.75 miles south/southwest of the Project. During construction, Project activities will likely be visible.

A simulation of the view from KOP 18 is depicted in Figure 20 (existing view) and Figure 21 (photo simulation view). The rock riprap and earth fill that make up the lower reservoir embankment and spoil piles are colored to match local source materials.

Figures

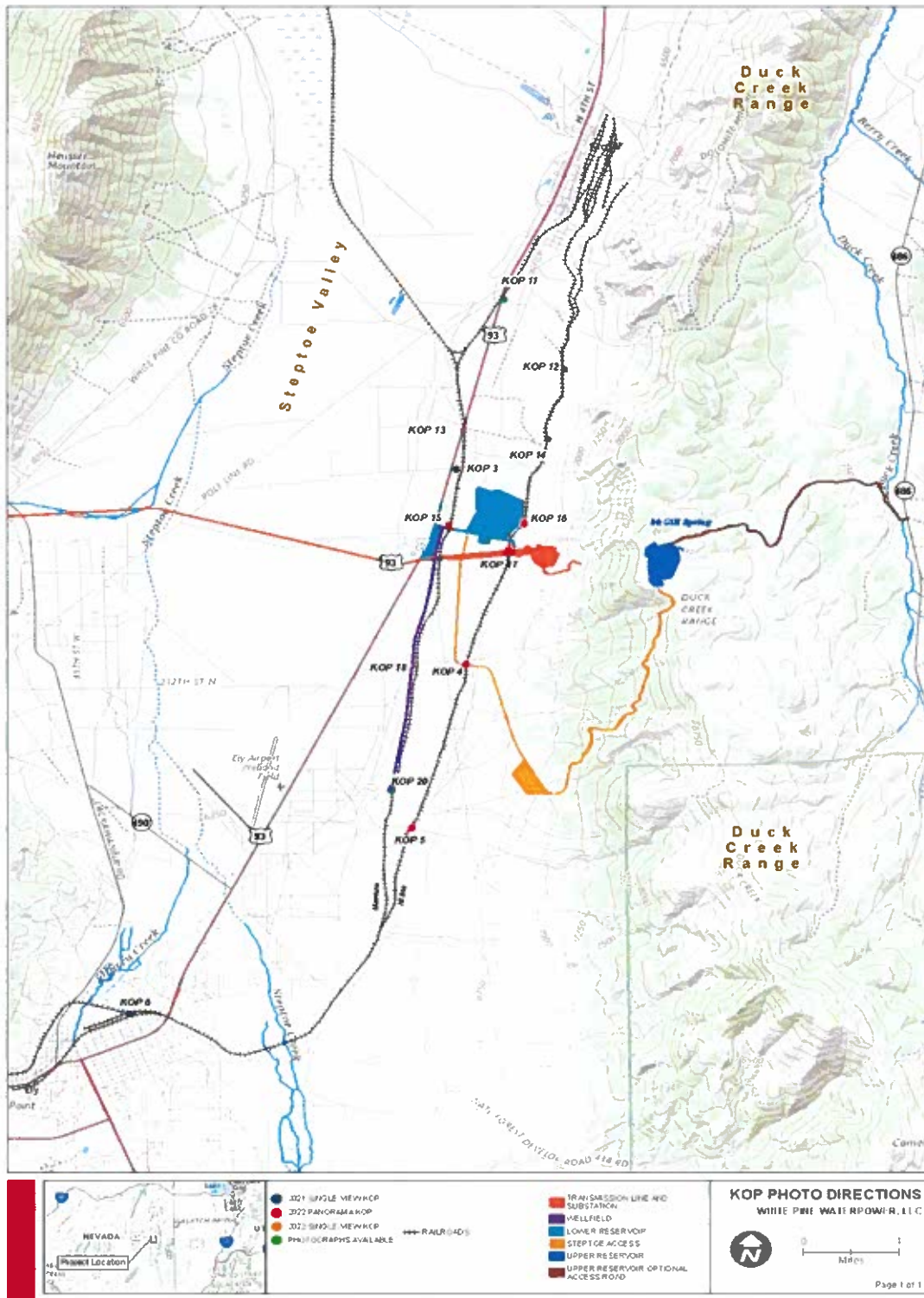


Figure 1. Identification of KOPs

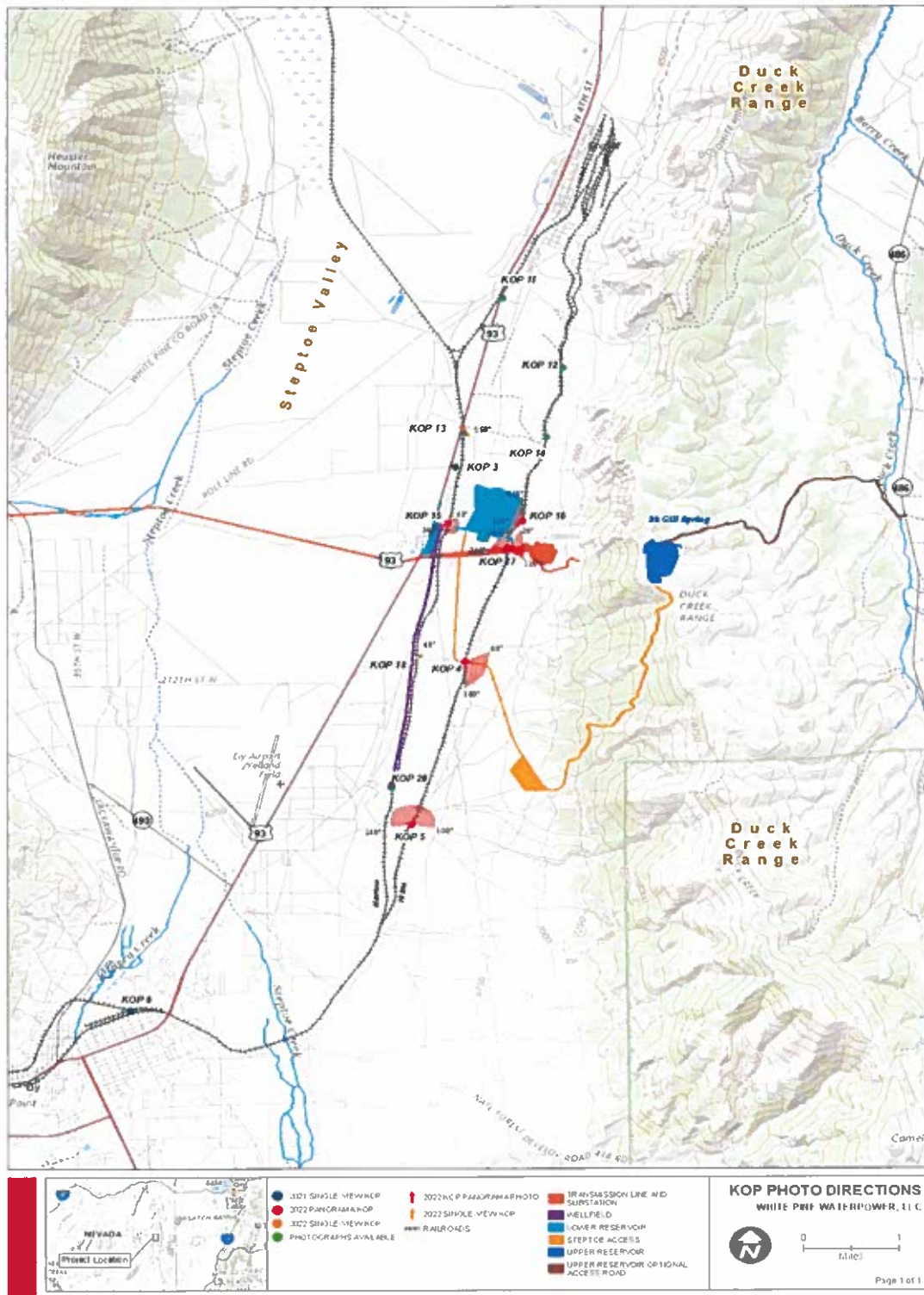


Figure 2. Initial KOP Photo Camera View Angles





Figure 4. KOP 4: NNR HiLine Route Near the Proposed Upper Reservoir Access Road Crossing - Existing View



Figure 5. KOP 4: NNR HiLine Route Near the Proposed Upper Reservoir Access Road Crossing – Photo-simulation View

Note: KOP #4 photo-simulation view contains a thin brown line representing the upper reservoir access road. This brown line is an accurate representation of the upper reservoir access road as an NNR rider would see it.



Figure 6. KOP 5: NNR HiLine Route - Star Platform – Existing View



Figure 7. KOP 5: NNR HiLine Route - Star Platform – Photo-simulation View



Figure 8. KOP 13: Highway 93 and the NNR Mainline Crossing – Existing View



Figure 9. KOP 13: Highway 93 and the NNR Mainline Crossing – Photo-simulation View



Figure 10. KOP 15: Project Access Road/NNR Mainline Crossing – Existing View



Figure 11. KOP 15: Project Access Road/NNR Mainline Crossing – Photo-simulation View



Figure 12. KOP 16: NNR HiLine Route Northeast of the Lower Reservoir -- Existing View Southwest



Figure 13. KOP 16: NNR HiLine Route Northeast of the Lower Reservoir -- Photo-simulation View Southwest -- Full Water Level



Figure 14. KOP 16: NNR HiLine Route Northeast of the Lower Reservoir -- Photo-simulation View Southwest -- Low Water Level



Figure 15. KOP 17-1: NNR HiLine Route Southeast of the Lower Reservoir – Existing View Northwest



Figure 16. KOP 17-1: NNR HiLine Route Southeast of the Lower Reservoir – Photo-simulation View Northwest – Full Water Level



Figure 17. KOP 17-1: NNR HiLine Route Southeast of the Lower Reservoir – Photo-simulation View Northwest – Low Water Level



Figure 18. KOP 17-2: NNR HiLine Route Southeast of the Lower Reservoir – Existing View East



Figure 19. KOP 17-2: NNR HiLine Route Southeast of the Lower Reservoir – Photo-simulation View East

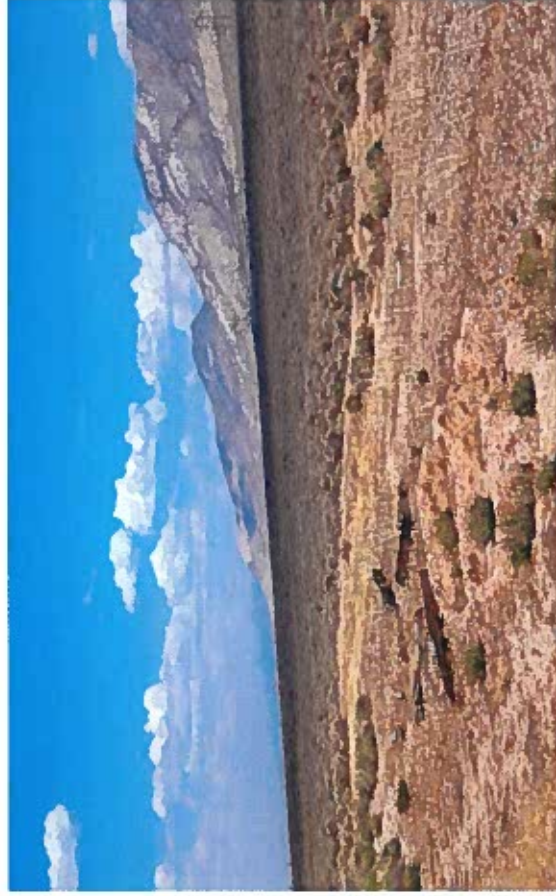


Figure 20. KOP 18: NNR Mainline Route – Existing View



Figure 21. KOP 18: NNR Mainline Route – Photo-simulation View

Appendix A

White Pine Pumped Storage

Photosimulation Supplemental Report

Mott MacDonald

May 5, 2023

White Pine Pumped Storage Photosimulations Supplemental Report

Project: White Pine Pumped Storage

Our reference: 507104181-003 **Your reference:** N/A

Prepared by: Geoff Taylor **Date:** 05/05/2023

Approved by: John Chesterton **Checked by:** John Chesterton

Subject: Photo simulation Supplemental Information

1 Introduction

Mott MacDonald has produced photo simulations for eight Key Observation Points (KOPs) as requested by rPlus. The locations, type and view angles for these simulations are summarized in Table 1.1 below.

The following sections describe the process that was followed for use in supplemental reporting.

Table 1.1: Photo Simulation GPS Location and Specifications

| KOP # | GPS Coordinates | | Line | Day/Time | Single/Pan | Requirements | | | |
|-------|-----------------|-------------|----------|------------------|------------|--------------|-------|-------|--------|
| | Latitude | Longitude | | | | Left | Right | Angle | Center |
| 4 | 39.19.18 N | 114.47.55 W | HiLine | 09/08/2022 10:45 | Pan | 60° | 180° | 120° | 120° |
| 5 | 39.17.36 N | 114.48.34 W | HiLine | 09/08/2022 11:08 | Pan | 260° | 100° | 200° | 360° |
| 13 | 39.21.42 N | 114.47.55 W | Mainline | 09/08/2022 14:34 | Single | | | - | 159° |
| 15 | 39.20.42 N | 114.48.6 W | Mainline | 09/08/2022 14:16 | Pan | 60° | 240° | 180° | 150° |
| 16 | 39.20.45 N | 114.47.14 W | HiLine | 09/08/2022 09:57 | Pan | 200° | 360° | 160° | 280° |
| 17.1 | 39.20.27 N | 114.47.25 W | HiLine | 09/08/2022 10:23 | Pan | 260° | 360° | 100° | 310° |
| 17.2 | 39.20.27 N | 114.47.25 W | HiLine | 09/08/2022 10:15 | Pan | 20° | 120° | 100° | 70° |
| 18 | 39.19.16 N | 114.48.29 W | Mainline | 09/08/2022 13:40 | Single | | | - | 40° |

While every attempt was made to meet these specifications, the process outlines some of the difficulties encountered. Table 1.2 gives the adjusted coordinates of the photo simulations, the shift from GPS coordinates and the actual angles captured by the photo simulations along with the centerline heading of the simulation.

Table 1.2: Photo Simulation Updated Location and Angles

| KOP # | Updated Coordinates | | Shift (ft) | Actual Extents | | | MM Comments |
|-------|---------------------|---------------------|------------|----------------|-------|--------|-------------------------------------|
| | Latitude | Longitude | | Left | Right | Center | |
| 4 | 39° 19' 24.6068" N | 114° 47' 52.7819" W | 690.8 | 60° | 180° | 420.8 | |
| 5 | 39° 17' 36.3971" N | 114° 48' 33.7552" W | 44.6 | 288.5° | 100° | 166.5 | Not enough pictures to start at 260 |

| | Updated Coordinates | | Shift | Actual Extents | | | |
|------|---------------------|---------------------|-------|----------------|------|-------|--|
| 13 | 39° 21' 42.4445" N | 114° 47' 54.7956" W | 47.8 | n/a | | 146.3 | Final angle represents the camera's orientation to true north rather than magnetic north |
| 15 | 39° 20' 41.9516" N | 114° 48' 05.9597" W | 5.8 | 48° | 275° | 26.9 | starting at 60 removes some of the reservoir. needs more than 240 to show road |
| 16 | 39° 20' 43.0490" N | 114° 47' 15.5498" W | 231.9 | 202.8° | 360° | 51.9 | Propose cropping at 202-360 |
| 17.1 | 39° 20' 28.1771" N | 114° 47' 24.6124" W | 112.9 | 260° | 360° | 186.5 | Recommend start at 240 to show transmission towers |
| 17.2 | 39° 20' 28.1771" N | 114° 47' 24.6124" W | 112.9 | 22.5° | 142° | 183.9 | Not enough pictures to start at 20. Stopping at 120 doesn't show entire civil access |
| 18 | 39° 19' 16.8599" N | 114° 48' 29.1501" W | 87.8 | n/a | | 28.5 | Final angle represents the camera's orientation to true north rather than magnetic north |

2 Process

The goal of a photo simulation is to create a realistic visual representation of a proposed development or project within its existing context. A photograph of the existing conditions gets manipulated with the help of a computer-generated rendering to accomplish this. As this work is often used to support critical visual impact assessments, producing photo-simulations as accurately as possible is required. Certain steps are taken to verify the accuracy of the views. This document explains the process used by the Mott McDonald visualization team when developing photo simulations for the White Pine Pumped Storage Project.

2.1 Data Collection

To begin the process of developing these photo simulations, it was important to gather as much project data and reference material as possible. For White Pine Pumped Storage, this included current project design files, site plans, graded surface models, project acquired survey data, USGS acquired satellite imagery, project site photography and GPS readings for all photo locations. Mott McDonald had previously used Autodesk 3DS Max to create a 3D model of the project in April 2022, which was used to develop highly detailed visualizations for a public outreach video. The collected data was used to update that 3D model to represent the most current design.

It's important to note that Autodesk 3DS Max does not support the same coordinate system used in the design files. While the design files use NAD83 State Plane Zone Nevada East (FIPS 2701), 3DS Max uses a cartesian coordinate system that works around the world center point of 0,0,0 (X,Y,Z). To account for this, all design files are offset before importing into 3DS Max so that they are located as close to the world center point as possible. For White Pine Pumped Storage, this offset was -883318, -27930381, 0 (X,Y,X). Which was automated within AutoCAD Civil3D via a script.

2.2 Photo Processing

Next, the photographs for KOP 13 and KOP 18 were collected from rPlus in RAW format (.NEF) and processed to correct any exposure or color inaccuracies. This was done by using Adobe Lightroom Classic.

2.3 Camera Matching

A single 3DS Max scene file is created for each view. These include a copy of the project 3D model, a digital terrain model of the site, a daylight system, a 3DS Max physical camera, the original photo to be used for that view, and a point helper object containing the GPS location for each viewpoint which has been offset by the same amount used on the design files. The original photographs for KOP 13 and KOP 18 contain embedded metadata which document the date, time and camera settings used when each view was photographed. By using a 3DS Max daylight system to illuminate the 3D model for rendering, the position and angle of the sun can be replicated by entering the date and time found in the metadata. This ensures that all rendered shadows and lighting accurately and realistically fall at the same angle as what is seen in the photographs. To further the accuracy of the photo-simulations, the camera's settings are used to set up a physical camera within 3DS Max. This included sensor size, shutter speed, ISO settings and focal lengths. While each photo provided from rPlus had different shutter and ISO settings, the focal length for all views was set at 50mm. This is the industry accepted standard for visual impact assessment work. By replicating camera settings within 3D Max, all rendered views will match the field of view and exposure used in the original photographs.

Once each 3DS Max scene is setup, the corresponding physical cameras need to be positioned within cartesian space to match the location of the actual camera when each photograph was taken. This begins by positioning the physical camera to match the GPS coordinates provided by rPlus for each viewpoint. Unfortunately, GPS locations often result in inaccurate data unless captured with the assistance of professional grade GPS survey equipment. Inaccurate GPS data is a typical occurrence. To account for this, each physical camera location is adjusted within 3DS Max by following a thorough process that utilizes reference points visible both in the original photographs and 3D model.

For each KOP, its original photograph is loaded into 3DS Max's rendering environment and into the physical camera's viewport background. Visible landmarks within the photographs are chosen as reference points to help extrapolate the true GPS location for where the photos were taken. For White Pine Pumped Storage this was often mountain peaks, trees, existing roads, and utility line poles. These reference points are also found within the 3D model. By keeping the photograph in the background of the viewport, the 3D model will appear to be overlayed on top of it. By using these reference points, the physical camera's position and rotation is continually adjusted until the 3D model reference points line up with their corresponding locations in the photograph. This process can take considerable time and can get as detailed as moving the camera within a matter of inches.

The final camera locations for KOP 13 and KOP 18 contained a significant difference from the locations provided by their GPS data. KOP 13 was moved by 47.8 feet and KOP 18 was moved by 87.8 feet.

2.4 Rendering and Photoshop work

To produce a detailed photo simulation, realistic colors and material are applied to the 3D model. Many of the features included in the photo simulations will be excavated into or constructed out of locally sourced materials. These include rock riprap, earth fill, and the local rock formations for road and portal excavations. We have reviewed the geological maps that were developed as part of the project investigation to ensure cut slope materials and textures were colored appropriately. Rock riprap and earth fill that make up the embankments, pads and spoil piles have also been colored to match local source materials. Slopes have not been vegetated and represent conditions expected soon after construction and have been left bare. Further work could be done to minimize visual impact through vegetation, careful selection of materials and texturing hard surfaces but have not been implemented at this stage.

KOP 13 and KOP 18 were rendered with 3DS Max using V-Ray, a highly accurate global illumination-based rendering engine. This rendered output is created to match the original photograph's overall pixel size and

resolution. The original photograph, along with its corresponding render is loaded into Adobe Photoshop. The rendering is placed on its own layer to begin the process of blending it into the existing photograph. Steps taken to accomplish this include using the masking tool to make it appear that objects in the render appear in front, or behind objects within the photograph. And certain portions of the rendering will be color corrected to match colors and tones of objects within the photograph. For White Pine Pumped Storage this included fine tweaks to shading, lighting and color saturation. A separate object ID pass is rendered to help isolate specific objects within the render to help facilitate with these color corrections. Certain existing objects within the photographs were digitally removed to match the final design. This included existing utility poles and vegetation.

2.5 All photo simulations were delivered to rPlus in a full resolution, uncompressed TIFF format. Panorama Photo Simulations

When developing photo simulations for panoramic views, the workflow has some key differences. Which are highlighted below.

2.6 Panorama Photo Processing

Additional photo simulations were produced in a panoramic format. Mott MacDonald was provided a series of individual photographs that were with some visual overlap between pictures. Using Lightroom Classic, these series of images were stitched together via the photo merge tool. While the process is typically automated by the software, errors can occur that cause the photo merge to fail. When this happens, additional exposure correction is applied to the individual photographs to help the software successfully stitch the images. Even with a successful panoramic stitch, minor inaccuracies can still occur. All inaccuracies that occurred for the White Pine Pumped Storage photo simulations are explained in further detail at the end of this document.

2.7 Camera Matching Panoramas

Camera matching a panoramic image requires additional steps than what is required when working with a single photograph. Instead of placing the panorama within the rendering environment and viewport background, the panorama is placed on a mesh object that surrounds the camera's position. This is accomplished by mapping the panorama to a rectangular object that matches the panorama's aspect ratio. Using a path deform modifier, this rectangle is bent around a circle with a diameter that is well over 2 miles in length. This effectively becomes the rendering environment but allows for additional control. A single reference point is chosen to define the panorama's center point. The panorama mesh is rotated from within the physical camera viewport until it aligns with its corresponding point in the 3D model. Additional reference points are chosen, and by using the path deform modifier, the panorama can be moved along its own circumference until it matches the new reference points. This process properly aligns the mesh-based environment with the horizon line. Once this is completed, the panorama is linked to the camera, which essentially "locks" its overall field of view. The camera position is then adjusted with the same steps as when working with a single photograph, as described above.

The final camera positions for the panorama views were also significantly different than what was listed in the GPS data. KOP 4 had the largest deviation at 690'. While KOP 15 had the least with a 5.8-foot difference.

2.8 Panorama Rendering and Photoshop work

Rendering and photoshopping a panoramic view follows the same steps as when working with a single photograph. Except for a few key items.

While a panorama made up of multiple individual photographs needs to be stitched into one image, by using V-ray within 3DS Max, a single panoramic image can be produced without the need for stitching. This is accomplished by changing the global camera setting type from a default camera to a panoramic camera and defining the overall field of view.

The final panoramic photo simulations covered a wider field of view than was needed to show the project site. Which resulted in cropping the images to an approved upon field of view. To help facilitate the accuracy of these crops, an angle guide was placed within each view to illustrate one degree field of view increments. Beginning at true north and circling around the viewpoint to 360.

Each panorama view delivered to rPlus included the cropped existing and cropped proposed conditions. Alongside a non-cropped version of the proposed conditions containing a rendered overlay of the angle guide.

2.9 View Specifics

The following explains view specific details related to panorama stitching errors and steps taken to address them:

- KOP 4: The stitching process was unable to correctly line up a portion of the wood bench on the train car on the right side of the non-cropped panorama. After stitching was complete, Adobe Photoshop was used to correctly align the bench within the image.
- KOP 15: The photographs used to create this panorama had varying degrees of cloud shadows on the ground. This caused some errors in the stitching process which resulted in uneven lighting, and minor misalignments along the top edge of the mountain range and overhead utility wires. After stitching was complete, Adobe Photoshop was used to correctly align these objects. And some shadow smoothing was applied to minimize the abrupt changes in shadows throughout the panorama.
- KOP 17: The photographs used to create this panorama had varying degrees of blurriness to the photos. This resulted in some misalignments along the left and right horizon line, a misalignment of the wood bench on the train car, and some loss of detail in the blurry areas. After stitching was complete, Adobe Photoshop was used to correctly align the wood bench. But little was done to minimize the blurriness as it would have required significant effort that fell beyond the current scope of work.

Section 2:

NNR Visitor Use and Experience Survey and Assessment Report (October 9, 2023)

NNR Visitor Use and Experience Survey and Assessment Report

White Pine Pumped Storage Project

Prepared by Cicero Group®

White Pine County, Nevada

October 9th, 2023

1. Introduction

1.1 Report Purpose

2. Methods

2.1 Survey Methodology

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2.2 Statistical Relevancy and Data Sufficiency

3. Conclusions

3.1 Estimated Use Levels

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3.2.5 Reasons to Ride

3.2.6 Effects on the Mainline (All Patrons)

3.2.7 Effects on the Hi-Line (All Patrons)

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3.2.9 Effects on the Hi-Line (Tourists Only)

1. Introduction

White Pine Waterpower, LLC (WPW) is proposing the licensing, construction, and operation of the White Pine Pumped Storage Project (FERC No. 14851) (Project) in White Pine County, Nevada, approximately 8 miles northeast of the City of Ely. The Project is a 1,000-megawatt, closed loop, pumped storage facility that will require the construction of two new reservoirs joined by underground conduits along with a powerhouse and associated generation, pumping, and transmission equipment. The Project will be located entirely off-stream, meaning neither the upper nor lower reservoir will intercept a perennial surface watercourse.

WPW has initiated a licensing process for the Project with the Federal Energy Regulatory Commission (FERC), the federal agency with jurisdiction over non-federal hydropower projects in the United States. During this process, WPW has engaged stakeholders and implemented a suite of resource studies that will inform FERC's environmental and developmental analyses and decision regarding license issuance. The NNR Visitor Use and Experience Survey and Assessment Report specifically assesses potential recreational effects on the Nevada Northern Railway (NNR). This report describes the results of the NNR Visitor Use and Experience Survey conducted from June to September 2023.

1.1 Report Purpose

Cicero Group® prepared the NNR Visitor Use and Experience Survey and Assessment Report for the Project and this report serves as a supplemental resource to the *Recreation Resources Study Report* HDR Engineering prepared in January 2022. This report provides additional information that refers to and builds upon several sections in the *Recreation Resources Study Report*. Section 2.2 titled 'Nevada Northern Railway Visitor Assessment' states, "The NNR visitor use assessment will collect visitors' demographic characteristics (e.g., zip code, group size, age), perceptions, attitudes, and preferences." The purpose of this supplemental recreation resources study report is to highlight the findings of these stated characteristics. A comprehensive slide deck with a wealth of detailed findings and data visualization is attached as an addendum.

2. Methods

2.1 Survey Methodology

Cicero conducted live-intercept surveys using iPads and printed paper copies at the Nevada Northern Railway (NNR) depot to gauge visitor use, primarily interviewing Patrons before they boarded the train. Surveyors attempted to reach a variety of visitors and participation in the survey was voluntary. A \$10 honorarium was given to those who participated.

Patrons were shown photo simulations of what the proposed pumped storage project would potentially look like from both the **Hi-Line and Mainline rails** and were then asked to state if and how much that would impact their **enjoyment level** and **willingness to ride NNR trains**.

The visuals of the Mainline rail shown to survey participants (KOP 13/15¹) depict the section of the rail that is located along the proposed project site. This portion of the Mainline is not operational, meaning no Mainline train excursions currently pass the proposed project site. Survey participants who took

¹ Find KOPs images in the appendix of the deck addendum

Mainline excursions (also known as the Keystone Line) traveled in the opposite direction towards Ruth, Nevada.

Regarding terms used throughout the report, certain analyses are conducted for all 'Patrons' i.e., all 435 survey responses, then repeated to include only 'Tourists' i.e., the 342 survey responses of NNR visitors who were neither Ely area residents, nor members of the NNR. **This 'Tourists' subset of the total sample is likely less affected by bias and more representative of unaffiliated visitors to the NNR.** Definitions for terms are below:

- **Patrons:** Refers to all individuals collectively in the sample (n=435).
- **Tourists:** Refers to those who are NOT from the Ely area and NOT members of the NNR (n=342).
- **NNR Members:** Refers to those who are subscribed members of the NNR (n=73).
- **Locals:** Refers to those who live in the Ely area (n=27).

2.2 Survey Timeline

Table 1 highlights the survey timeline and data collection numbers for each fielding event date.

Table 1. Timeline of Survey Data Collection

| | June 14-17 | July 19-22 | August 9-12 | September 6-9 |
|---|-------------------|-------------------|------------------|------------------|
| Number of surveyed Patrons per day | Wednesday: 16 | Wednesday: 9 | Wednesday: 4 | Wednesday: 0 |
| | Thursday: 23 | Thursday: 23 | Thursday: 18 | Thursday: 13 |
| | Friday: 47 | Friday: 46 | Friday: 26 | Friday: 12 |
| | Saturday: 50 | Saturday: 50 | Saturday: 45 | Saturday: 53 |
| | Total: 136 | Total: 128 | Total: 93 | Total: 78 |

2.3 Statistical Relevancy and Data Sufficiency

For market research generally, an acceptable margin of error is typically considered to fall between 4%-9% at a 95% Confidence Interval. Of equal, or perhaps greater importance than the margin of error is the quality of the sample – in this instance, survey participants are known to be actual Patrons of the NNR and therefore, constitute a very high-quality sample set. Table 2 illustrates the sample population and size of the NNR Visitor Use and Experience Survey.

Table 2. Sample Distribution

| Population Size² (total annual NNR riders in 2022) | Survey Sample Size | Confidence Interval | Margin of Error³ |
|--|---------------------------|----------------------------|------------------------------------|
| 17,484 | N=435 | 95% | 5% |

² Population size extracted from NNR report included in the 09/14/23 Ely City Council Agenda

³ Margin of error calculated using Survey Monkey's online margin of error calculator which employs industry standard inputs in its calculation

It is important to note that the 'Tourist' subset analyzed (n=342) also has a margin of error of 5%.

3. Conclusions

The study provides many insights into visitors' demographic characteristics (e.g., zip code, group size, age), perceptions, attitudes, and preferences. The following sections explore the various findings. Due to a noticeable discrepancy in preferences between 'Patrons' (the full sample set of n=435) and 'Tourists' (n=342 subset of that sample which excludes Ely area residents and members of the NNR), this report presents analyses of key questions for both populations.

During data collection, many Ely area residents and NNR Members were vocal about their opposition to the project. Several NNR Members mentioned an email they had received from the NNR. This email, distributed on April 25th, 2023, is known to Project stakeholders, and was discussed prior to the first data collection event. Essentially, the email presented arguments against the Project, highlighting opinions of how it might negatively impact the NNR. It is not possible to know exactly how many survey respondents read this email or the extent to which it may have generated negative bias toward the Project, but it is assumed that it did indeed introduce some amount of negative bias, as evidenced by comments from NNR Members and Locals, and survey data. As mentioned previously, to account for this apparent bias, certain analyses in this report are conducted for all 'Patrons', then repeated to include only 'Tourists'. This 'Tourists' subset of the total sample is almost certainly less affected by bias and more representative of general visitors to the NNR.

3.1 Estimated Use Levels

During 2023, the NNR was 100% operational. Although some locomotives were out of service, each scheduled excursion departed. The Night Sky–Star Train excursion on the Hi-Line is scheduled one night each week from late May to mid-September. Exact train excursion numbers have not yet been shared by the NNR with the research team, but there are an estimated 18 Night Sky–Star Train excursions in 2023. Other excursions on the Hi-Line include the Sunset, Stars, and Champagne excursion, offered twice each week from late May to mid-September. There are an estimated 35 Sunset, Stars, and Champagne excursions scheduled in 2023. Each of these Hi-Line excursions has a capacity of 82 people.

3.2 Survey Results and Conclusions

This portion of the report aligns with section 2.3 of the 2022 Recreation Resources Study Report produced by HDR indicating a report "summary of NNR visitor demographics, perceptions, attitudes, and preferences."

3.2.1 Key Findings

1. A large majority of Patrons state that the Project will have no impact on both their enjoyment level and willingness to ride. This applies to both the Hi-Line and Mainline rails.
2. Tourists are especially likely to state the Project will have no impact on their level of enjoyment or willingness to ride.
3. Of the Patrons who state a possible impact, they are slightly more likely to state a possible impact from the Project for the Hi-Line rail than for the Mainline rail.

3.2.2 Additional Findings

4. NNR Members and Locals are more likely to perceive a negative impact from the Project. These groups comprise a small portion of the total sample (17% and 6%, respectively).
5. Very few NNR Patrons are local to the ELY area, few Patrons are NNR Members, and a large majority have NOT taken an NNR excursion before (72% have not taken an NNR excursion before).
6. Patrons state their willingness to ride will be less affected by the Project than their level of enjoyment. Only 17% and 15% state negative impacts on their willingness to ride compared to 29% and 26% on their level of enjoyment when riding the Hi-Line and Mainline rails, respectively.
7. Patrons take excursions for a variety of reasons. The most common purpose for taking an excursion is riding a historic train, followed by spending time with friends and family.
8. Patrons think NNR rides are unique and would take them again. 72% of Patrons think the excursions are unique, and 87% would take them again.
9. Nearly 3/4ths of Patrons hail from Nevada, California, and Utah. The most common state of origin is Nevada at 37%, followed by Utah and California both at 18%.

3.2.3 NNR Patron Demographics

1. **Age:** Roughly 50% of Patrons are between the ages of 60-79.
2. **Gender:** Patron gender is almost equally split – 51% male and 49% female.
3. **Household Income:** 60% of Patrons have an annual household income of \$75,000 or more.
4. **Location:** 37% of Patrons are from Nevada while Utah and California each constitute 18%. 61% of Nevada Patrons are from Clark County with the next highest being White Pine County at 14%.
5. **Racial Background:** 86% of Patrons are white. The remaining 14% are Hispanic/Latino, Asian, Black/African American, American Indian/Alaska Native, or other.
6. **Primary Language:** 97% of Patrons speak English as their primary language.

3.2.4 NNR Patron Profile

1. **Ridership Stats:** 89% of Patrons have taken, or plan to take an NNR excursion during their visit.
2. **Group Makeup:** NNR Patrons' median group size is two. 69% of Patrons are visiting with no minors in their party. Roughly 50% of Patrons are between age 60-79.
3. **Travel Accommodations:** Of the Patrons staying overnight in the Ely area, 80% stay in a lodge, hotel, or motel during their stay. 10% stay in Great Basin National Park. The remaining 10% stay in some other campground, or stay with a friend or relative, or other.
4. **Money Spent:** 25% of the median amount of money Patrons spend in the Ely area is spent at the NNR.
5. **NNR Membership:** 17% of Patrons are NNR Members; nearly half of those NNR Members report entry-level membership (*Active Level*).
6. **NNR Awareness:** 65% of Patrons are first time riders, 28% state they are return riders, and the remaining 7% have not taken and aren't planning on riding an NNR excursion.

3.2.5 Reasons to Ride

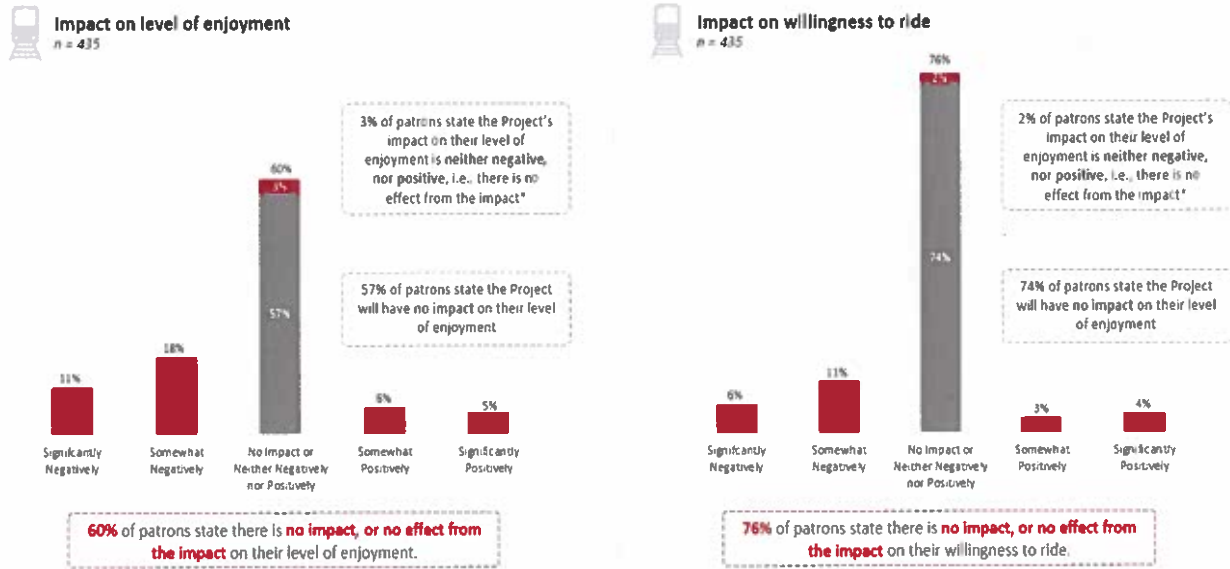
1. The top 3 stated purposes for the excursion were 'to ride a historic train', 'to spend time with friends/family', and 'to view the night sky'.
2. 'Experiencing a historic train ride' and 'experiencing scenic beauty' are the two most important reasons for taking the excursion. 'The food and beverage offered on the excursion' and 'experiencing the ranger program' are the two least important reasons for the excursion.

3. 87% of Patrons say they would take their excursion again.
4. 72% of Patrons say the NNR train excursions are unique.

3.2.6 Effects on the Hi-Line (All Patrons)

Figure 1 illustrates that a large majority of Patrons state the Project will have no impact on their level of enjoyment and willingness to ride the Hi-Line rail.

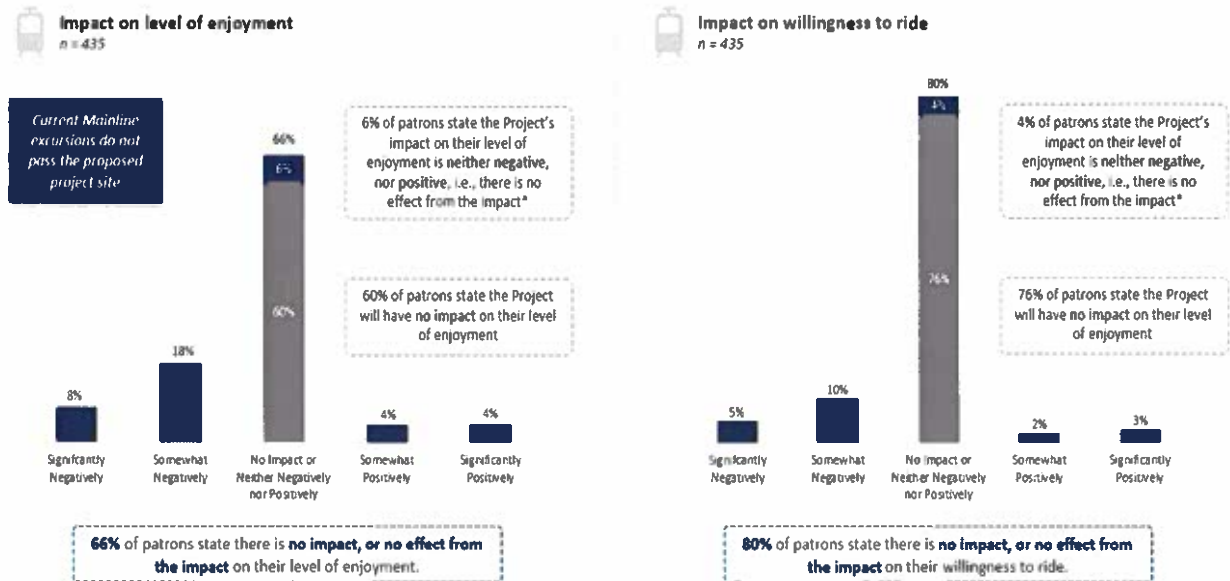
Figure 1. All Patrons' Impact on Level of Enjoyment and Willingness to Ride on the Hi-Line Rail.



3.2.7 Effects on the Mainline (All Patrons)

Figure 2 illustrates that a large majority of Patrons state the Project will have no impact on their level of enjoyment and willingness to ride the **Mainline** rail.

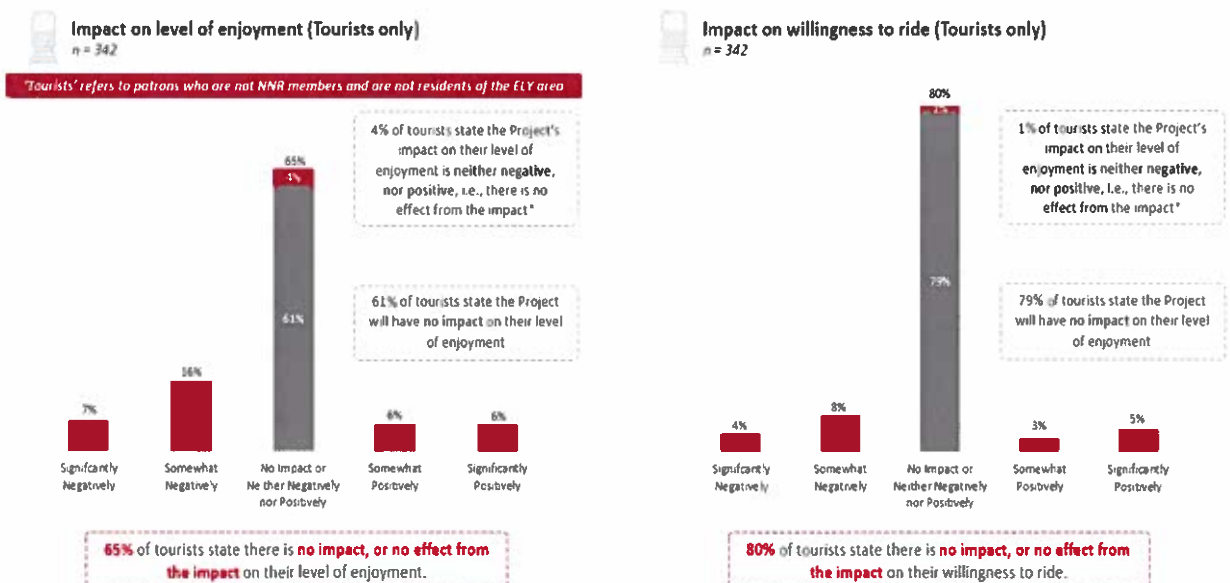
Figure 2. All Patrons' Impact on Level of Enjoyment and Willingness to Ride on the Mainline Rail.



3.2.8 Effects on the Hi-Line (Tourists Only)

Figure 3 illustrates that Tourists are especially likely to state the Project will have no impact on their level of enjoyment and willingness to ride the **Hi-Line** rail.

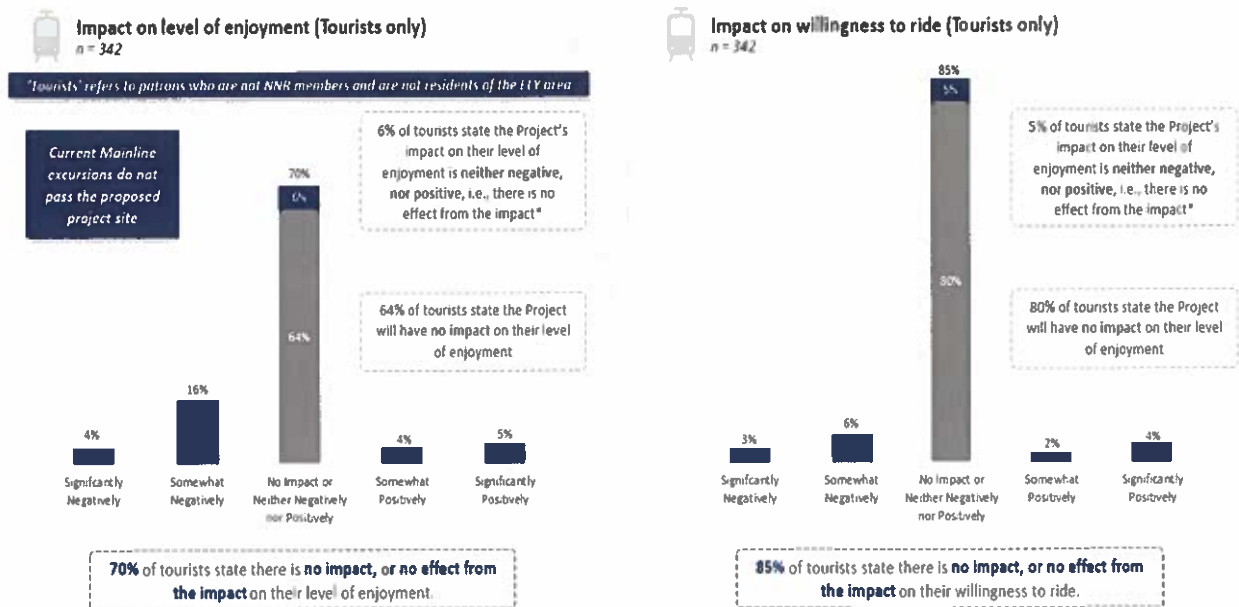
Figure 3. Tourists' Impact on Level of Enjoyment and Willingness to Ride on the Hi-Line Rail.



3.2.9 Effects on the Mainline (Tourists Only)

Figure 4 illustrates that Tourists are especially likely to state the Project will have no impact on their level of enjoyment and willingness to ride the Mainline rail.

Figure 4. Tourists' Impact on Level of Enjoyment and Willingness to Ride on the Mainline Rail.





NNR Visitor Use and Experience Survey

Summary Report and Findings of Survey Data
2023



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Executive Summary | Glossary

Key Terms

| | |
|---------------------|---|
| Patrons n=435 | Refers to all individuals collectively in the sample i.e., all 435 survey participants. |
| Tourists n=342 | Refers to those who are NOT from the Ely area and are NOT members of the NNR. |
| NNR Members n=73 | Refers to those who are subscribed members of the NNR. |
| Locals n=27 | Refers to those who live in the Ely area. ¹ |

The Mainline rail visuals which Patrons were shown (KOP 13/15²) when taking the survey depict the portion of the Mainline rail near the proposed project site. This portion of the Mainline is not operational, meaning no Mainline train excursions currently pass the proposed project site. Survey participants who took Mainline excursions went in the opposite direction towards Ruth, Nevada.

Q26: Are you staying overnight in the Ely Area, spending less than one day in the Ely area, or are you a resident of the Ely area?

¹Answered "I am a resident of the Ely area" to Q26

²Refer to the appendix to see photo simulations

Executive Summary | Study Overview & Methodology



Methodology

Cicero conducted live-intercept surveys using iPads and printed paper copies at the Nevada Northern Railway (NNR) depot to gauge visitor use, primarily interviewing Patrons before they boarded the train. Surveyors attempted to reach a variety of visitors, though participation in the survey was voluntary.

Patrons were shown photo simulations of what the proposed pumped storage project would look like from both the **Mainline** and **Hi-Line rails** and were then asked to indicate if and how much that would impact their **enjoyment level** and **willingness to ride** NNR trains.

Surveys fielded between June 14th and September 9th

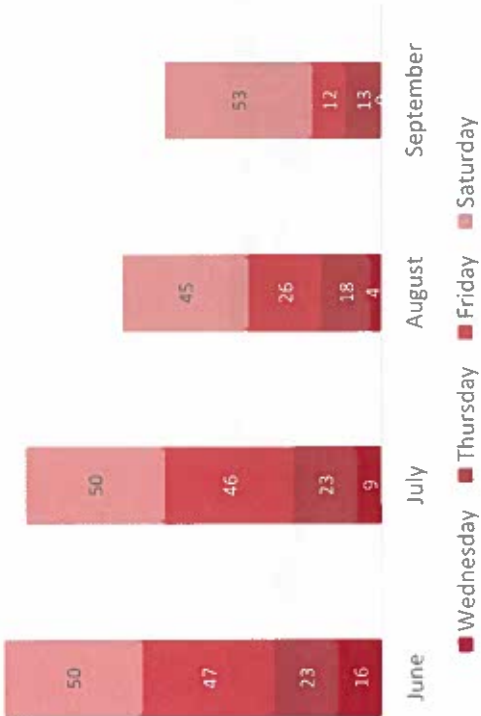


Sample Distribution

| Population Size ¹ (total annual NNR riders) | Sample Size | Confidence Interval | Margin of Error ² |
|---|-------------|---------------------|------------------------------|
| 17,484 | N=435 | 95% | 5% |

For market research generally, an acceptable margin of error is typically considered to fall between 4%-9% at a 95% confidence interval. Of equal, or perhaps greater importance than margin of error is the quality of sample – in this instance, survey participants are known to be actual Patrons of the NNR and therefore, constitute a very high-quality sample set.

It is important to note that the 'Tourist' subset analyzed (n=342) has a margin of error of 5%.



¹Population size extracted from [NNR report](#) included in the 09/14/23 Ely City Council Agenda

²Margin of error calculated by Survey Monkey, an online margin of error calculator

Executive Summary | Timeline



| | June 14-17 | July 19-22 | August 9-12 | September 6-9 |
|--------------------------------------|--|---|--|--|
| % completed towards 435 survey total | 31% | 60% | 81% | 100% |
| Number of surveyed Patrons per day | Wednesday: 16 Thursday: 23 Friday: 47 Saturday: 50 Total: 136 | Wednesday: 9 Thursday: 23 Friday: 46 Saturday: 50 Total: 128 | Wednesday: 4 Thursday: 18 Friday: 26 Saturday: 45 Total: 93 | Wednesday: 0 Thursday: 13 Friday: 12 Saturday: 53 Total: 78 |
| Relevant call-outs and notes | <ul style="list-style-type: none"> Survey fielding event kick-off meeting took place before survey collection Survey methodology passed off by all the parties involved About 10 Locals came by to question the Project throughout the week | <ul style="list-style-type: none"> Decision was made to allow all Patrons to take the survey besides NNR employees and volunteers for non-bias reasons | <ul style="list-style-type: none"> Several Patrons mentioned an email sent by the NNR to its members stating their negative opinion of the Project.* Total number of weekly surveys noticeably decreased compared to the previous week | <ul style="list-style-type: none"> The annual event 'Race the Rails' occurred on Sept 9th increasing number of Patrons at the Depot Total number of weekly surveys noticeably decreased compared to the previous week |

*The email referred to by several Patrons during the August fielding event is believed to be the same email sent by the NNR in April – said email was discussed and addressed by project stakeholders at that time. It is not possible to know exactly how many respondents read this email or the extent to which it may have led to negative bias toward the Project, but it is assumed that it did indeed introduce some amount of negative bias. To account for this, certain analyses in this report are conducted for all 'Patrons' i.e., all 435 survey responses, then repeated to include only 'Tourists' i.e., the 342 survey responses of NNR visitors who were neither Ely area residents, nor members of the NNR who would have received the email. This 'Tourists' subset of the total sample is likely less affected by bias and more representative of unaffiliated visitors to the NNR.

Executive Summary | Key Findings



A large majority of Patrons indicate the Project will have no impact on both their enjoyment level and willingness to ride.

This applies to both the Mainline and Hi-Line rails.



Patrons are slightly more likely to indicate possible impact from the Project for the Hi-Line rail than for the Mainline rail.

This includes both negative and positive impacts.



Very few NNR Patrons are local to the Ely area, few are NNR Members, and a large majority have NOT taken an NNR excursion before.

6% are local to the Ely area, 17% are NNR Members, and 72% have not taken an NNR excursion before.

Executive Summary | Additional Key Findings



NNR Members and Ely area residents (affiliated populations) are more likely to perceive negative impact from the Project.

These groups comprise a small portion of the total sample (17% and 6%, respectively).



Patrons indicate their willingness to ride will be less affected by the Project than their level of enjoyment.

Only 15% and 17% indicate negative impacts on their willingness to ride compared to 26% and 29% on their level of enjoyment when riding the Mainline and Hi-Line rails, respectively.



Patrons take excursions for a variety of reasons.

The most common purposes for the excursion is riding a historic train, followed by spending time with friends and family.



Patrons think NNR rides are unique and would take them again.

72% of Patrons think the excursions are unique, and 87% would take them again.



Roughly 3/4th of Patrons hail from Nevada, California, and Utah.

The most common state of origin is Nevada at 37% followed by Utah and California both at 18%.

Executive Summary | NNR Patron Profile

Ridership Stats

- 89% of Patrons have taken, or plan to take an NNR excursion
- 72% of Patrons have not taken an NNR excursion before

NNR Membership & Awareness

- 17% of Patrons are NNR Members; nearly half of those report entry-level membership (*active level*)
- 28% of Patrons have taken NNR excursions before

Travel Accommodations

- 6% of Patrons are residents of the Ely area
- 80% stay in a lodge, hotel, or motel during their stay

Location

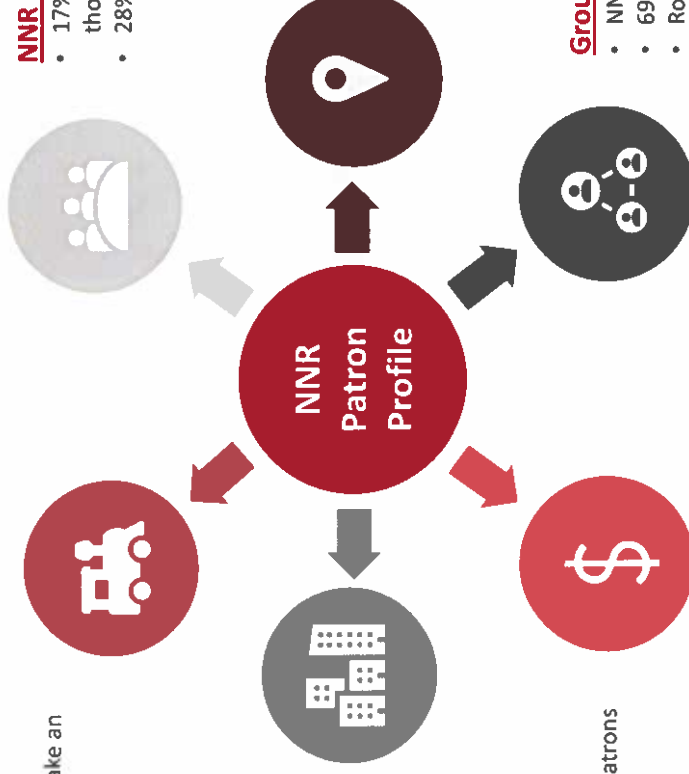
- 37% of Patrons are from Nevada while Utah and California each constitute 18%
- 61% of Nevada Patrons are from Clark County with the next highest being White Pine County at 14%

Money Spent

- 25% of the median amount of money Patrons spend in Ely is spent at the NNR

Group Makeup

- NNR Patrons' median group size is two
- 69% of Patrons are visiting with no minors in their party
- Roughly 50% of Patrons are between age 60-79



Executive Summary | Reasons to Ride



Top 3 stated purposes for the excursion:

1. To ride a historic train
2. To spend time with friends/family
3. To view the night sky



Experiencing a historic train ride and experiencing scenic beauty are the two most important reasons for taking the excursion.

The food and beverage offered on the excursion and experiencing the ranger program are the two least important reasons for the excursion.



87%

Would take their excursion again

“

The experience and the view that is not available in the urban areas.

“

We enjoy this part of Nevada, and the train excursion has become a family tradition when we visit Great Basin and Ely.

“

This is an important organization preserving railway history.



72%

Say the NNR train excursions are unique

“

This one is the whole original enchilada. It is a complete fully functional and extremely rare treasure of an operation.

“

Historic nature of the train and remoteness of the location. Untouched by human hands.

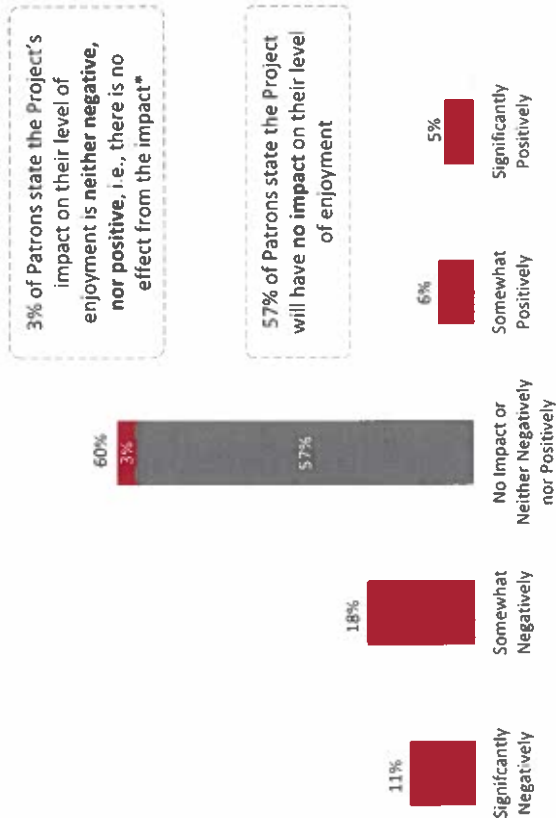
“

This one was special with the theme. The length of the train ride was the longest one I've done.

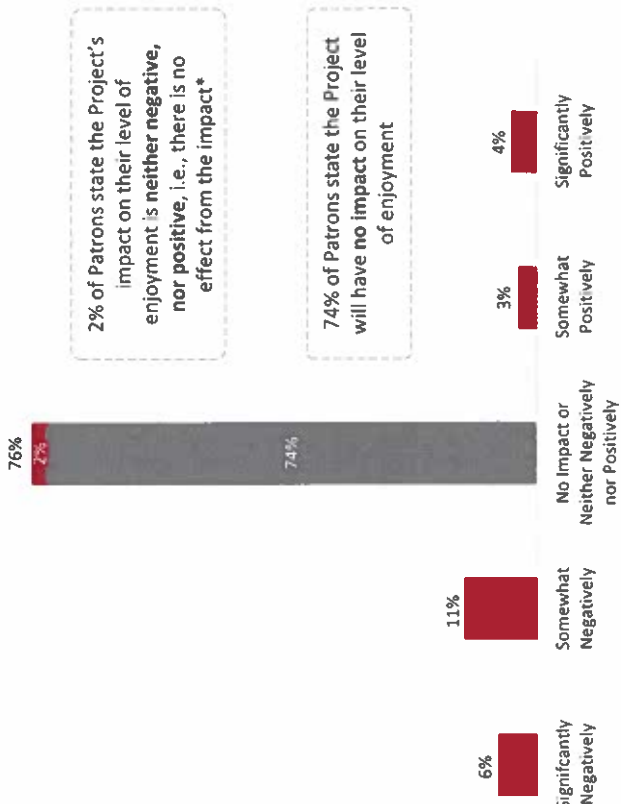
A large majority of Patrons state the Project will have no impact on their level of enjoyment and willingness to ride the Hi-Line rail.



Impact on level of enjoyment
n = 435



Impact on willingness to ride
n = 435



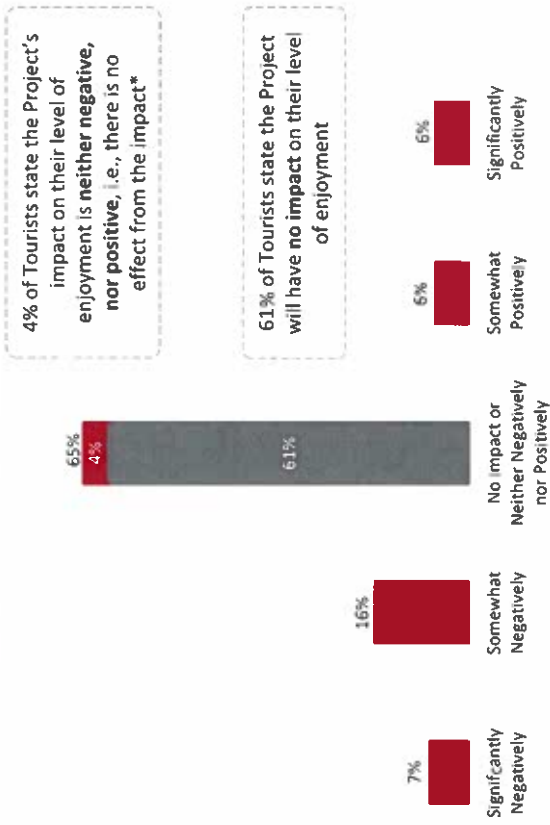
Q7a: How would the proposed pumped storage project impact your level of enjoyment when riding on this portion of the Hi-Line rail?
Q8a: How would the proposed pumped storage project impact your willingness to ride on this portion of the Hi-Line rail?
*If patron responded "Yes" to Q7/Q8 then answered Q7a/Q8a with "Neither Negatively or Positively"

Tourists are especially likely to state the Project will have no impact on their level of enjoyment and willingness to ride the **Hi-Line** rail.



Impact on level of enjoyment (Tourists only)
n = 342

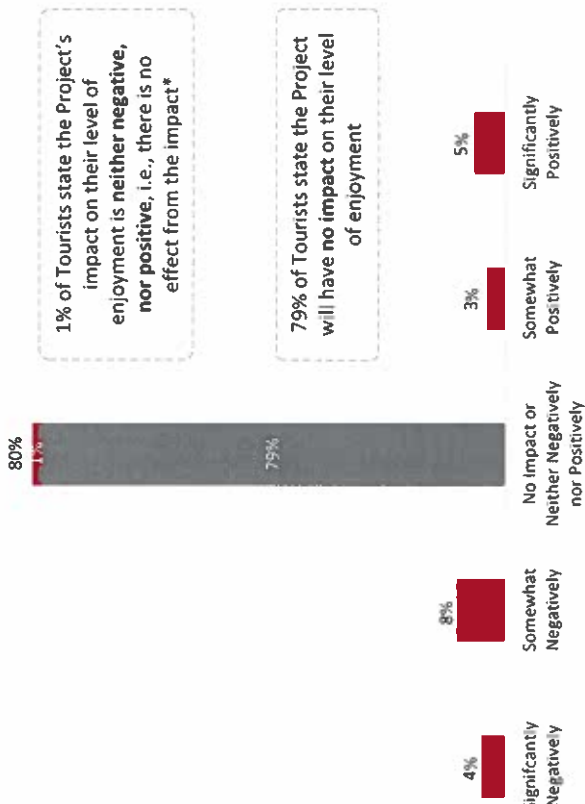
'Tourists' refers to Patrons who are not NNR Members and are not residents of the ELY area



65% of Tourists state there is **no impact, or no effect from the impact** on their level of enjoyment.



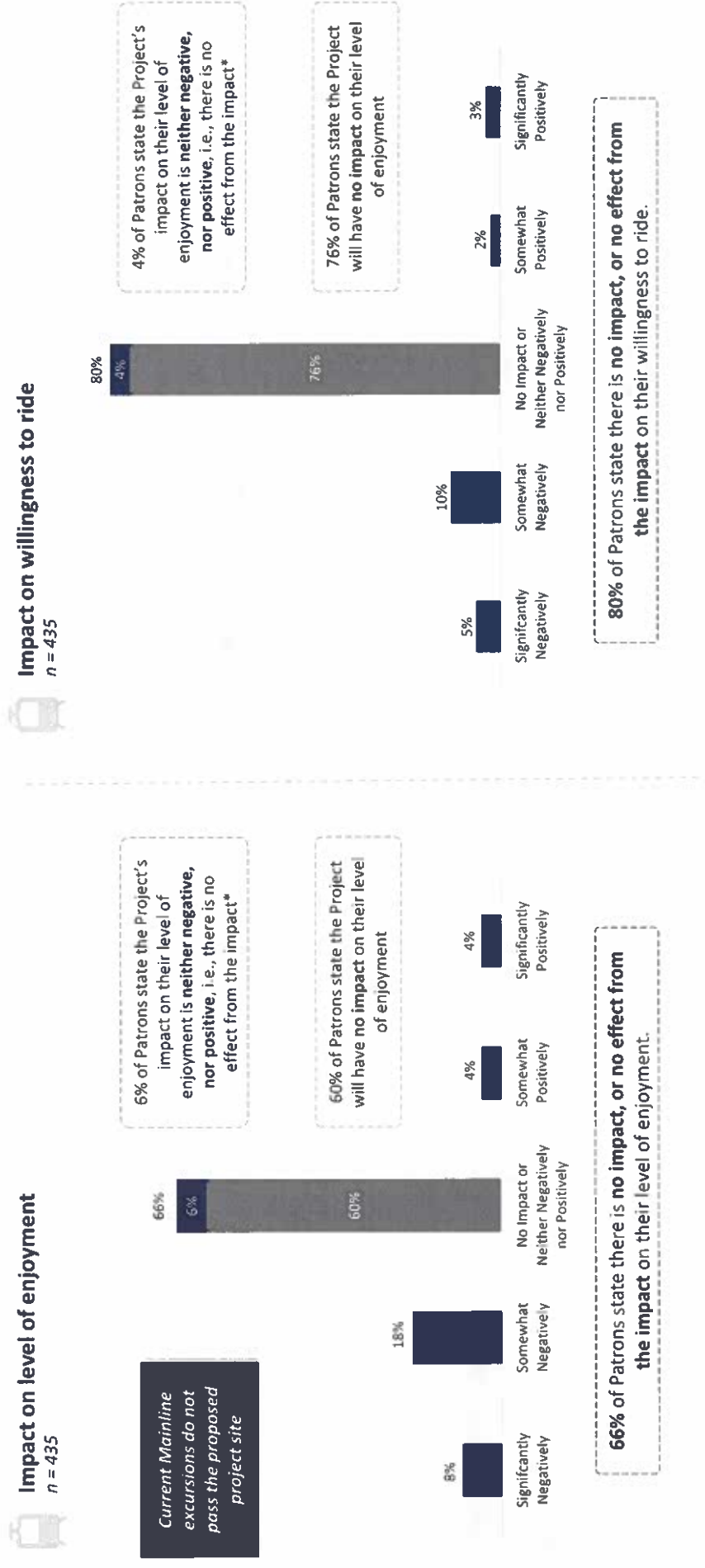
Impact on willingness to ride (Tourists only)
n = 342



80% of Tourists state there is **no impact, or no effect from the impact** on their willingness to ride.

Q7a: How would the proposed pumped storage project impact your level of enjoyment when riding on this portion of the Hi-Line rail?
Q8a: How would the proposed pumped storage project impact your willingness to ride on this portion of the Hi-Line rail?
*If patron responded "yes" to Q7/Q8 then answered Q7a/Q8a with "Neither Negatively or Positively"

A large majority of Patrons state the Project will have no impact on their level of enjoyment and willingness to ride the Mainline rail.



Q5a: How would the proposed pumped storage project impact your level of enjoyment when riding on this portion of the Mainline rail?

Q6a: How would the proposed pumped storage project impact your willingness to ride on this portion of the Mainline rail?

Q6a: How would the proposed pumped storage project impact your willingness to ride on this portion?

*If patron responded "Yes" to Q5/Q6 then answered Q5a/Q6a with "Neither Negatively or Positively"

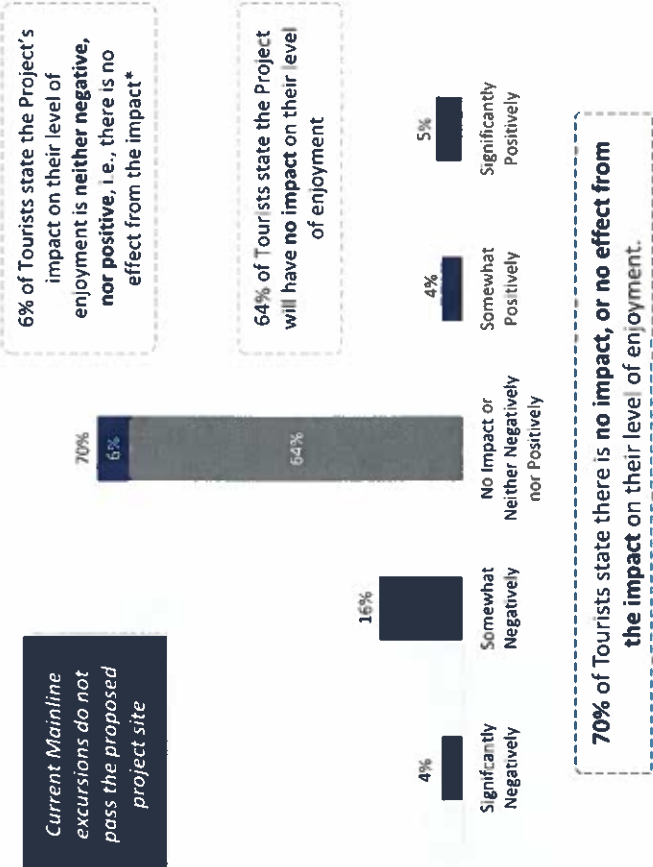
Tourists are especially likely to state the Project will have no impact on their level of enjoyment and willingness to ride the Mainline rail.



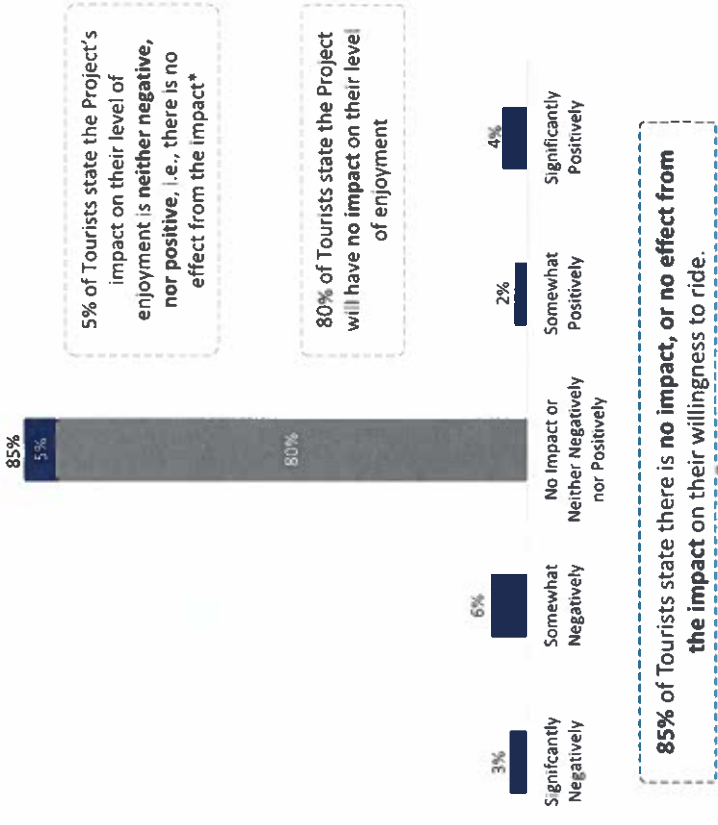
Impact on level of enjoyment (Tourists only)
n = 342

Tourists' refers to Patrons who are not NNR Members and are not residents of the ELY area

Current Mainline
excursions do not
pass the proposed
project site

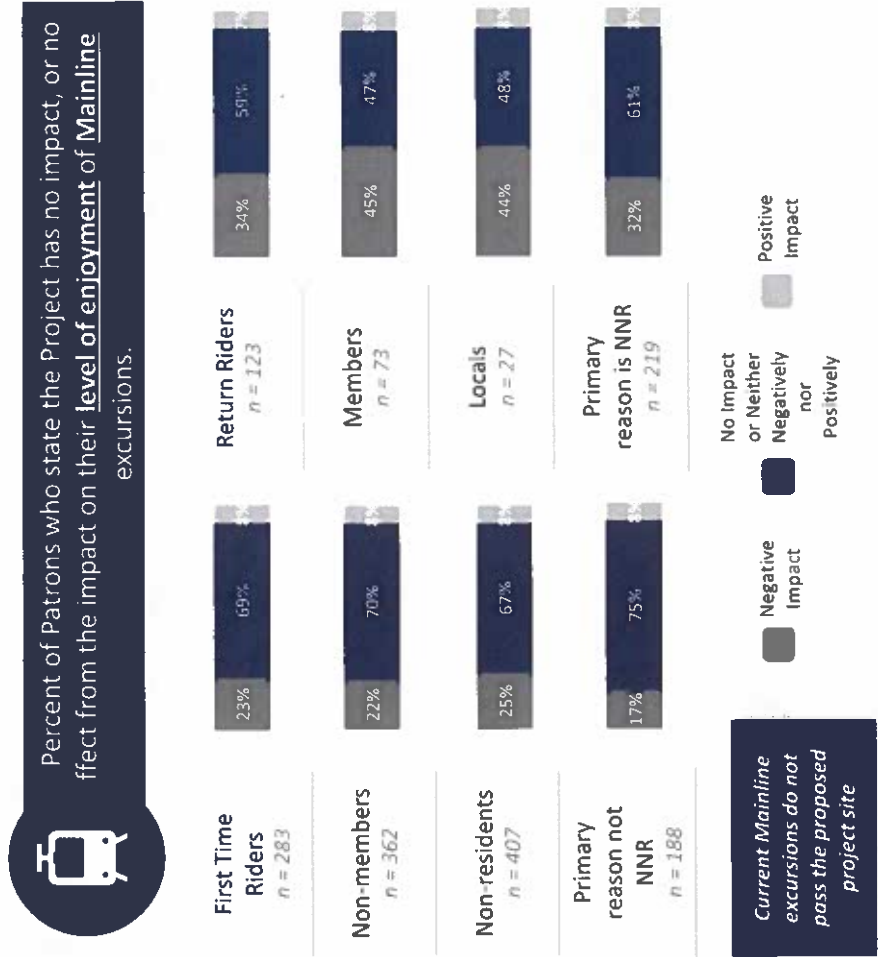


Impact on willingness to ride (Tourists only)
n = 342

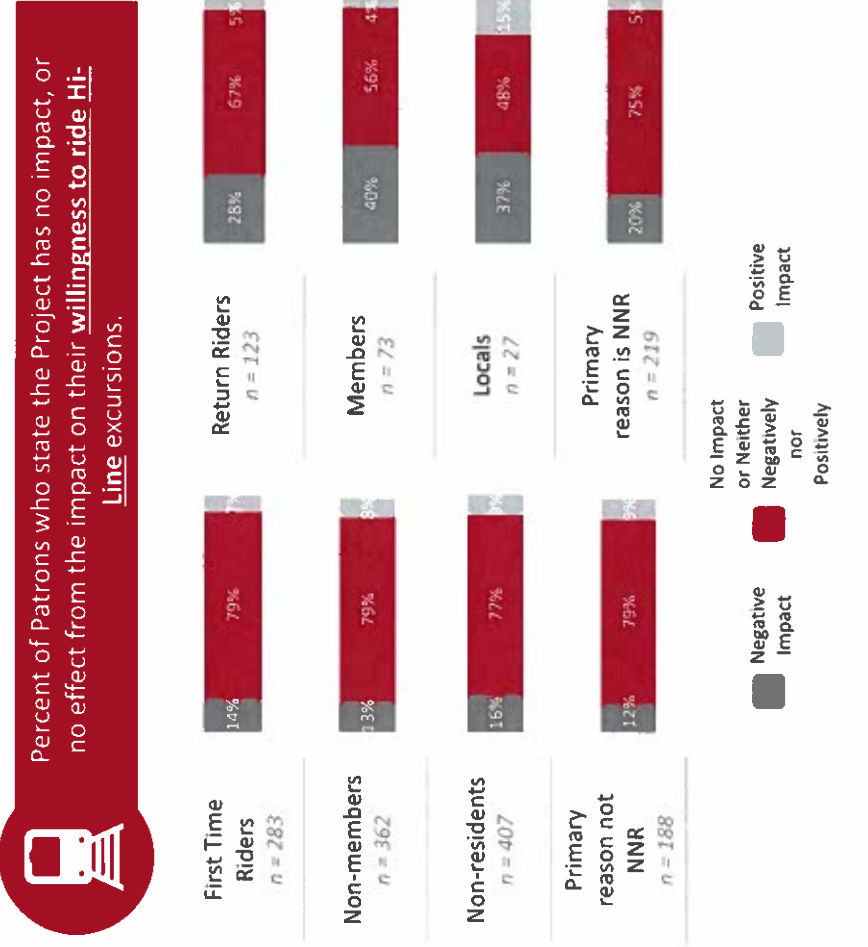
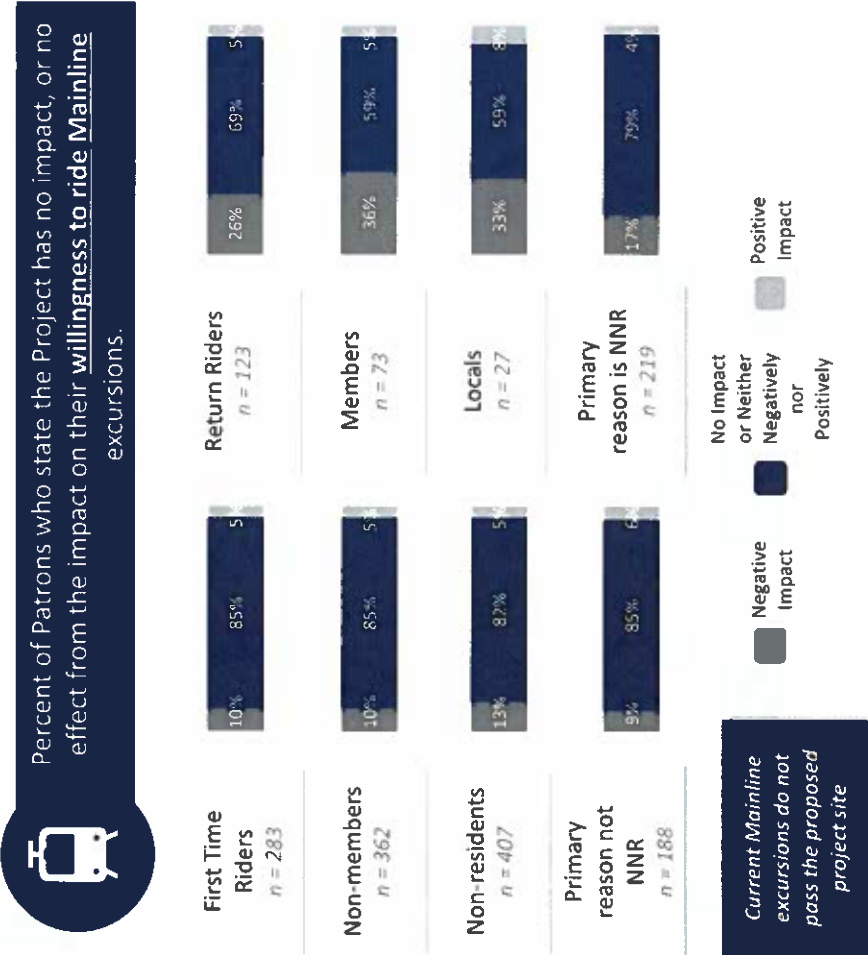


Q5a: How would the proposed pumped storage project impact your level of enjoyment when riding on this portion of the Mainline rail?
Q6a: How would the proposed pumped storage project impact your willingness to ride on this portion of the Mainline rail?
*If patron responded "yes" to Q5/Q6 then answered Q5a/Q6a with "Neither Negatively or Positively"

Across groups, Patrons are more likely to state the Project will have no impact, or no effect from the impact on their level of enjoyment of the Mainline rail compared to the Hi-Line.



Across groups, Patrons were more likely to state the Project will have no impact, or no effect from the impact on their willingness to ride the Mainline rail compared to the Hi-Line.

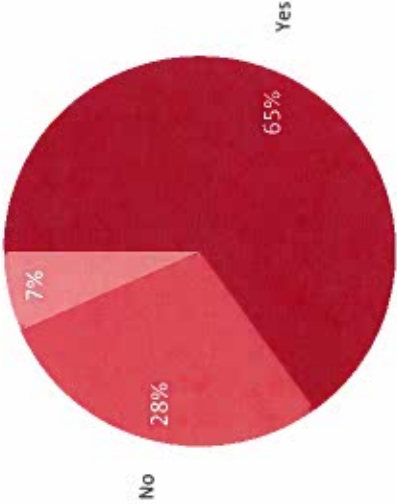


NNR Patron Profile

A majority of Patrons report that this is their first NNR excursion. For those who have previously ridden NNR, most have taken between 1 – 3 excursions.

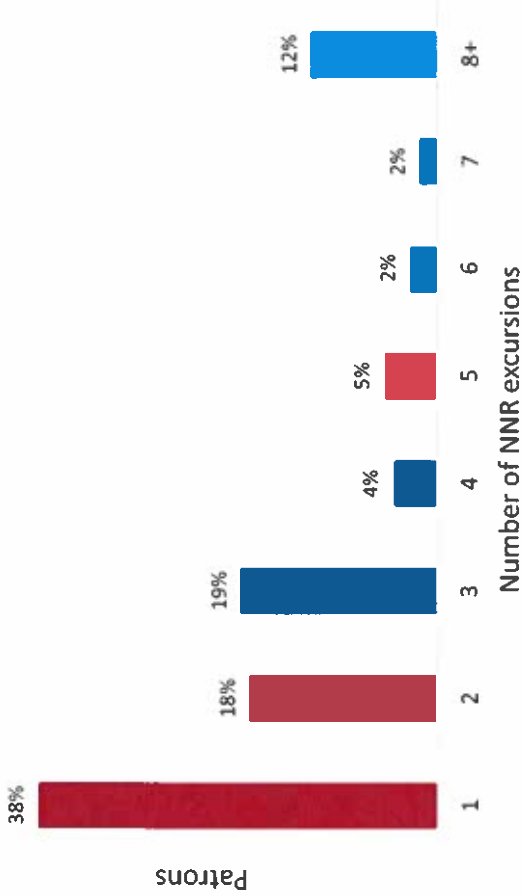
First ever NNR excursion
n = 435

I have never taken, and am
not taking, an NNR excursion
today



72% of Patrons have not ridden NNR before.

Number of past NNR excursions taken, if any
n = 123



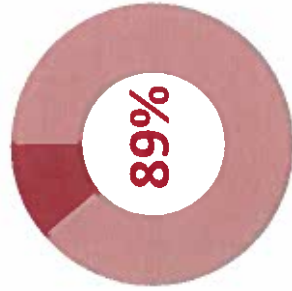
The median number of times Patrons have taken **non-NNR** train excursions was **two**.

A NNR excursion is part of nearly all Patrons' plans for the day. Patrons plan to or have taken a variety of different excursions.

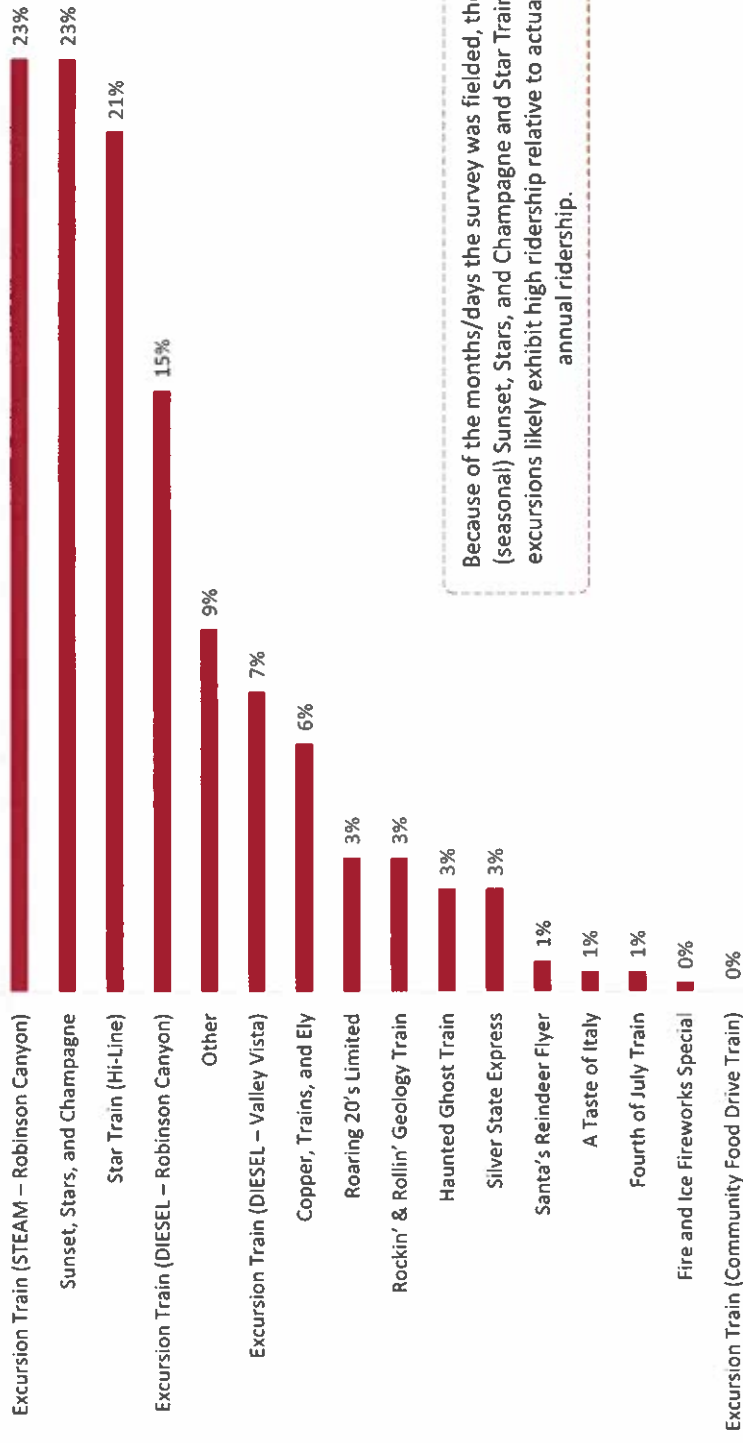
 Train excursion
n = 435



Specific excursion plans
n = 387



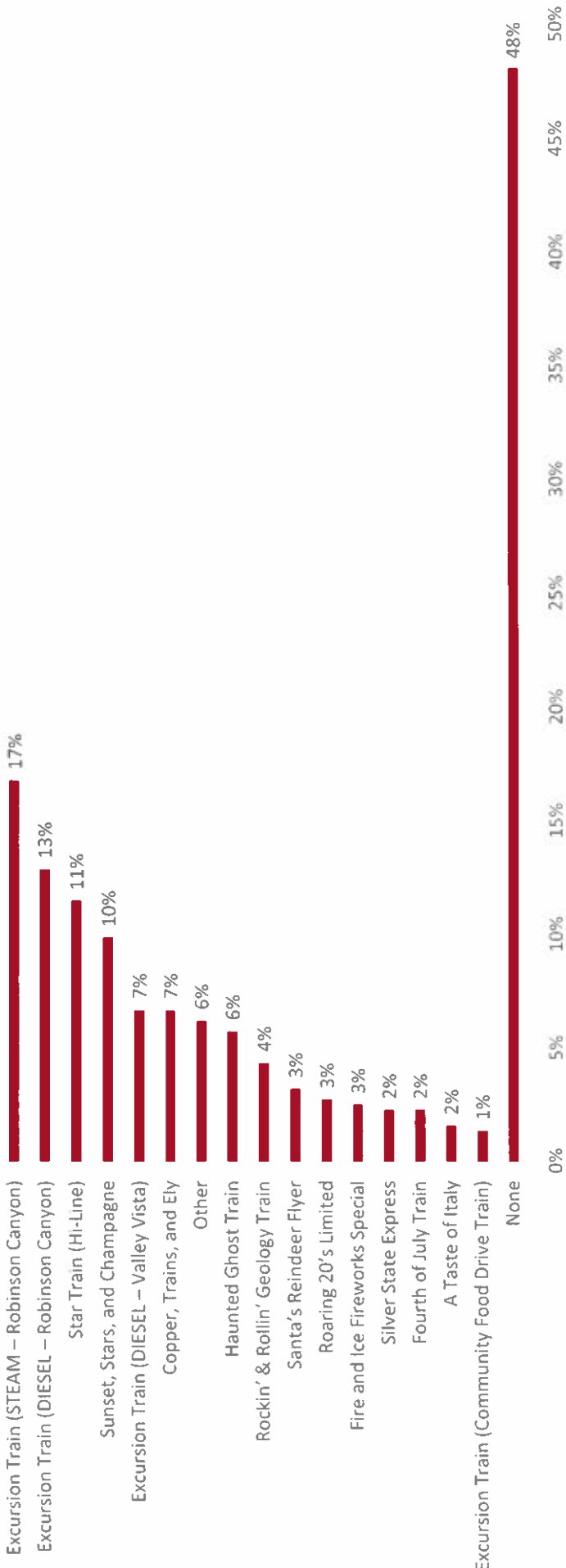
Had ridden or planning to ride a train the day of their survey



Because of the months/days the survey was fielded, the (seasonal) Sunset, Stars, and Champagne and Star Train excursions likely exhibit high ridership relative to actual annual ridership.

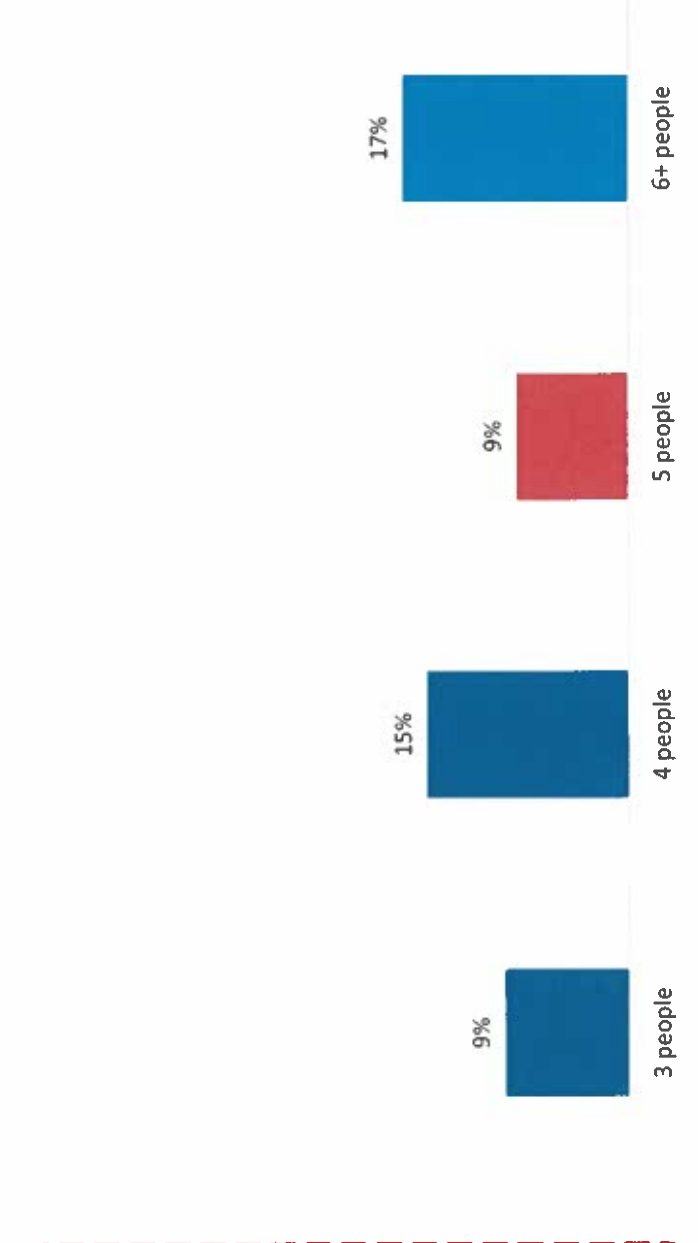
Among past NNR excursions Patrons have taken, the STEAM and DIESEL excursions in Robinson Canyon are most common, and the seasonal Star Train is the 3rd most common.

 Past NNR excursions Patrons have taken
n = 435

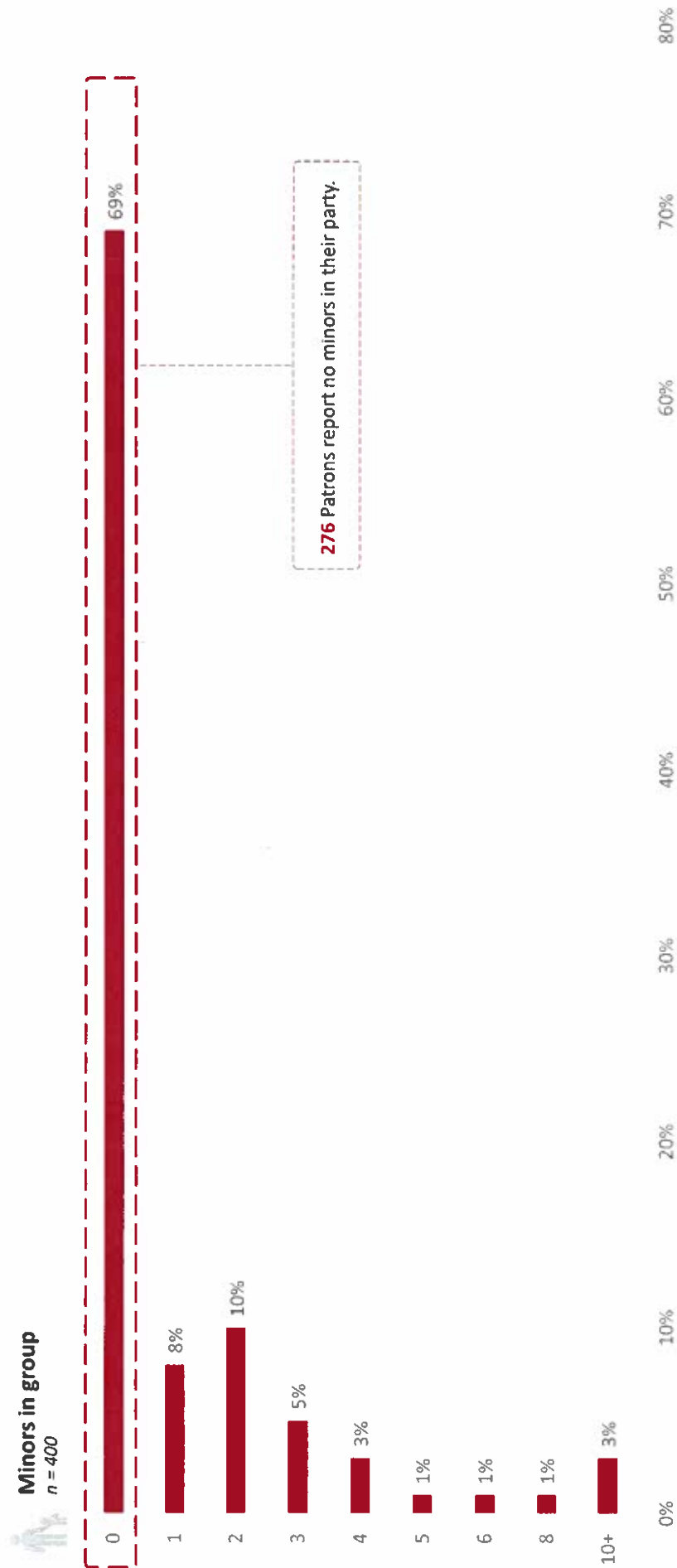


Nearly half of Patrons are traveling in a group of two, or alone. Large groups account for a relatively small portion of Patrons.

 Group size
n = 435

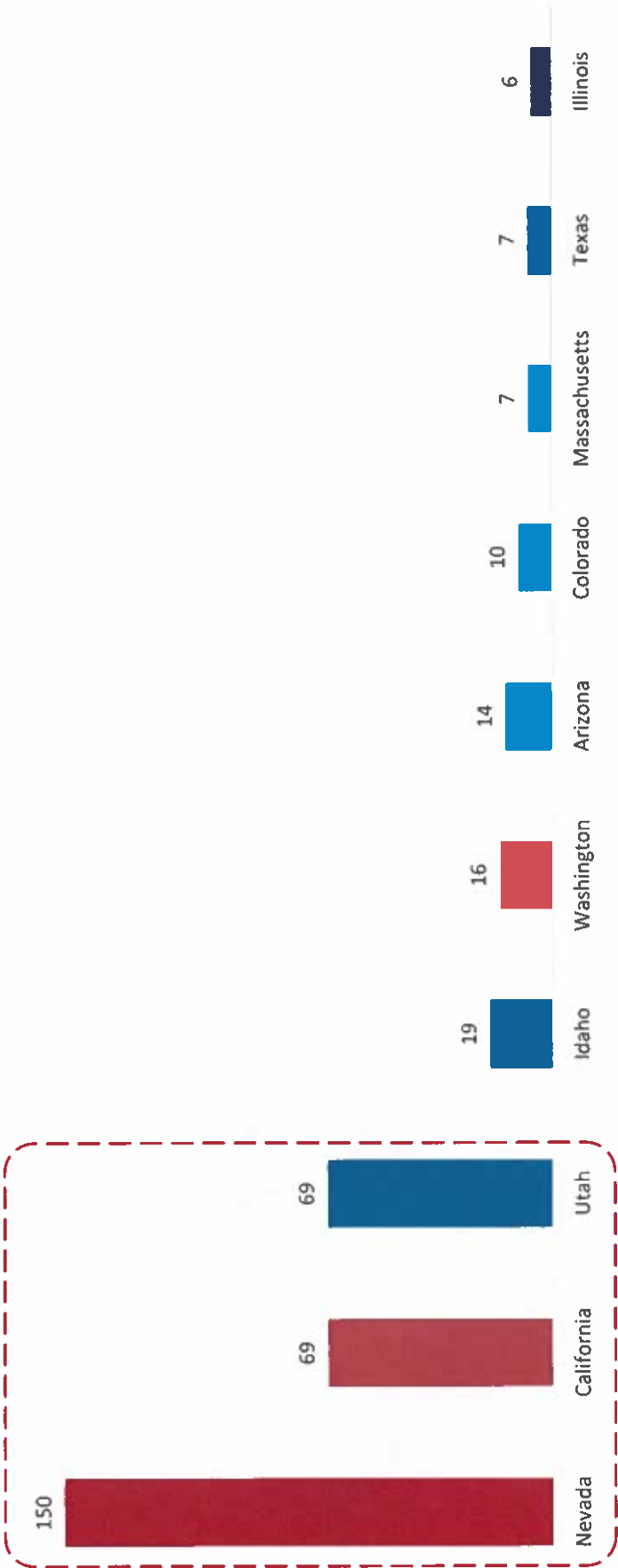


Most Patrons have no minors in their party.



NNR Patron Profile | Top Locations by State

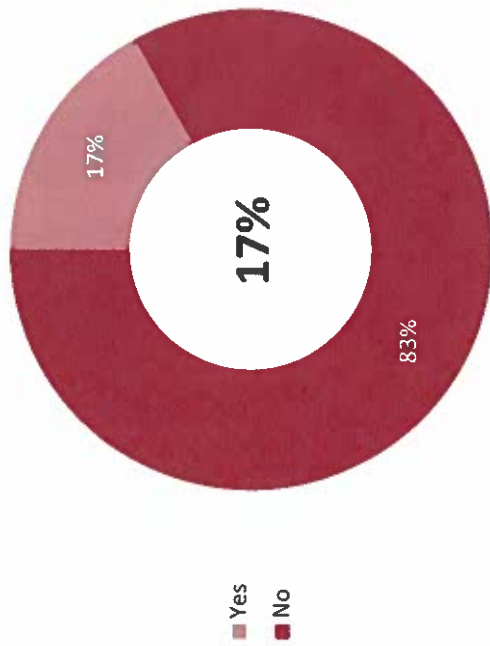
Where riders are coming from
n = 411



24 responses have been excluded from the display due to invalid data entries or non-U.S. resident entries.

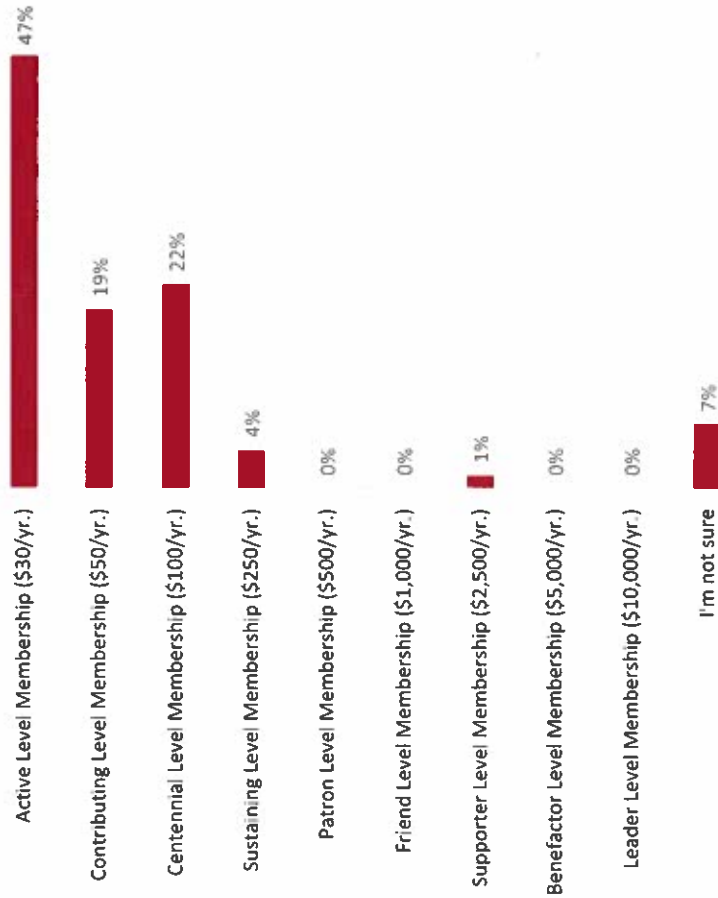
Most Patrons are not NNR Members, and almost half of those that are report the minimum level of membership.

 NNR Membership rate
n = 435

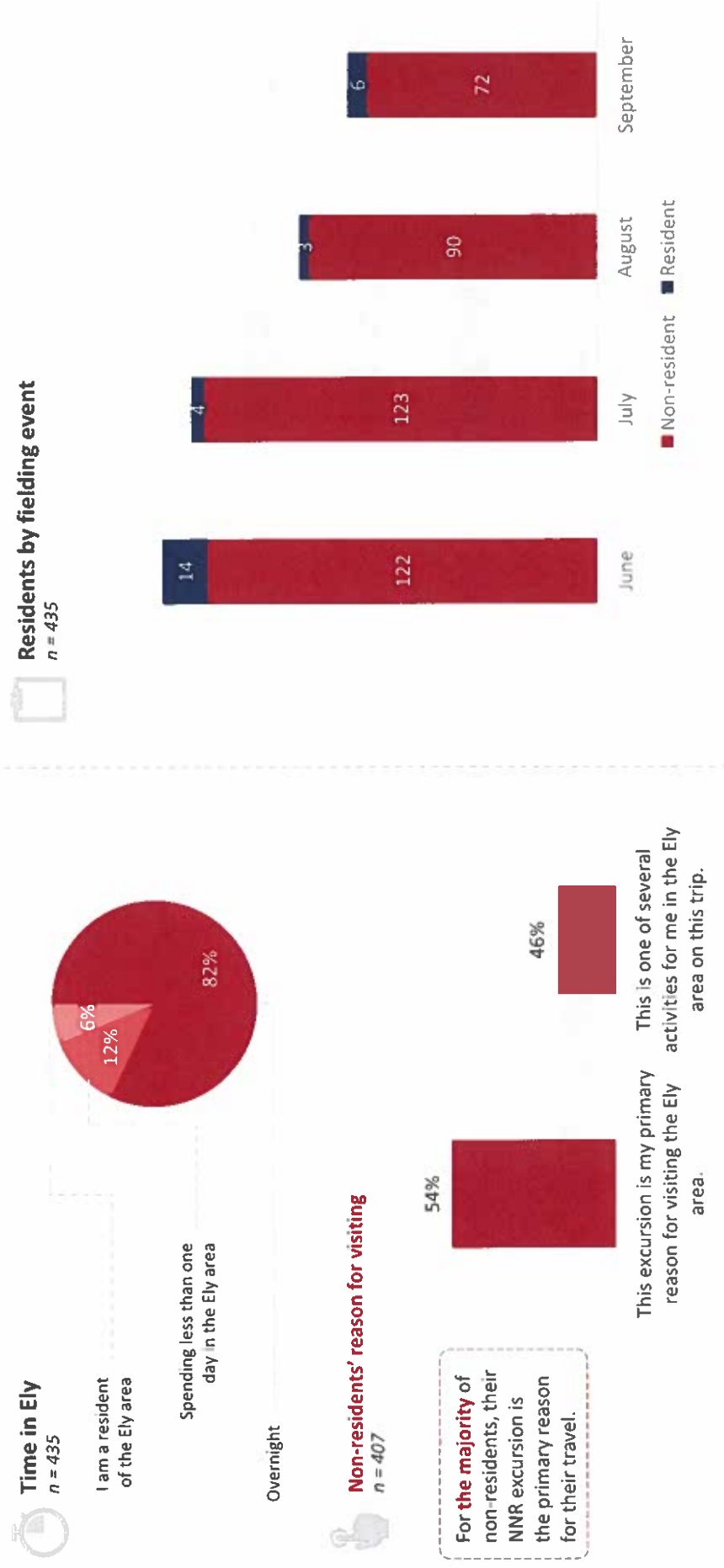


73 out of **435** total Patrons report being a Nevada Northern Railway member.

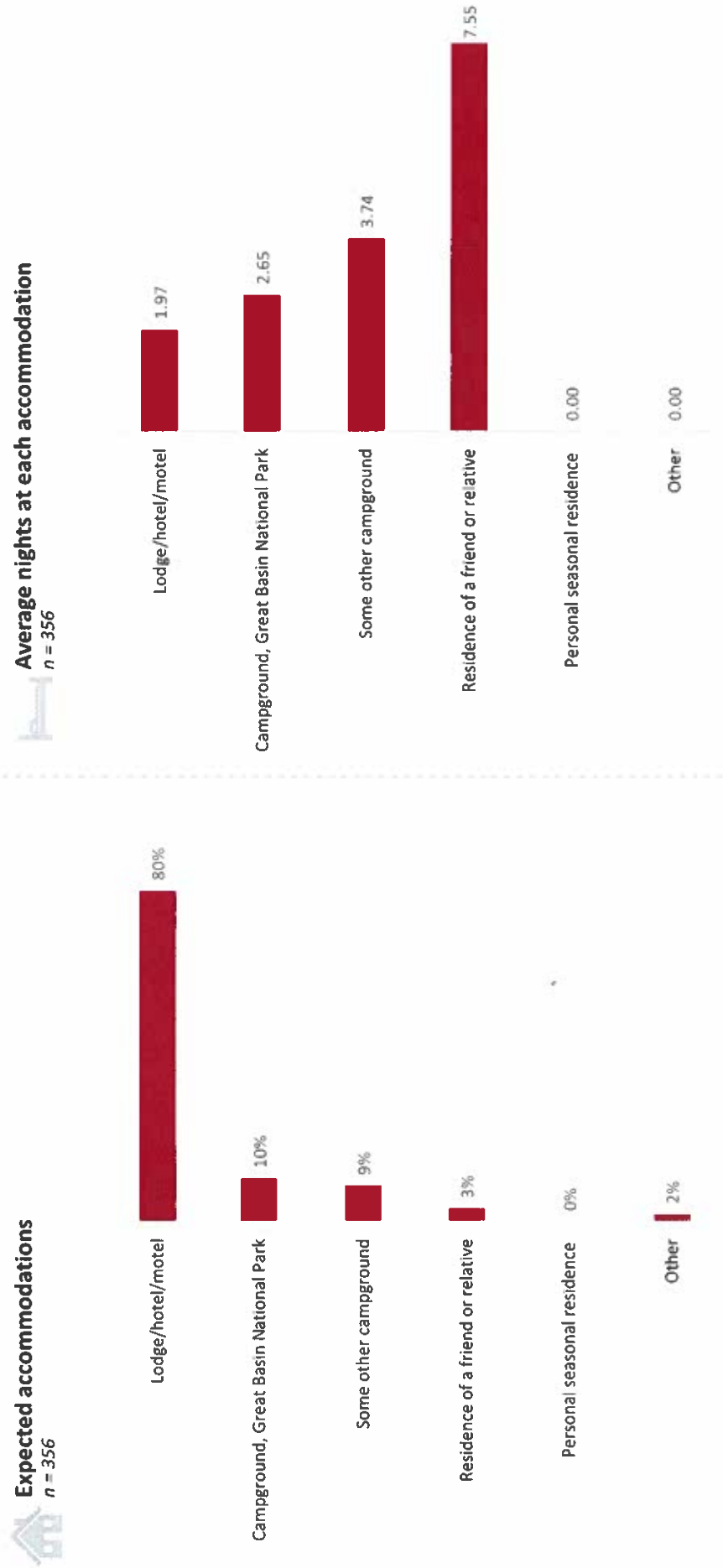
 Level of membership
n = 73



Only 27 Patrons are residents of Ely, with the most residents participating in the June fielding event.

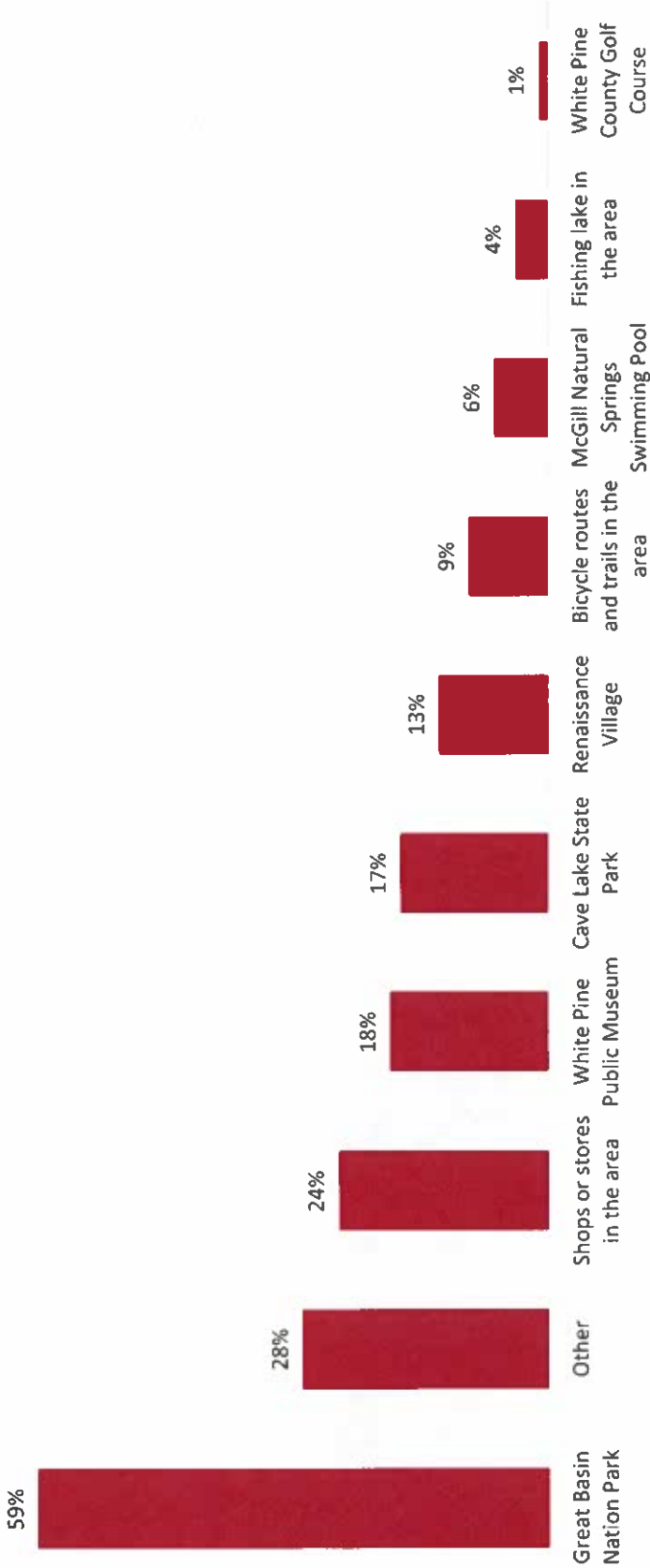


The most common accommodation for Patrons is a lodge, hotel, or motel, though they are more likely to stay for a longer period of time at a friend or family's residence.



Patrons have a variety of additional plans in the area, with more than half planning to visit Great Basin National Park.

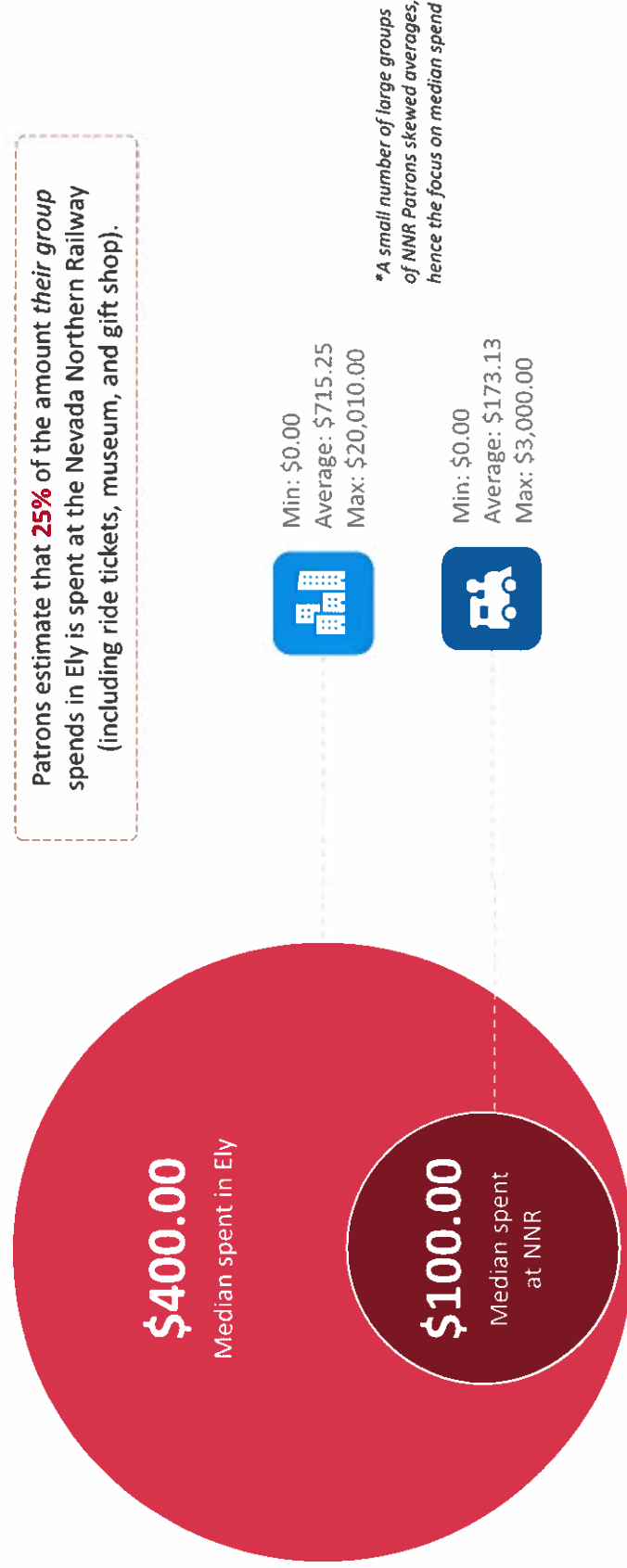
Other attraction plans
n = 407



Patrons estimate that they spend a quarter of the total amount they plan to spend in the Ely area at NNR.

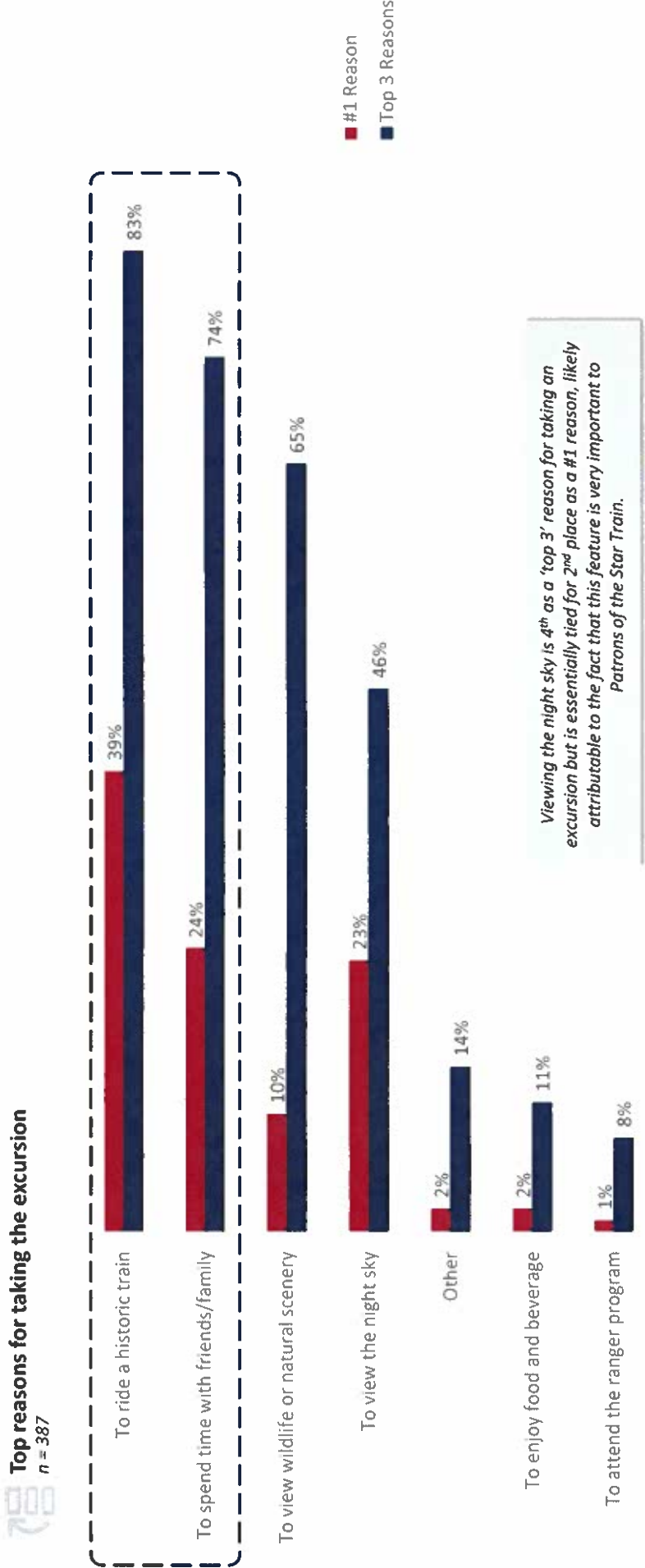


Money spent at NNR estimate
n = 433



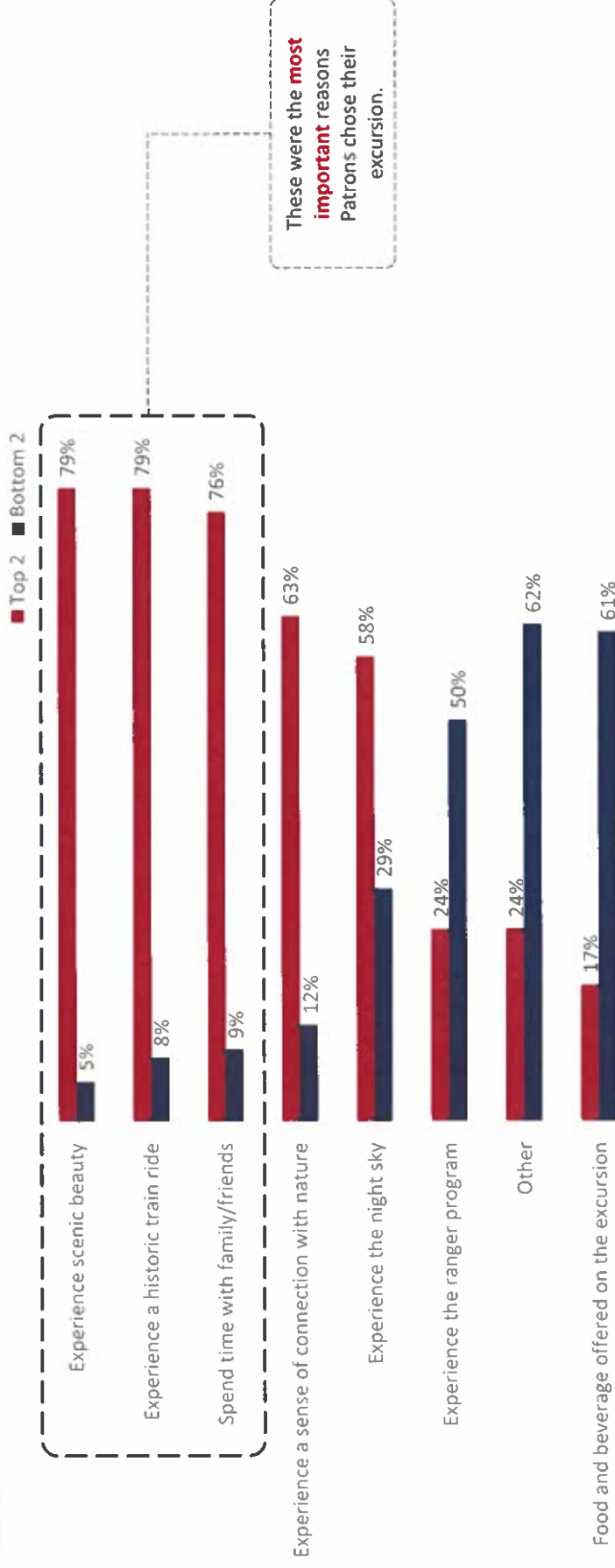
Reasons to Ride

The top reasons for taking an excursion include riding a historic train and spending time with friends/family.



The most important factors Patrons note for taking the excursion are experiencing scenic beauty, a historic train ride, and spending time with family and friends.

Most and least important factors
n = 387



Patrons would overwhelmingly go on another excursion, with distance being one of the only reasons why they say no or are unsure.



Likelihood of taking another excursion
n = 406



"Would love to experience all of the train excursions especially the ghost train ride and the night star train excursions."

"The staff and volunteers are very friendly. The historic trains are rare."

"We enjoy this part of Nevada and the train excursion has become a family tradition When we visit Great Basin and Ely."

"I enjoy scenic and historic train rides. Enthusiastic personnel. Friendly vibe."

"I love the time with family and seeing the stars. This train is a great experience."

"As long as the nature is left alone. Stop taking from the farmers and the wildlife with your beautification lies."*

3%
No, unlikely

A few Patrons note the distance is too far for them likely return

"Don't see myself coming back to the area."

10%
Not Sure

Patrons either have not yet ridden the train or cite reasons such as distance

"It is beautiful here. It is a very long drive, however."

"Since I have not yet ridden, I don't yet have an opinion."



Q10: Would you consider taking a Nevada Northern Railway excursion again?

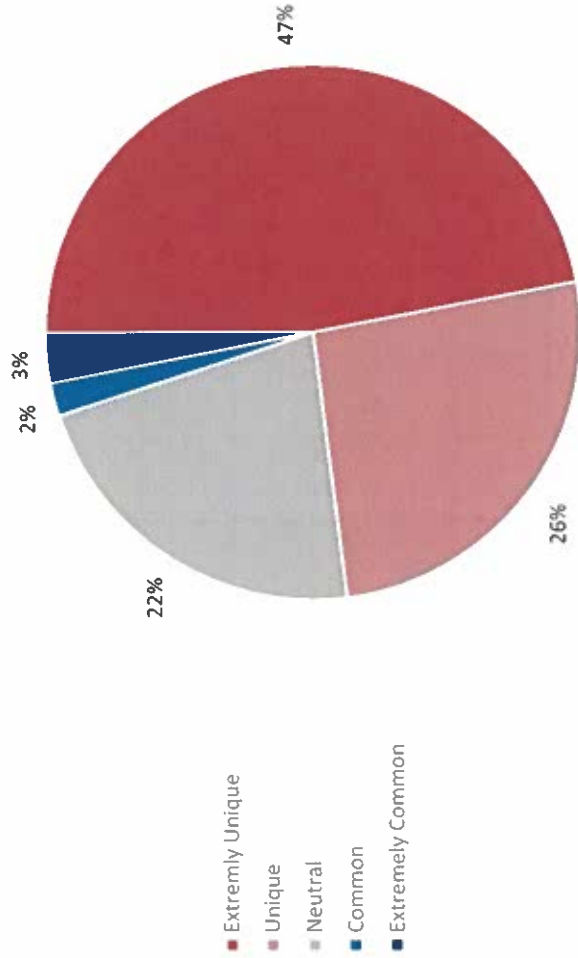
Q11: Why or why not?

*This was one of 2 comments (out of a total of 110) that appeared to have negative undertones towards the Project.

Most Patrons believe the excursions are unique, noting the history, scenery, trains themselves, length, skies, and staff as some reasons why.



Relative uniqueness of excursion
n = 435



Extremely Unique
Unique
Neutral
Common
Extremely Common

73% of Patrons state that NNR excursions are either **unique** or **extremely unique**.

"**Authentic and visual beauty** plus overall **quality** of the experience."

"The connection and experience tied to the **history** of the railway."

"The **scenery** is different than all of the others I have done, and the **trains** are amazing."

"**Steam engine** and wide **variety** of types of rides."

"**Location**. The trains are beautiful, and unusual."

"Beautiful **night sky** that is not visible in southern Nevada."

*Effects on Enjoyment and Willingness to Ride:
Hi-Line*

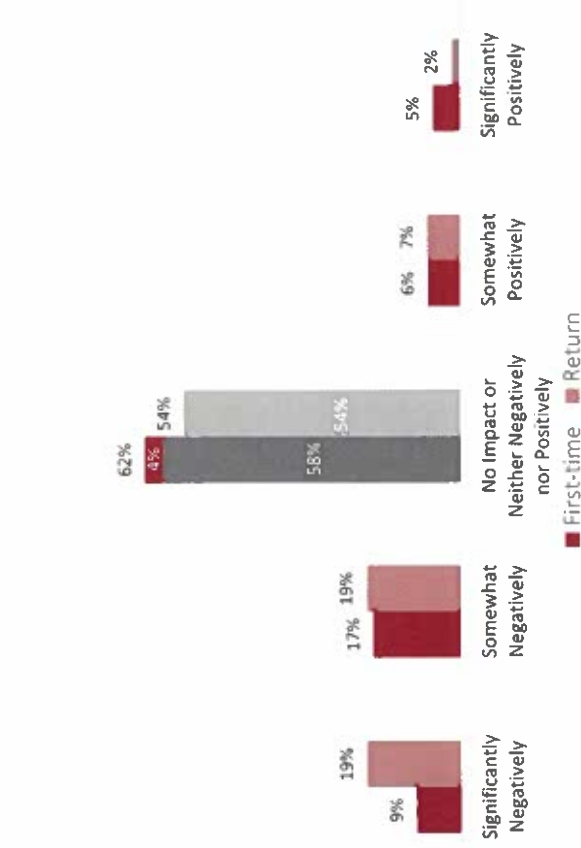
Return riders are more likely to state there are negative impacts and less likely to state there is no impact, or no effect from the impact because of the Project compared to first-time riders.



First-time vs. return riders

First-time riders: n = 283, Return riders: n = 123

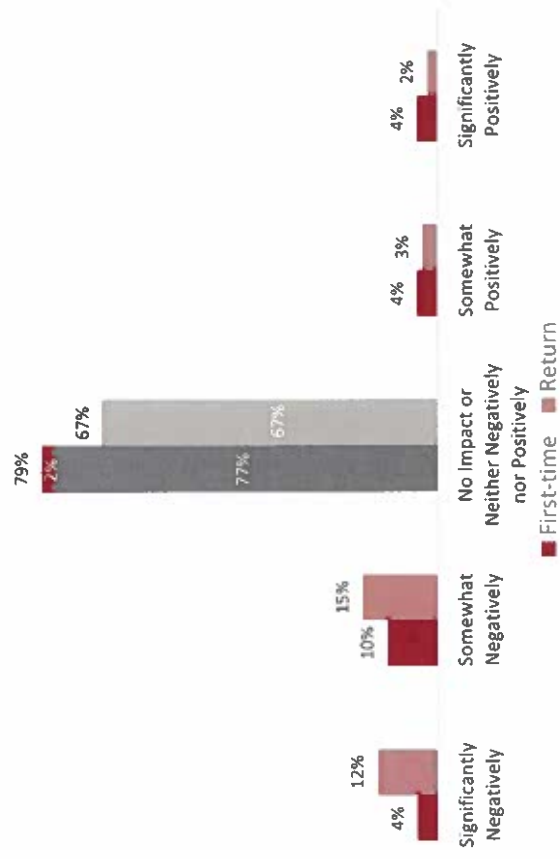
Impact on level of enjoyment



62% of first-time riders state there is **no impact, or no effect from the impact** on their level of enjoyment compared to **54%** of return riders.



Impact on willingness to ride



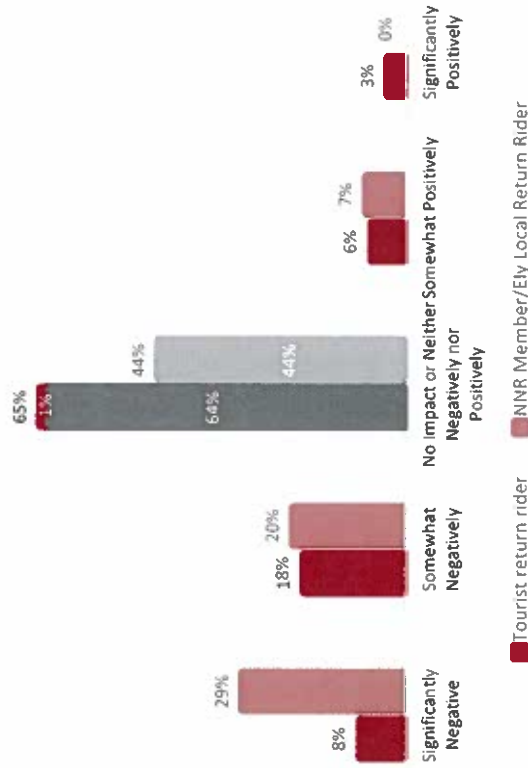
79% of first-time riders state there is **no impact, or no effect from the impact** on their willingness to ride compared to **67%** of return riders.

NNR member/Ely local return riders are more likely to indicate negative impacts and less likely to indicate no impact, or no effect from the Project compared to tourist return riders.



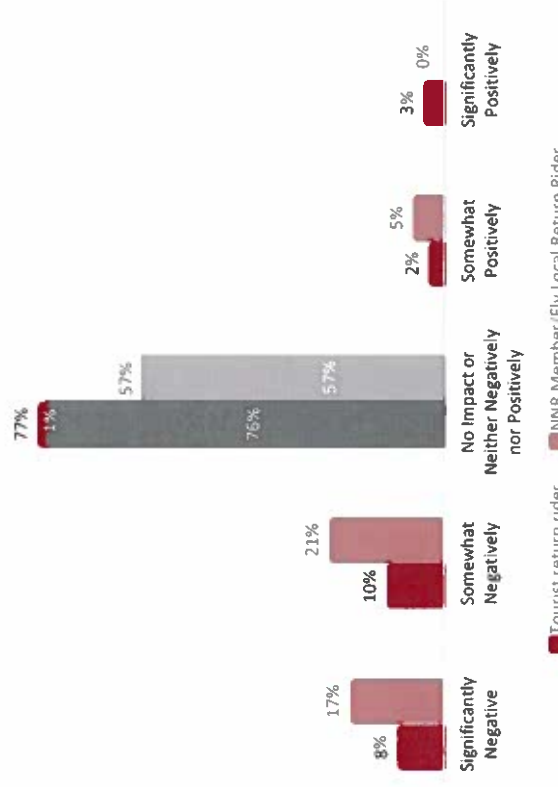
Tourist return riders vs. NNR member/Ely local return riders
Tourist return riders: n = 62, NNR member/Ely local return riders: n = 61

Impact on level of enjoyment



65% of tourist return riders state there is **no impact, or no effect from the impact** on their level of enjoyment compared to **44%** of NNR member/Ely local return riders.

Impact on willingness to ride



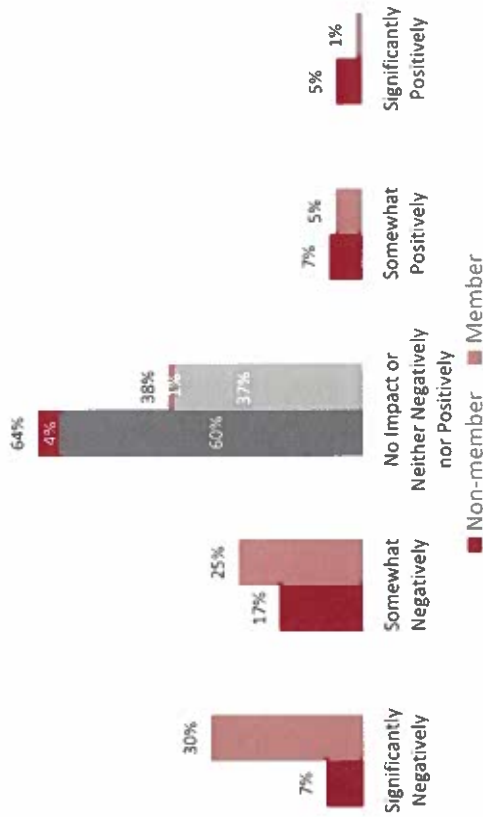
77% of tourist return riders state there is **no impact, or no effect from the impact** on their willingness to ride compared to **57%** of NNR member/Ely local return riders.

NNR Members are far more likely to state there are negative impacts and less likely to state there is no impact, or no effect from the impact because of the Project compared to non-members.



Non-members vs. NNR Members
Non-members: n = 362, Members: n = 73

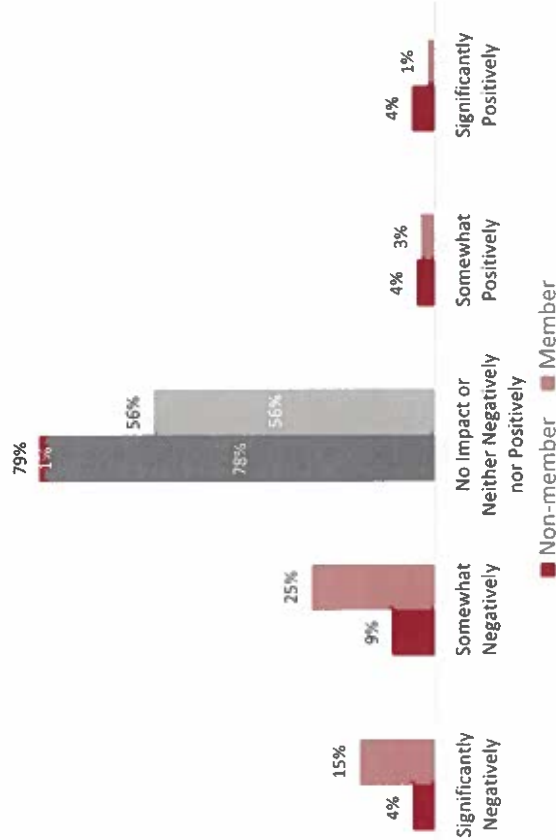
Impact on level of enjoyment



64% of non-members state there is **no impact, or no effect from the impact** on their level of enjoyment compared to **38%** of NNR Members.



Impact on willingness to ride



79% of non-members state there is **no impact, or no effect from the impact** on their willingness to ride compared to **56%** of NNR Members.

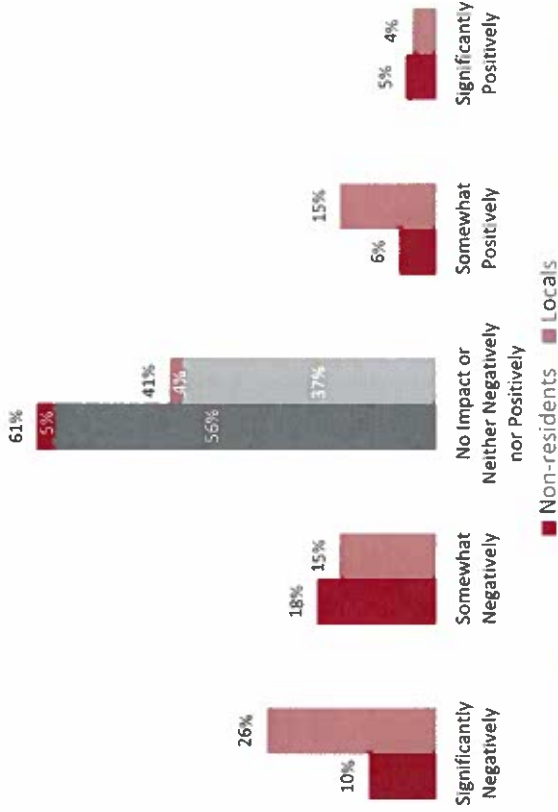
Locals are far more likely to state there are significant negative and somewhat positive impacts and less likely to state there is no impact, or no effect from the impact because of the Project.



Non-residents vs. Locals

Non-residents: n = 407, Locals: n = 27

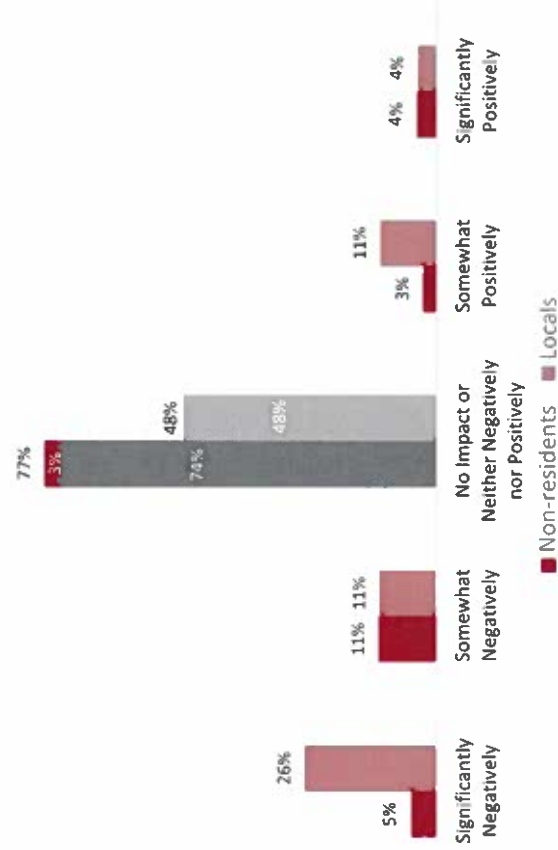
Impact on level of enjoyment



61% of non-residents state there is **no impact, or no effect from the impact** on their level of enjoyment compared to **41%** of Locals.



Impact on willingness to ride



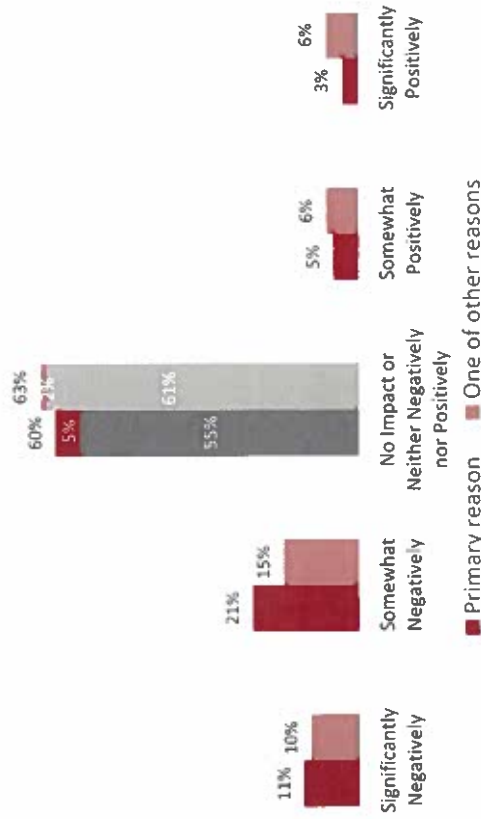
77% of non-residents state there is **no impact, or no effect from the impact** on their willingness to ride compared to **48%** of Locals.

Patrons whose primary reason for being in the area is their NNR excursion are slightly more likely to indicate negative impact because of the Project.



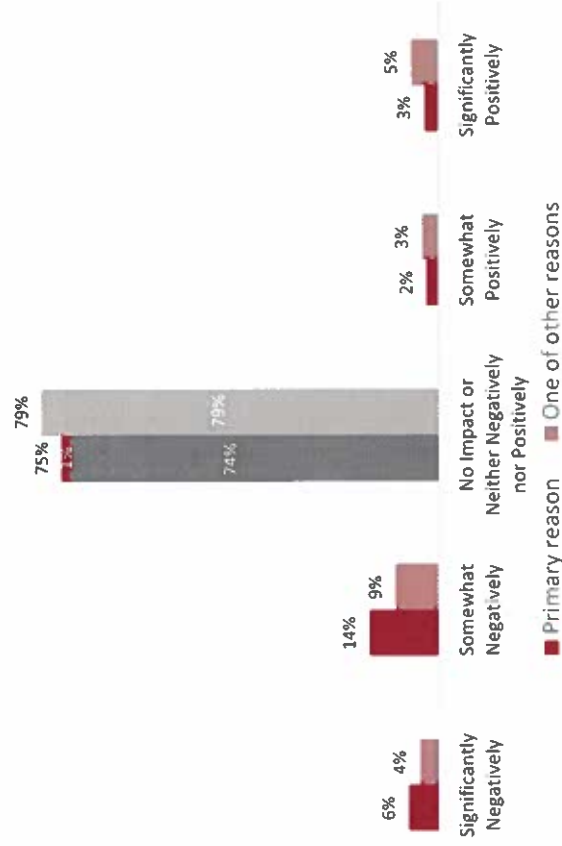
Primary reason for being in area is/is not NNR excursion
Primary reason: n = 219, One of other reasons: n = 188

Impact on level of enjoyment



60% of Patrons whose primary reason for being in the area is the NNR excursion state there is **no impact, or no effect from the impact** on their level of enjoyment compared to 63% of Patrons whose primary reason for being in the area is not the NNR excursion.



Impact on willingness to ride



75% of Patrons whose primary reason for being in the area is the NNR excursion state there is **no impact, or no effect from the impact** on their willingness to ride compared to 79% of Patrons whose primary reason for being in the area is not the NNR excursion.



Women are slightly more likely to indicate negative and positive impacts of the Project on the Hi-Line rail compared to men.

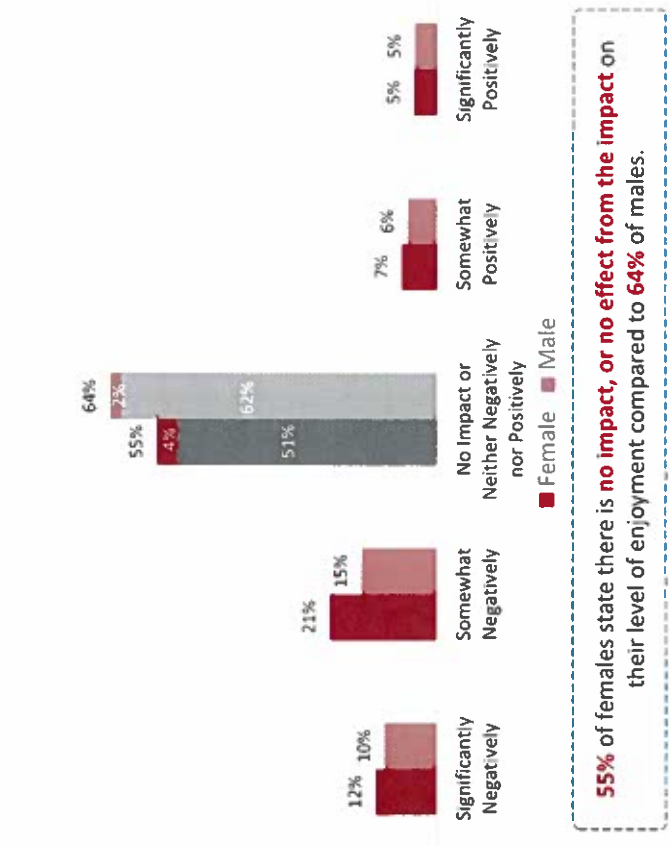



Female vs. male
 Female: n = 214, Male: n = 221

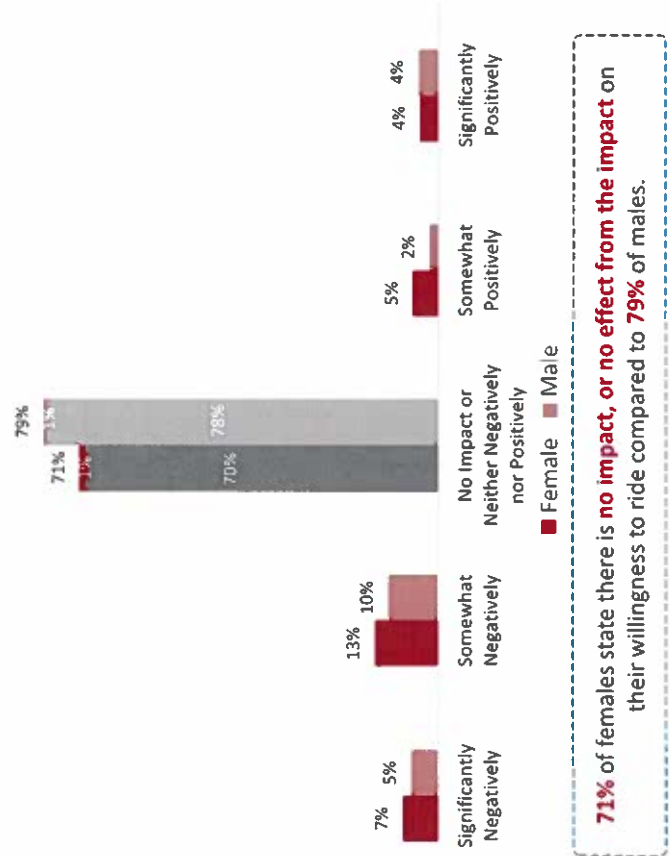


 Hi-Line

Impact on level of enjoyment



Impact on willingness to ride

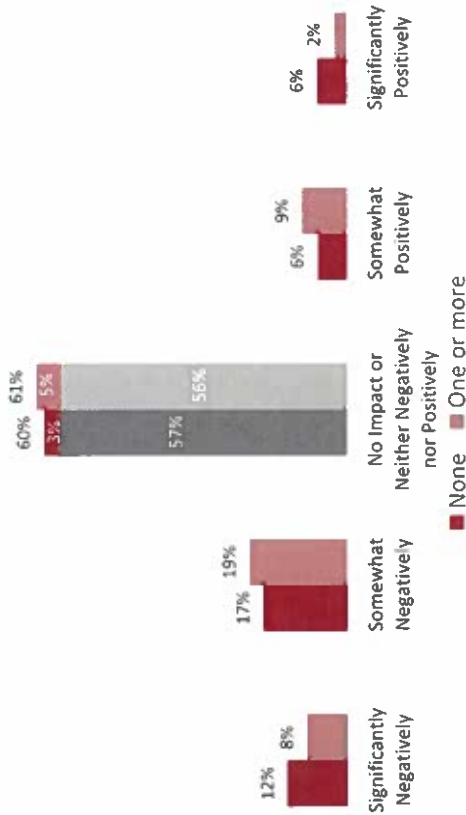


There are few differences in perceived impact of the Project based on whether a group had members under 18.



Minors in group vs. No minors in group
None: n = 276, One or more: n = 124

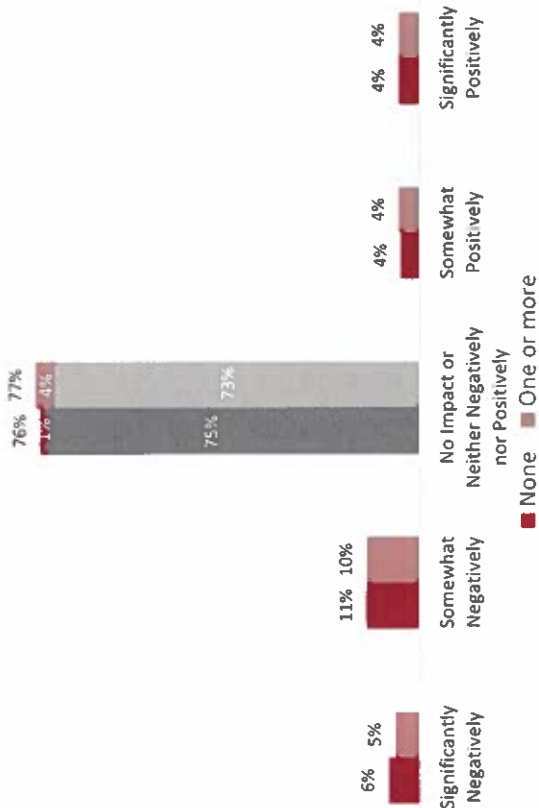
Impact on level of enjoyment



60% of Patrons who don't have minors in their group state there is **no impact, or no effect from the impact** on their level of enjoyment compared to **61%** of Patrons who have one or more minor in their group.



Impact on willingness to ride

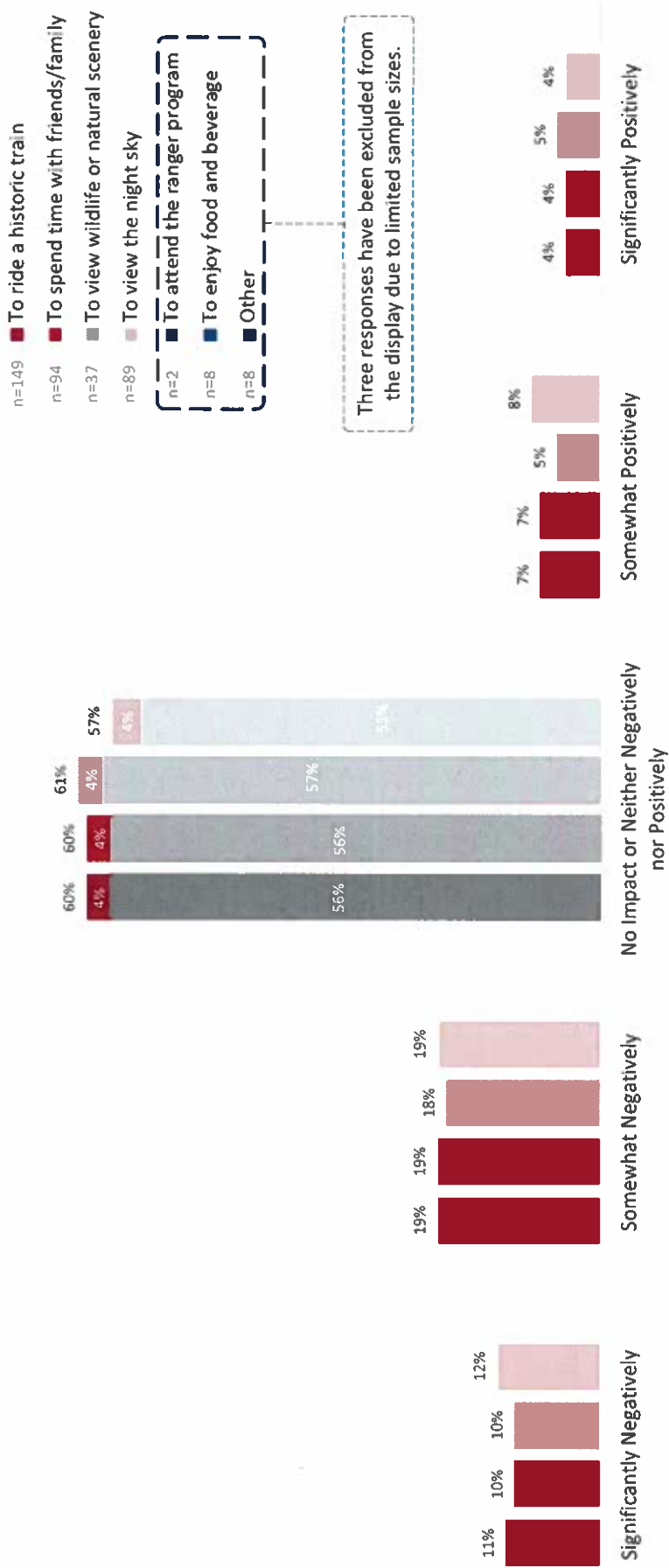


76% of Patrons who don't have minors in their group state there is **no impact, or no effect from the impact** on their willingness to ride compared to **77%** of Patrons who have one or more minor in their group.

Regardless of the top reason for their excursion, a large majority of Patrons state there is no impact, or no effect from the impact on their level of enjoyment because of the Project.

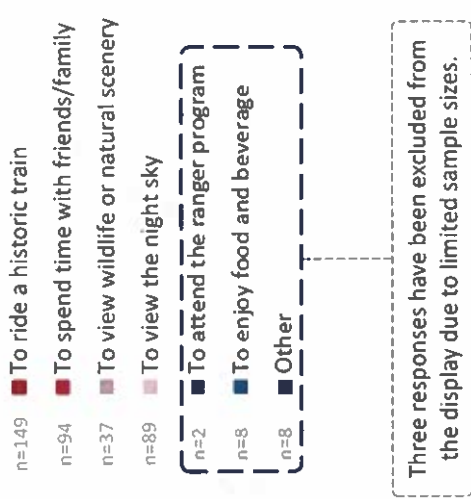
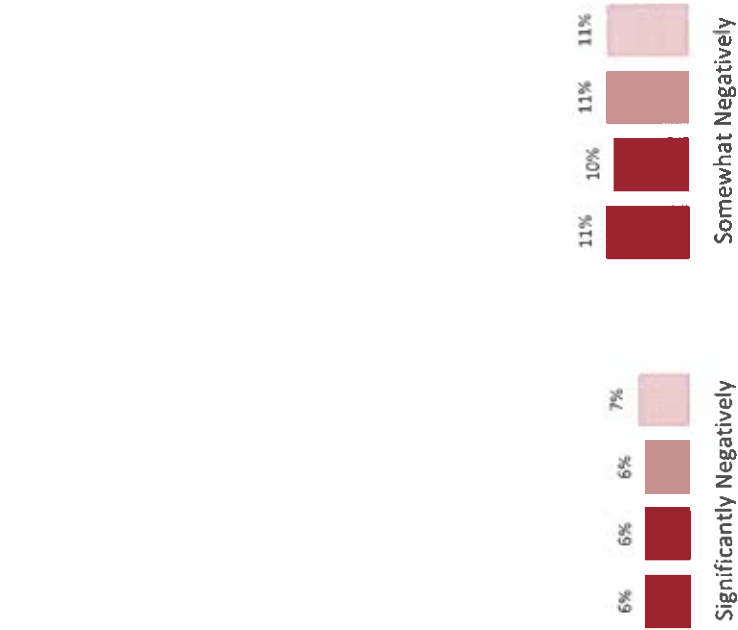


Impact on level of enjoyment
Top reason for riding
Top reason: n = 369

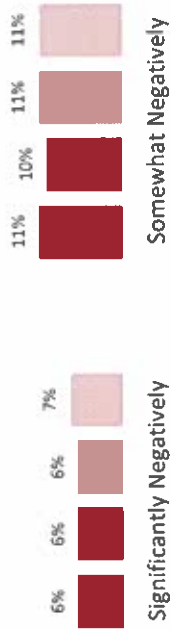
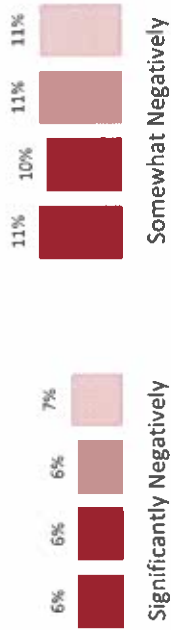


Regardless of the top reason for their excursion, Patrons overwhelmingly state there is no impact, or no effect from the impact on their willingness to ride because of the Project.

Impact on willingness to ride
Top reason for riding
Top reason: n = 369



Three responses have been excluded from the display due to limited sample sizes.

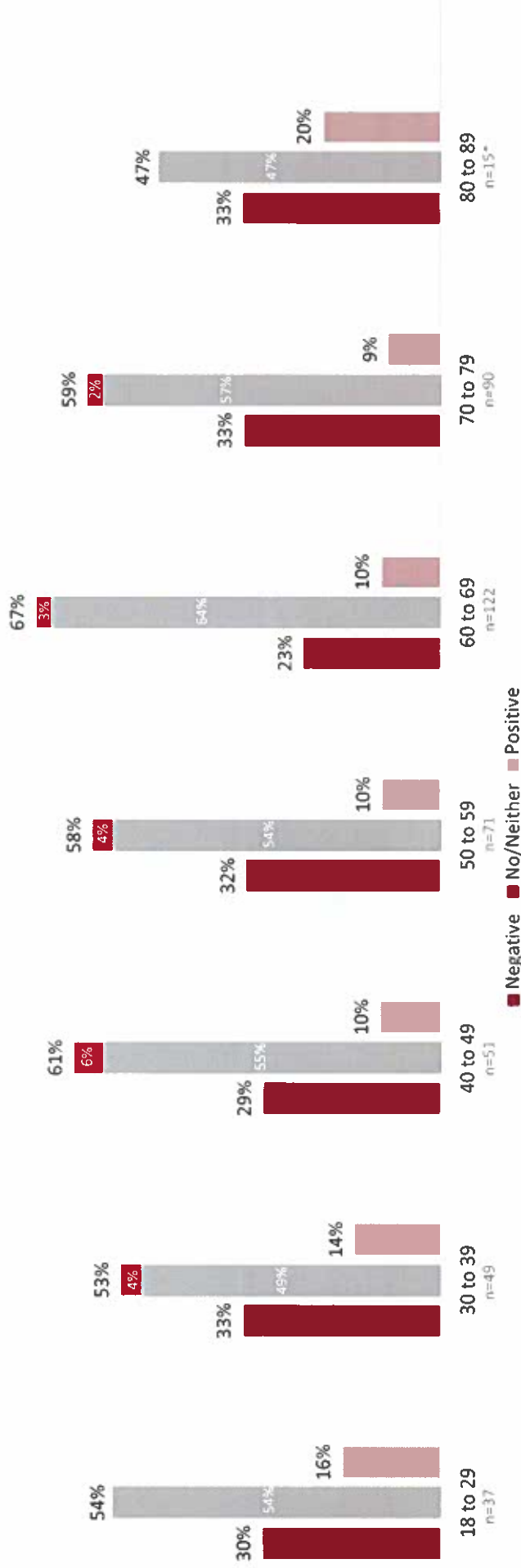


For all but the 80-89 age group, a majority state there is no impact, or no effect from the impact on their level of enjoyment because of the Project.

Impact on level of enjoyment

Age group

n = 435



A large majority of all age groups state there is no impact, or no effect from the impact from the impact on their willingness to ride the Hi-Line because of the Project.

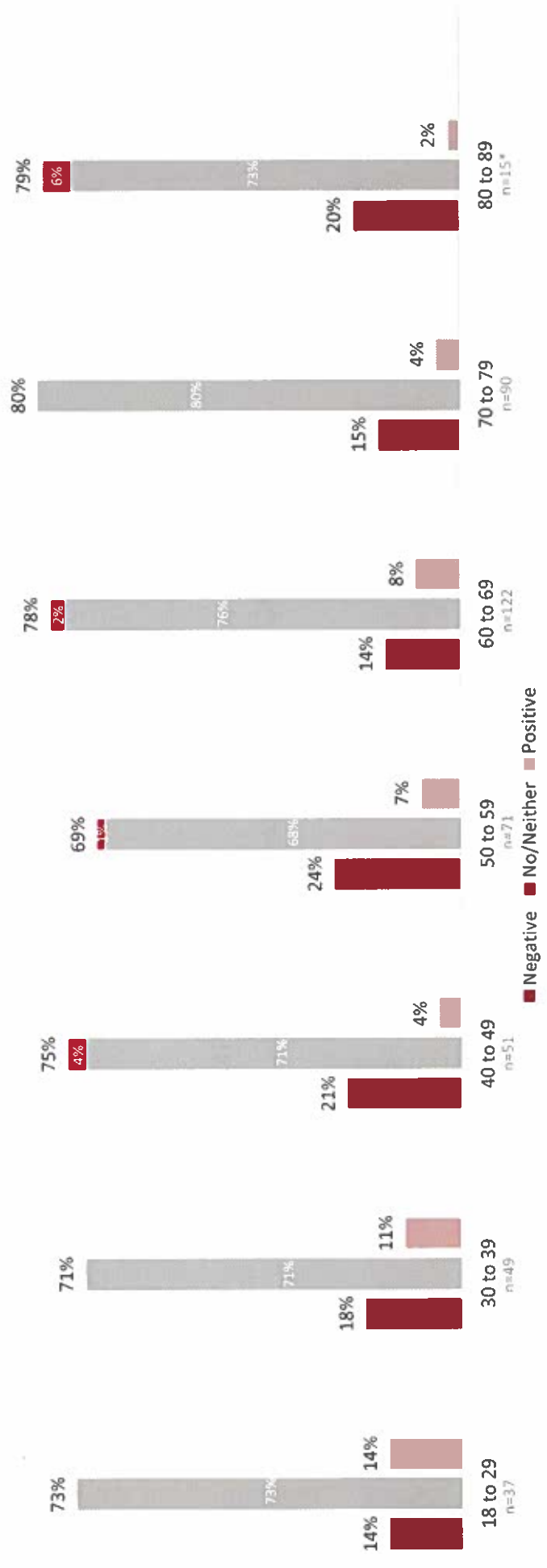


Impact on willingness to ride



Hi-Line

Age group
n = 435

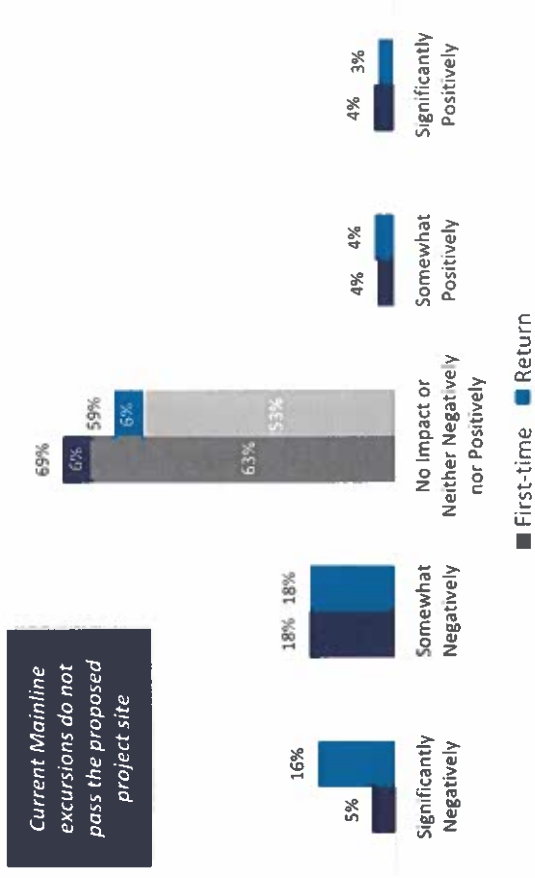


*Effects on Enjoyment and Willingness to Ride:
Mainline*

Return riders are more likely to indicate negative impacts and less likely to indicate no impact, or no effect from the impact because of the Project compared to first-time riders.

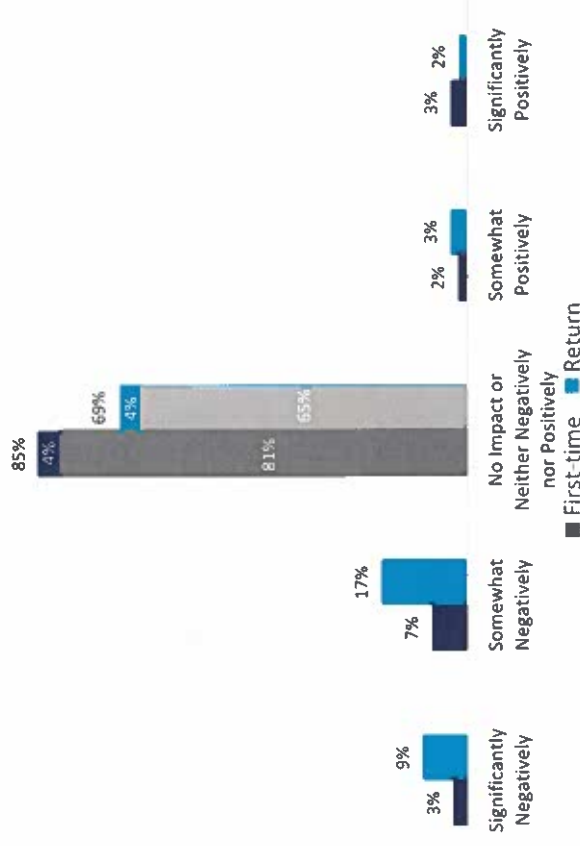
First-time vs. return riders
First-time riders: n = 283, Return riders: n = 123

Impact on level of enjoyment



69% of first-time riders state there is **no impact, or no effect from the impact** on their level of enjoyment compared to 59% of return riders.

Impact on willingness to ride



85% of first-time riders state there is **no impact, or no effect from the impact** on their willingness to ride compared to 69% of return riders.

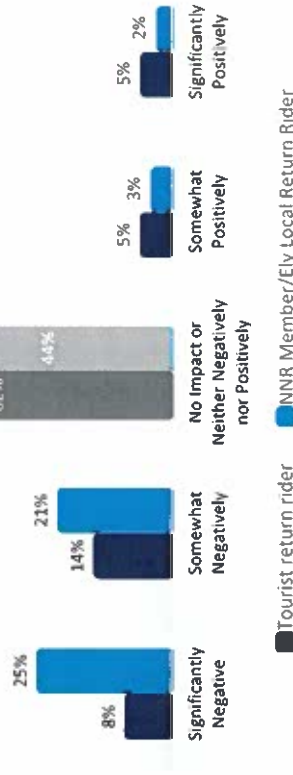
NNR member/Ely local return riders are more likely to indicate negative impacts and less likely to indicate no impact, or no effect from the Project compared to tourist return riders.



Tourist return riders vs. NNR member/Ely local return riders
Tourist return riders: n = 62, NNR member/Ely local return riders: n = 61

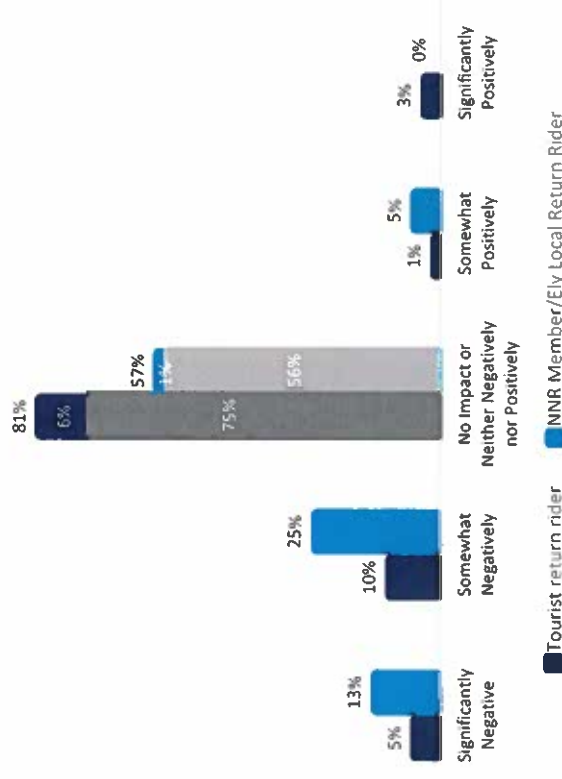
Impact on level of enjoyment

Current Mainline
excursions do not
pass the proposed
project site



68% of tourist return riders state there is **no impact, or no effect from the impact** on their level of enjoyment compared to 49% of NNR member/Ely local return riders.

Impact on willingness to ride



81% of tourist return riders state there is **no impact, or no effect from the impact** on their willingness to ride compared to 57% of NNR member/Ely local return riders.

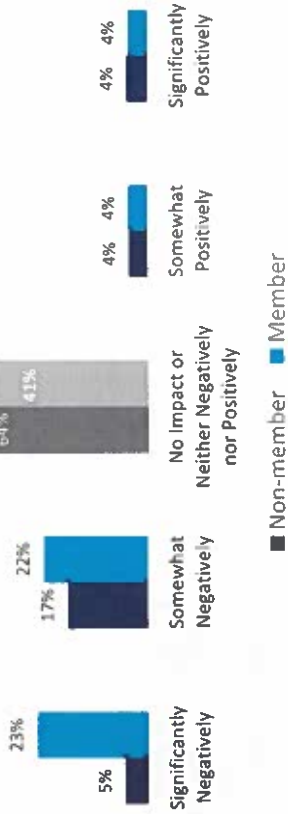
NNR Members are far more likely to indicate negative impacts and less likely to report no impact, or no effect from the Project compared to non-members.



Non-members vs. NNR Members
 Non-members: n = 362, Members: n = 73

Impact on level of enjoyment

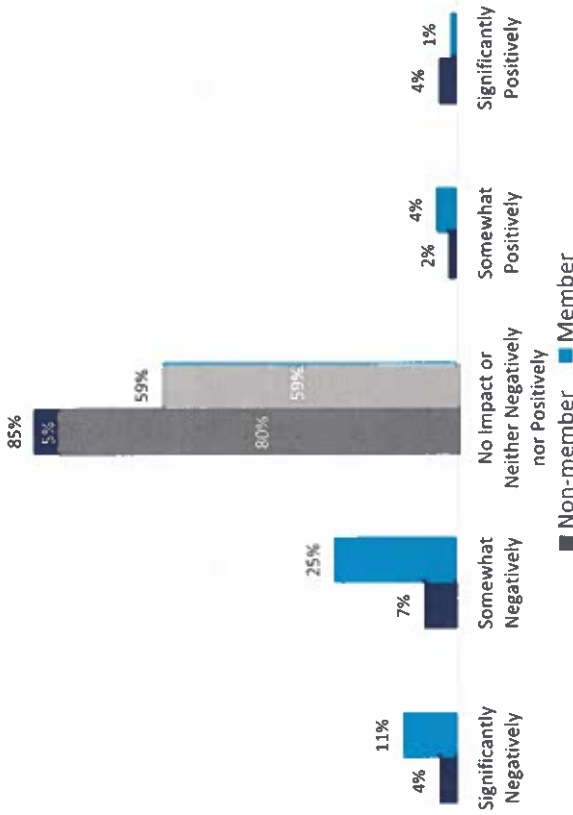
Current Mainline
 excursions do not
 pass the proposed
 project site



70% of non-members state there is **no impact, or no effect from the impact** on their level of enjoyment compared to **47%** of NNR Members.



Impact on willingness to ride



85% of non-members state there is **no impact, or no effect from the impact** on their willingness to ride compared to **59%** of NNR Members.

Locals are far more likely to indicate negative impacts and less likely to indicate no impact, or no effect from the impact because of the Project compared to non-residents.

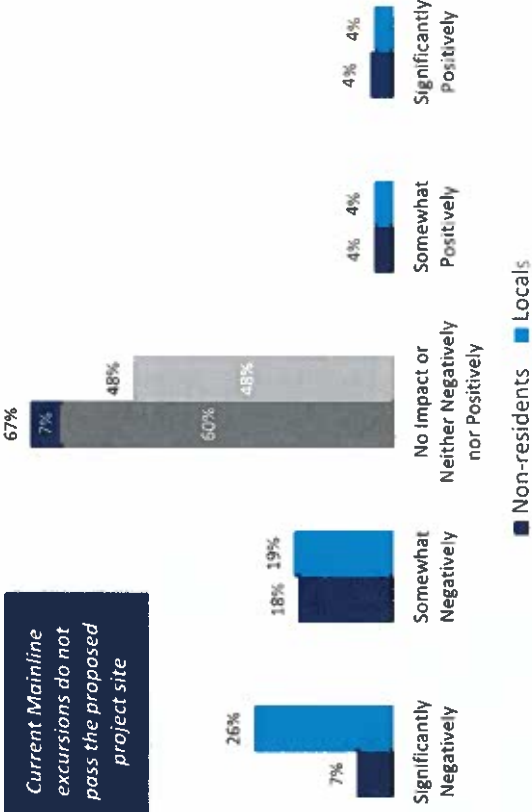


Non-residents vs. Locals

Non-residents: n = 407, Locals: n = 27

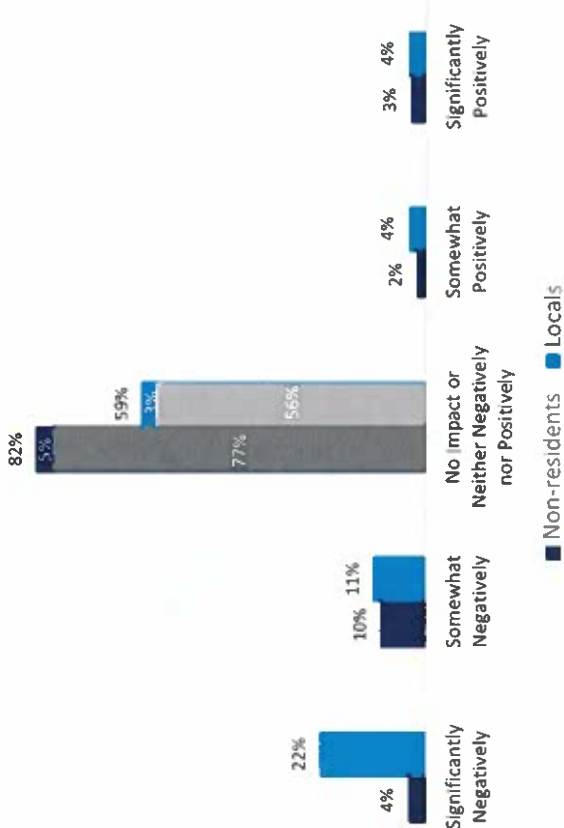
Impact on level of enjoyment

Current Mainline
excursions do not
pass the proposed
project site



67% of non-residents state there is **no impact, or no effect from the impact** on their level of enjoyment compared to 48% of Locals.

Impact on willingness to ride



82% of non-residents state there is **no impact, or no effect from the impact** on their willingness to ride compared to 59% of Locals.

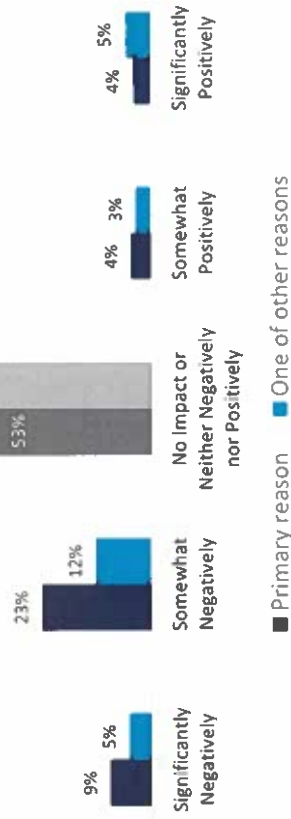
Patrons whose primary reason for being in the area is their NNR excursion are more likely to indicate a negative impact of the Project than those for whom the NNR excursion is not the primary reason for their visit.



Primary reason for being in area is/is not NNR excursion
Primary reason: n = 219, One of other reasons: n = 188

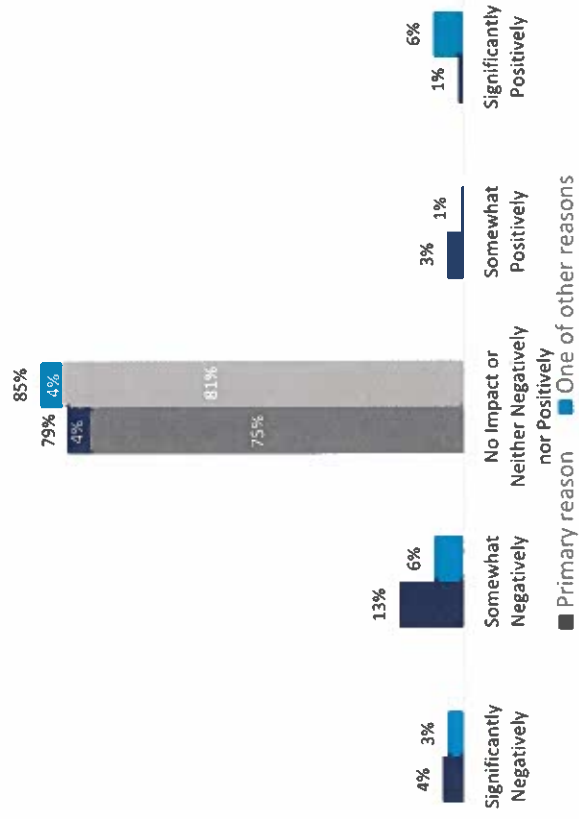
Impact on level of enjoyment

Current Mainline excursions do not pass the proposed project site



61% of Patrons whose primary reason for being in the area is the NNR excursion state there is **no impact, or no effect from the impact** on their level of enjoyment compared to **75%** of Patrons whose primary reason for being in the area is not the NNR excursion.

Impact on willingness to ride



79% of Patrons whose primary reason for being in the area is the NNR excursion state there is **no impact, or no effect from the impact** on their willingness to ride compared to **85%** of Patrons whose primary reason for being in the area is not the NNR excursion.

Mainline

There are few differences between stated impacts of the Project for men and women, though slightly more men state there is no impact, or no effect from the impact.



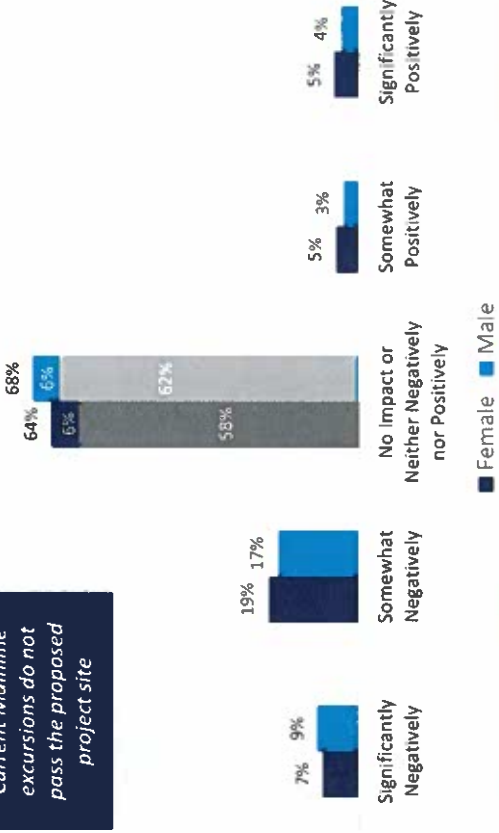
Female vs. male

Female: n = 214, Male: n = 221

Mainline

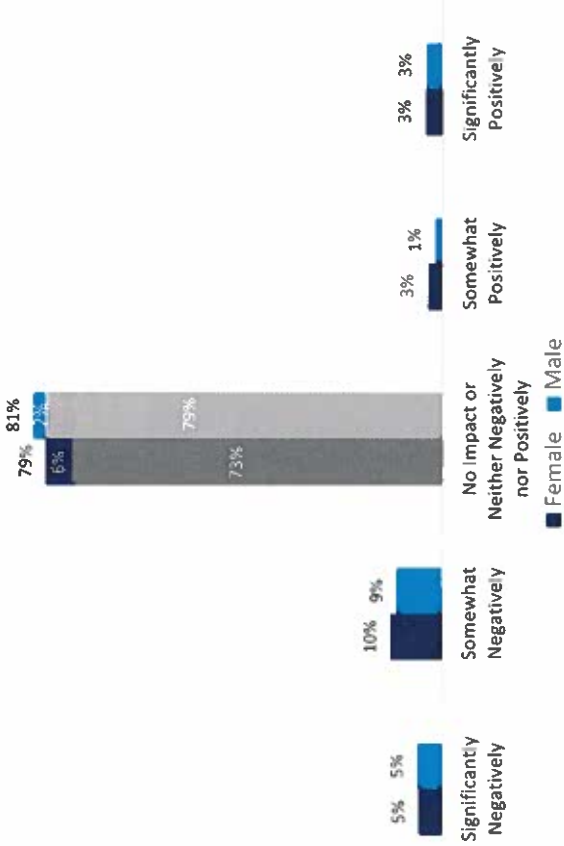
Impact on level of enjoyment

Current Mainline excursions do not pass the proposed project site



64% of females state there is **no impact, or no effect from the impact** on their level of enjoyment compared to 68% of males.

Impact on willingness to ride



79% of females state there is **no impact, or no effect from the impact** on their willingness to ride compared to 81% of males.

There are few differences in perceived impact of the Project based on whether a group had members under 18.

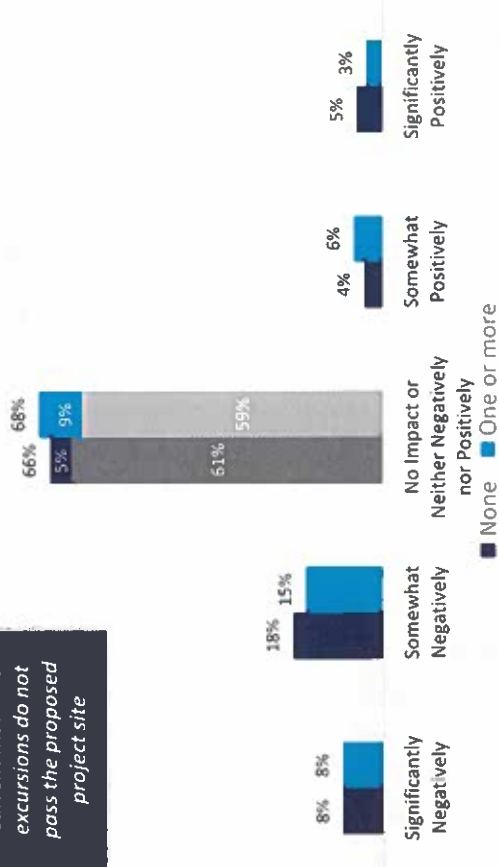


Number of minors in group
None: n = 276, One or more: n = 124

Mainline

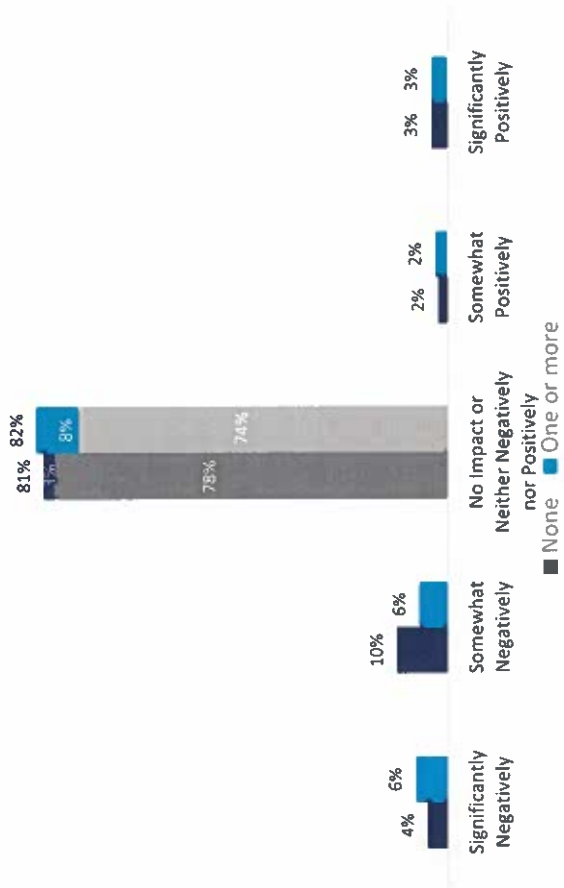
Impact on level of enjoyment

Current Mainline
excursions do not
pass the proposed
project site



66% of Patrons who don't have minors in their group state there is **no impact, or no effect from the impact** on their level of enjoyment compared to 68% of Patrons who have one or more minor in their group.

Impact on willingness to ride



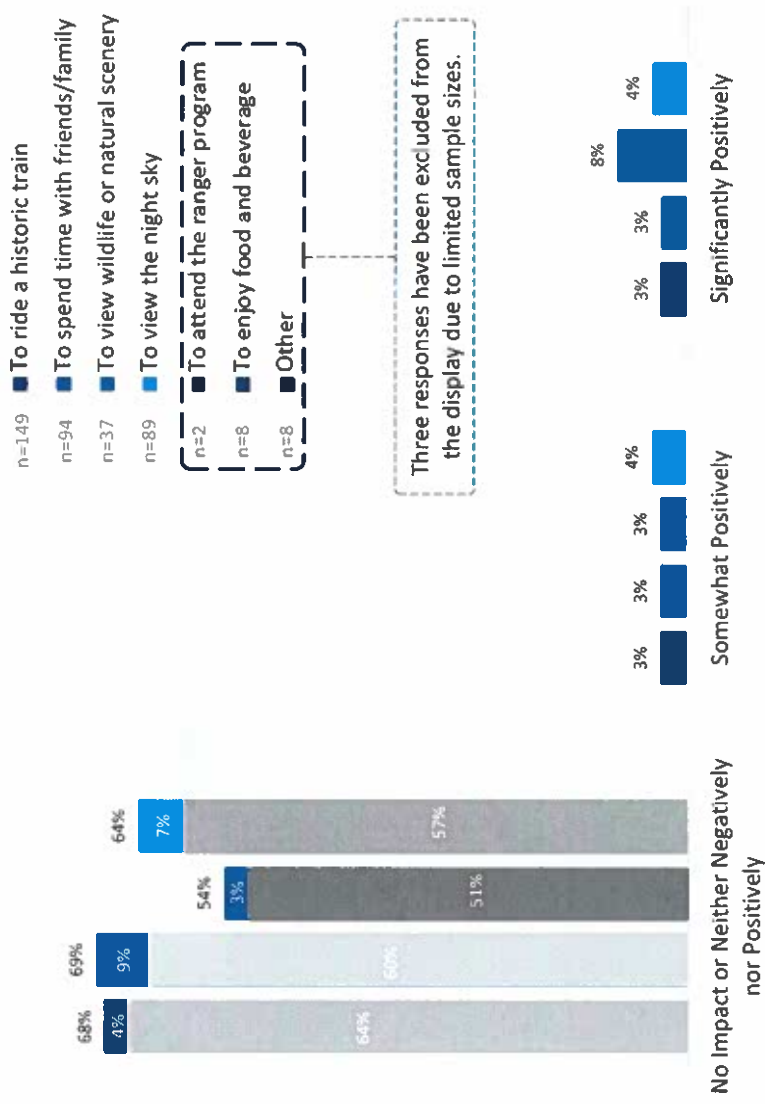
81% of Patrons who don't have minors in their group state there is **no impact, or no effect from the impact** on their willingness to ride compared to 82% of Patrons who have one or more minor in their group.

Regardless of the top reason for their excursion, a large majority of most patron groups state there is no impact, or no effect from the impact on their level of enjoyment because of the Project.

Impact on level of enjoyment
Top reason for riding
Top reason: n = 369

Mainline

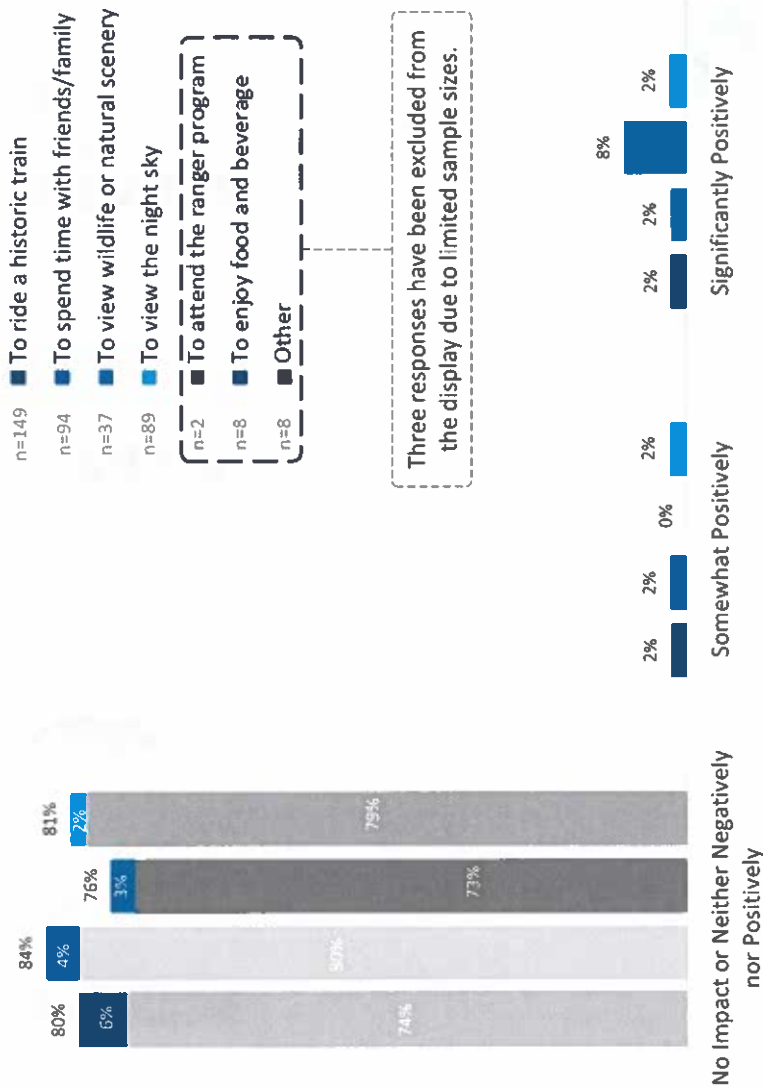
Current Mainline excursions do not pass the proposed project site



Regardless of the top reason for their excursion, Patrons overwhelmingly state there is no impact, or no effect from the impact on their willingness to ride because of the Project.

Impact on willingness to ride
Top reason for riding
Top reason: n = 369

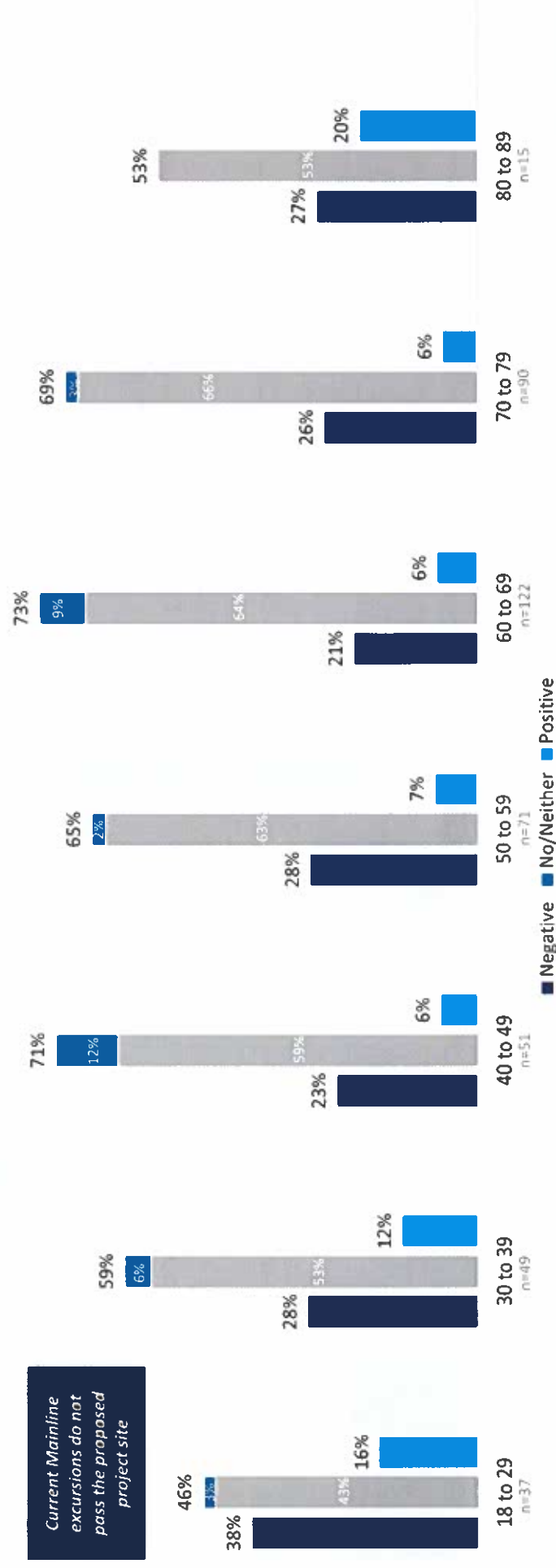
Mainline



For all but the youngest age group, a majority state there is no impact, or no effect from the impact on their level of enjoyment because of the Project.

Impact on level of enjoyment
Age group
n = 435

Mainline

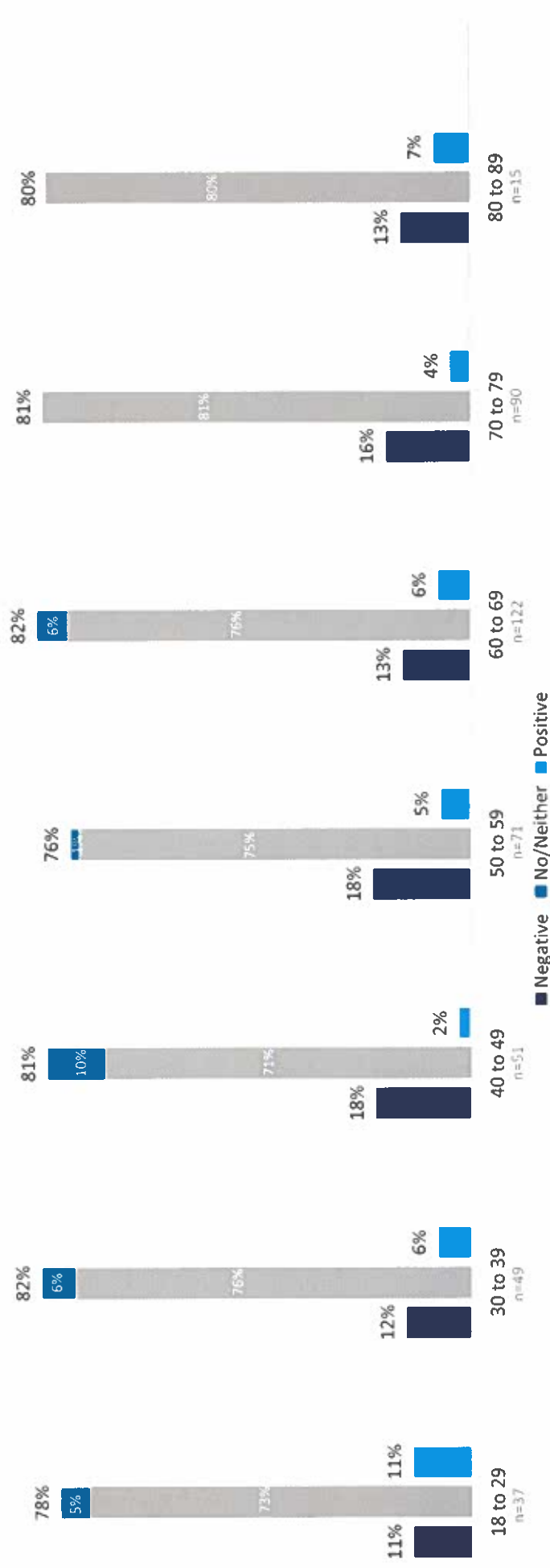


A large majority of all age groups state there is no impact, or no effect from the impact on their willingness to ride the Mainline because of the Project.

Impact on willingness to ride
Age group
n = 435

Mainline

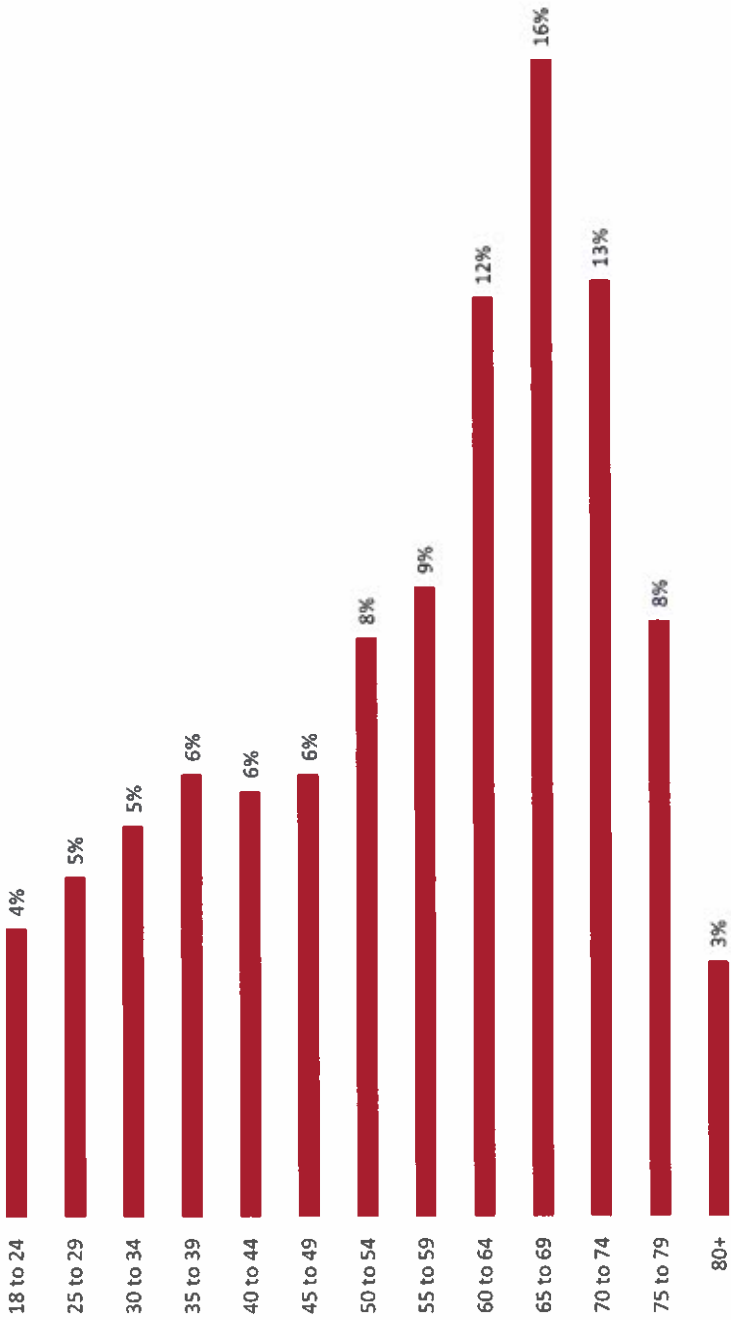
Current Mainline
excursions do not
pass the proposed
project site



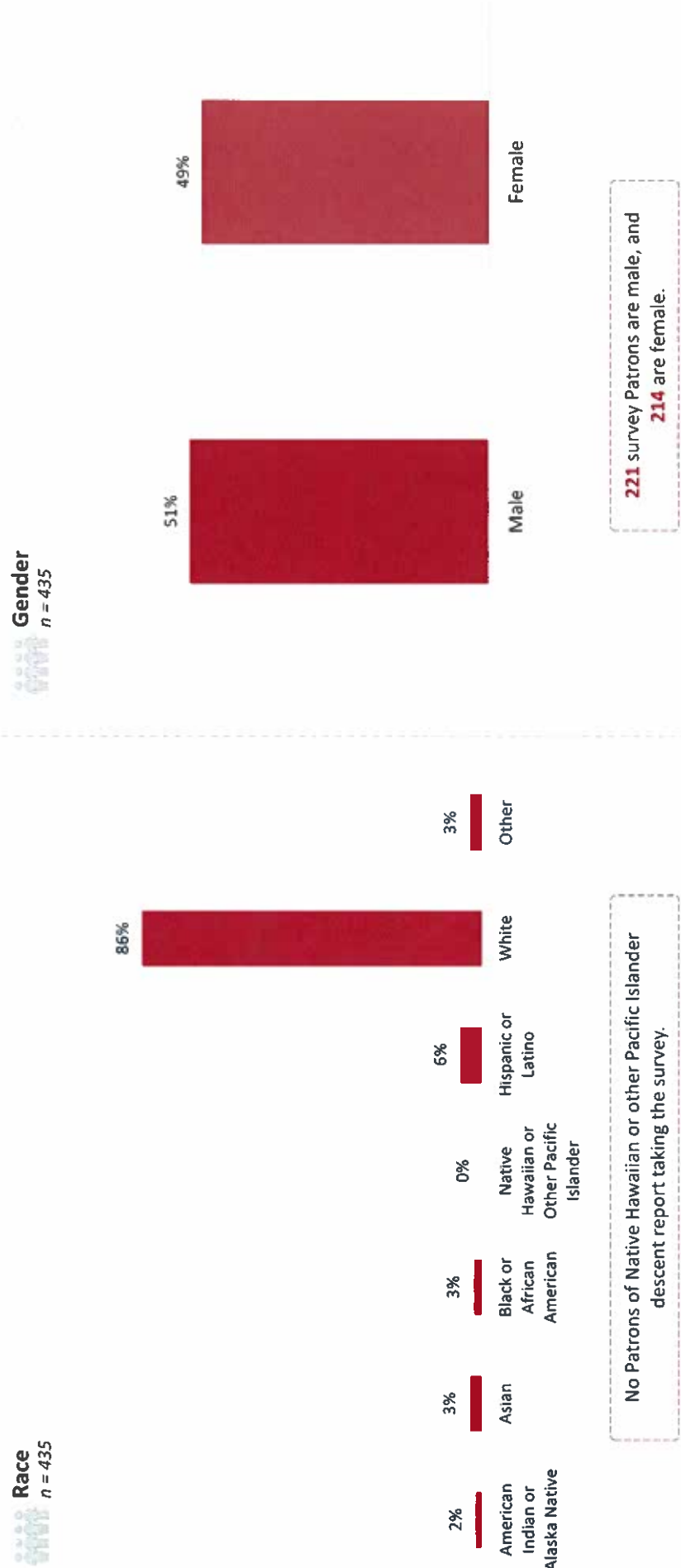
Additional Demographics

Additional Demographics | Age Distribution

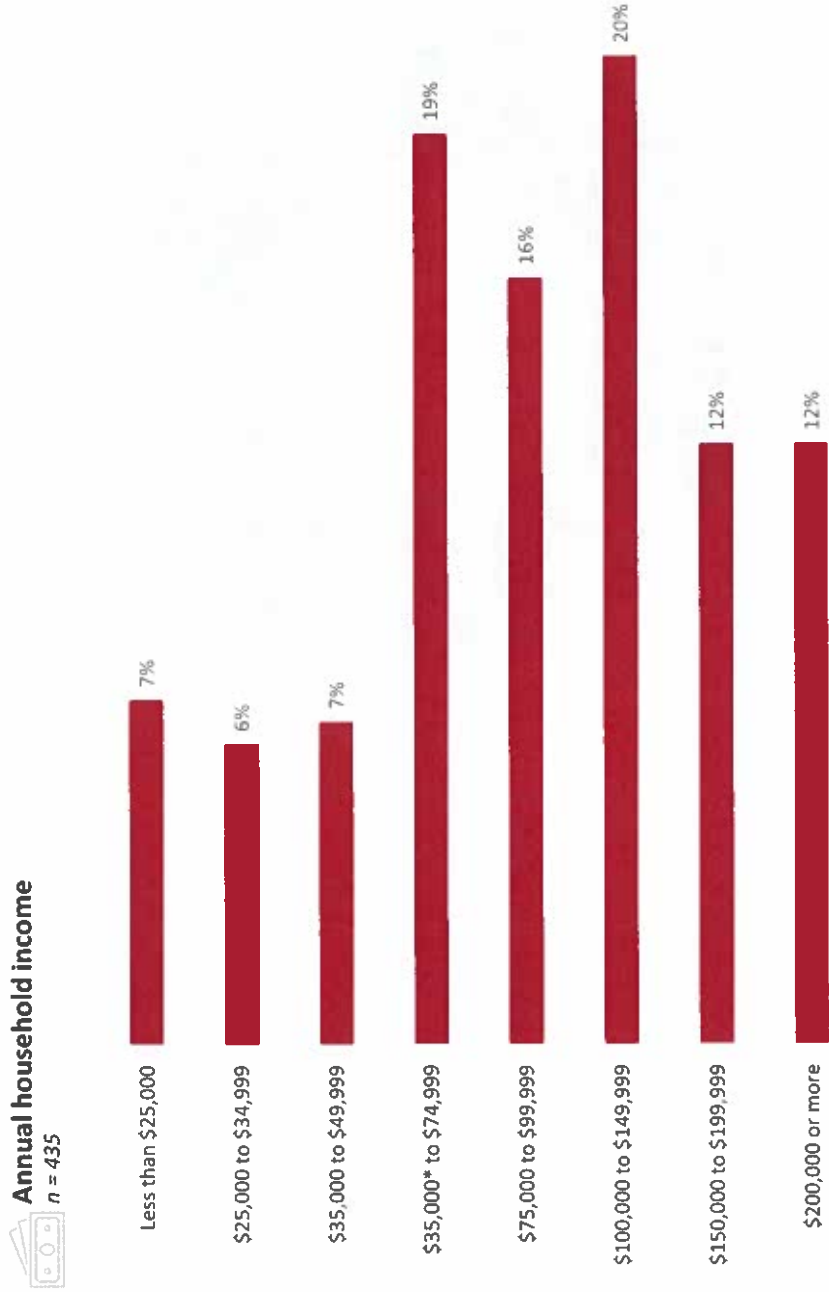
Age
n = 435



Additional Demographics | Racial Background



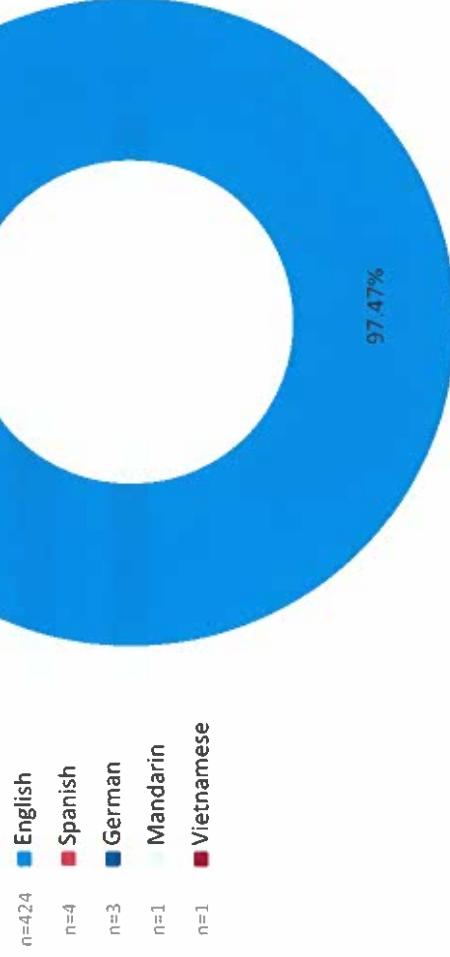
Additional Demographics | Household Income



Patrons speak five primary languages, with a very large majority reporting English as their primary spoken language.



Primary spoken language
n = 435



All surveys are conducted in English.

Appendix

Appendix | KOP 13

Current Conditions



Post-Construction Conditions



Appendix | KOP 15

Current Conditions



Post-Construction Conditions



Appendix | KOP 16

Current Conditions



Post-Construction Conditions Low Water Level



Post-Construction Conditions High Water Level



Appendix | KOP 17.1

Current Conditions



Post-Construction Conditions Low Water Level



Post-Construction Conditions High Water Level

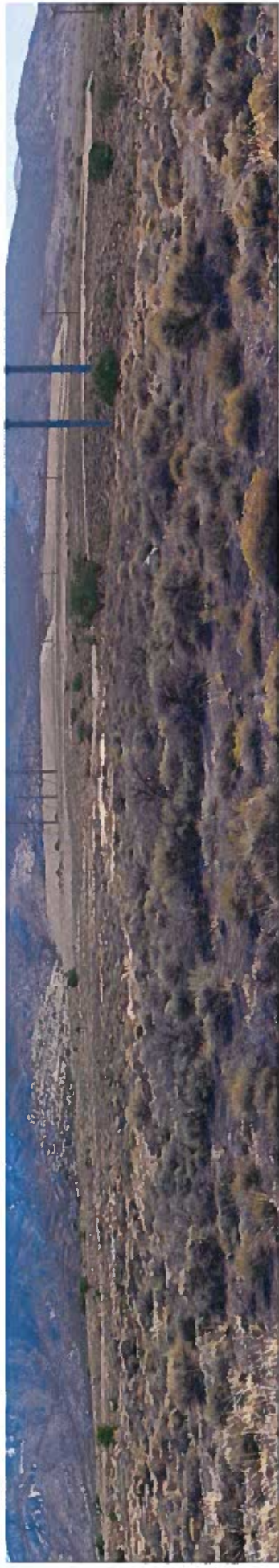


Appendix | KOP 17.2

Current Conditions



Post-Construction Conditions



Section 3:

NNR Star Train Rider Analysis Report (January 4, 2024)

NNR Star Train Rider Analysis Report

Prepared by Cicero Group®

White Pine County, Nevada

January 4th, 2024

1. Introduction

1.1 Report Purpose

2. Methods

2.1 Survey Methodology

3. Conclusions

3.1 Estimated Use Levels

3.2 Survey Results and Conclusions

3.2.1 Key Findings

3.2.2 NNR Patron Demographics

3.2.3 Reasons to Ride

3.2.4 Effects on the Hi-Line (Star Train Patrons)

3.2.5 Effects on the Hi-Line (Tourists vs. NNR Members)

1. Introduction

White Pine Waterpower, LLC (WPW) is proposing the licensing, construction, and operation of the White Pine Pumped Storage Project (FERC No. 14851) (Project) in White Pine County, Nevada, approximately 8 miles northeast of the City of Ely. The Project is a 1,000-megawatt, closed loop, pumped storage facility that will require the construction of two new reservoirs joined by underground conduits along with a powerhouse and associated generation, pumping, and transmission equipment. The Project will be located entirely off-stream, meaning neither the upper nor lower reservoir will intercept a perennial surface watercourse.

WPW has initiated a licensing process for the Project with the Federal Energy Regulatory Commission (FERC), the federal agency with jurisdiction over non-federal hydropower projects in the United States. During this process, WPW has engaged stakeholders and implemented a suite of resource studies that will inform FERC's environmental and developmental analyses and decision regarding license issuance. This NNR Star Train Rider Analysis Report assesses the potential recreational effects specifically from Star Train Patrons on the Nevada Northern Railway (NNR). This report describes the results of the NNR Star Train Analysis from intercept surveys that were conducted from June to September 2023.

1.1 Report Purpose

Cicero Group® has prepared the NNR Star Train Rider Analysis Report for the Project. While this report is ancillary to the Nevada Northern Railway Visitor Use and Assessment Report, it serves as a standalone study, meaning all data analyses and conclusions are complete in themselves. The purpose of this study report is to highlight Star Train patron opinions, identify patron profile(s), and to share demographic insights for this specific subset of NNR patrons. Attached as an addendum is a comprehensive slide deck of detailed findings and data visualizations.

2. Methods

2.1 Survey Methodology

Cicero conducted live-intercept surveys using iPads and printed paper copies at the Nevada Northern Railway (NNR) depot to gauge visitor use, primarily interviewing Patrons before they boarded the train. Surveys were conducted in the summer of 2023 on the following dates: June 14-17, July 19-22, August 9-12, and September 6-9. Surveyors attempted to reach a variety of visitors and participation in the survey was voluntary. A \$10 honorarium was given to those who participated.

Survey methodology was designed to collect data from riders of many different excursions offered by the NNR with the aim of producing an analysis that could be representative of NNR patrons generally. It is important to note that this NNR Star Train Rider Analysis Report is limited to data collected only from Star Train Riders. In 2023, the NNR operated an estimated 18 Star Train Excursions of which 4 were included in surveying efforts. The NNR operated nearly 300 train excursions in 2023, meaning the Star Train accounts for a small portion of total excursions and riders, and the analysis herein is therefore not representative of NNR patrons at large, but only the subset of Star Train riders.

Patrons were shown photo simulations of what the proposed pumped storage project would potentially look like from the Hi-Line and from the inactive portion of the Mainline and were then asked to state if and how much that would impact their enjoyment level and willingness to ride NNR excursion trains.

Because the Star Train excursion operates exclusively on the Hi-Line – all data in this report pertains solely to the Hi-Line and NOT the Mainline photo simulations.

Regarding terms used throughout the report, certain analyses have been conducted for all ‘Patrons’ i.e., all 83 Star Train survey responses, then repeated to include only ‘Tourists’ i.e., the 50 survey responses of NNR visitors who were neither Ely area residents nor members of the NNR. It is important to note that no residents of the Ely area appear in this Star Train sample population. This ‘Tourists’ subset of the total sample is likely less affected by bias and more representative of unaffiliated visitors to the NNR.

Definitions for terms are below:

- **Patrons:** Refers to all individuals collectively in the sample (n=83).
- **Tourists:** Refers to those who are NOT from the Ely area and NOT members of the NNR (n=50).
- **NNR Members:** Refers to those who are subscribed members of the NNR (n=33).
- **Locals:** Refers to those who live in the Ely area (n=0).

3. Conclusions

The study provides many insights into Star Train Patrons’ demographic characteristics (e.g., age, racial background, language, etc.), perceptions, attitudes, and preferences. The following sections explore the various findings. Due to a noticeable discrepancy in preferences between ‘Patrons’ (the full sample set of n=83) and ‘Tourists’ (n=50) subset of that sample which excludes Ely area residents and members of the NNR), this report presents analyses of key questions for both populations.

During data collection, many Ely area residents and NNR Members were vocal about their opposition to the project. Several NNR Members mentioned an email they had received from the NNR. This email, distributed on April 25th, 2023, is known to Project stakeholders and was discussed prior to the first data collection event. Essentially, the email presented arguments against the Project, highlighting opinions of how it might negatively impact the NNR. It is not possible to know exactly how many survey respondents read this email or the extent to which it may have generated negative bias toward the Project, but it is assumed that it did indeed introduce some amount of negative bias, as evidenced by comments from NNR Members and Locals, and survey data. As mentioned previously, to account for this apparent bias, certain analyses in this report are conducted for all ‘Patrons’, then repeated to include only ‘Tourists’. This ‘Tourists’ subset of the total sample is almost certainly less affected by bias and more representative of general visitors to the NNR.

3.1 Estimated Use Levels

During 2023, the NNR was 100% operational. Although some locomotives were out of service, each scheduled excursion departed. The Night Sky–Star Train excursion on the Hi-Line is scheduled one night each week from late May to mid-September. Exact train excursion numbers have not been shared by the NNR with the research team, but there were an estimated 18 Night Sky–Star Train excursions in 2023. The Star Train excursion has a capacity of 82 riders.

3.2 Survey Results and Conclusions

3.2.1 Key Findings

1. The majority of Star Train Patrons indicated the Project would have no impact, or a neutral impact on both their enjoyment level and willingness to ride.
2. The majority of the Star Train Patrons who were surveyed have NOT taken an NNR excursion before, less than half were NNR members, and none were local to the Ely area. 60% had not taken an NNR excursion before, 40% were NNR Members, and 0% were from the Ely area.
3. The primary reason for Patrons choosing the Star Train excursion was to view the night sky, with the least significant factor being the enjoyment of food and beverage. 60% stated that viewing the night sky was their #1 reason and 61% stated enjoying food and beverage was in their bottom 2 reasons.

3.2.2 NNR Star Train Patron Demographics

1. **Age:** 50% of Patrons are 60+ years old.
2. **Household Income:** 63% of Patrons have an annual household income of \$75,000 or more.
3. **Racial Background:** 85% of Patrons are white. The remaining 15% are Hispanic/Latino, Asian, Black/African American, American Indian/Alaska Native, or other.
4. **Primary Language:** 98% of Patrons speak English as their primary language.

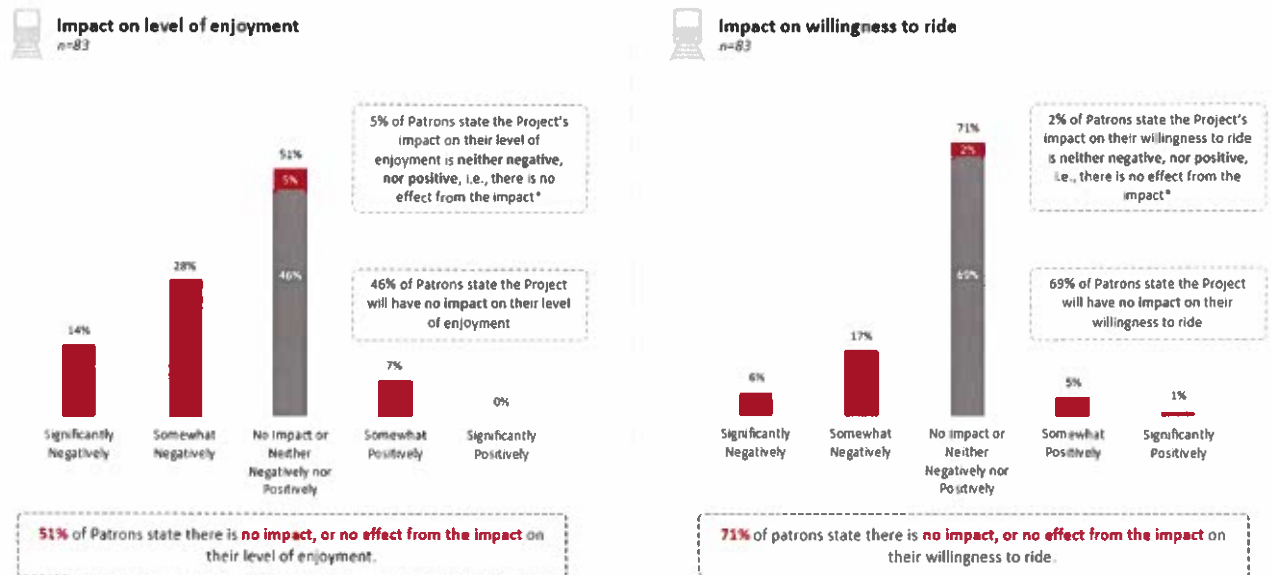
3.2.3 Reasons to Ride

1. The top 3 stated purposes for the excursion were 'to view the night sky', 'to ride a historic train', and 'to spend time with friends/family'.
2. 'Experiencing the night sky' and 'experiencing scenic beauty' were the two most important reasons for taking the excursion. 'The food and beverage offered on the excursion' was the least important reason for the excursion.

3.2.4 Effects on the Hi-Line (Star Train Patrons)

Figure 1 illustrates that a majority of Patrons stated the Project would have no impact on their level of enjoyment and willingness to ride the **Hi-Line** rail.

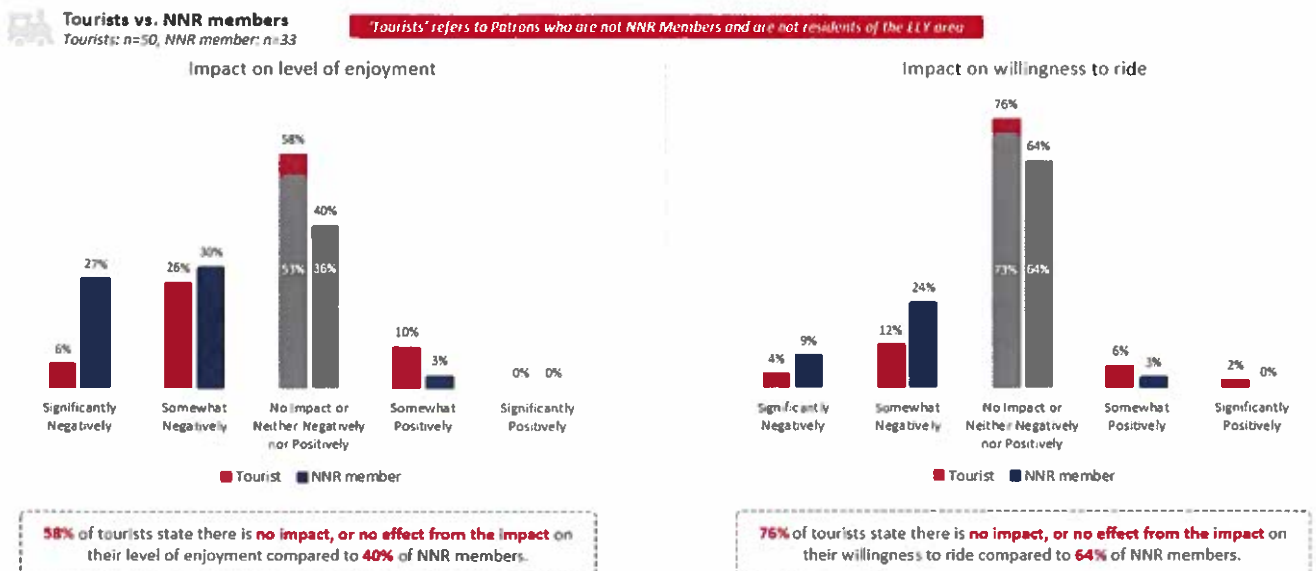
Figure 1. All Patrons' Impact on Level of Enjoyment and Willingness to Ride on the Hi-Line Rail.



3.2.5 Effects on the Hi-Line (Tourists vs. NNR Member)

Figure 2 illustrates that Tourists are especially likely to state the Project will have no impact on their level of enjoyment and willingness to ride the Hi-Line rail.

Figure 2. Tourists' Impact on Level of Enjoyment and Willingness to Ride on the Hi-Line Rail.





NNR Star Train Analysis of Survey Data

Summary Report and Findings of Survey Data

January 2024

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| 5 | Reasons to Ride |
| 8 | Effects on Enjoyment and Willingness to Ride |
| 14 | Additional Demographics |
| 16 | Appendix |

Executive Summary | Glossary

Key Terms

| | |
|---------------------|--|
| Patrons n=83 | Refers to all individuals collectively in the sample i.e., all 83 Star Train survey participants. ¹ |
| Tourists n=50 | Refers to those who are NOT from the Ely area and are NOT members of the NNR. |
| NNR Members n=33 | Refers to those who are subscribed members of the NNR. ² |
| Locals n=0 | Refers to those who live in the Ely area. ³ |

¹ The Star Train excursion exclusivity operates on the Hi-Line, so all the data in the Star Train Summary Report pertains solely to the Hi-Line and NOT the Mainline.*

² An email was referred to by several Patrons during the August fielding event that is believed to be the same email sent by the NNR in April – said email was discussed and addressed by project stakeholders at that time. It is not possible to know exactly how many respondents read this email or the extent to which it may have led to negative bias toward the Project, but it is assumed that it did indeed introduce some amount of negative bias. To account for this, certain analyses in this report are conducted for all ‘Patrons’ i.e., all 83 Star Train survey responses, then repeated to include only ‘Tourists’ i.e., the 50 survey responses of NNR visitors who were neither Ely area residents, nor members of the NNR who would have received the email. This ‘Tourists’ subset of the total sample is likely less affected by bias and more representative of unaffiliated visitors to the NNR.

Q26. Are you staying overnight in the Ely Area, spending less than one day in the Ely area, or are you a resident of the Ely area?

³ Answered “I am a resident of the Ely area” to Q26

*Refer to appendix for KOP Hi-Line images shown to patrons

Executive Summary | Key Findings



The majority of Star Train Patrons indicate the Project will have no impact, or a neutral impact on both their enjoyment level and willingness to ride.

The Star Train excursion operates exclusively on the Hi-Line – all data pertains solely to the Hi-Line and NOT the Mainline.



The majority of Star Train Patrons have NOT taken an NNR excursion before, less than half are NNR members, and none are local to the Ely area.

60% have not taken an NNR excursion before, 40% are NNR Members, and 0% are from the Ely area.

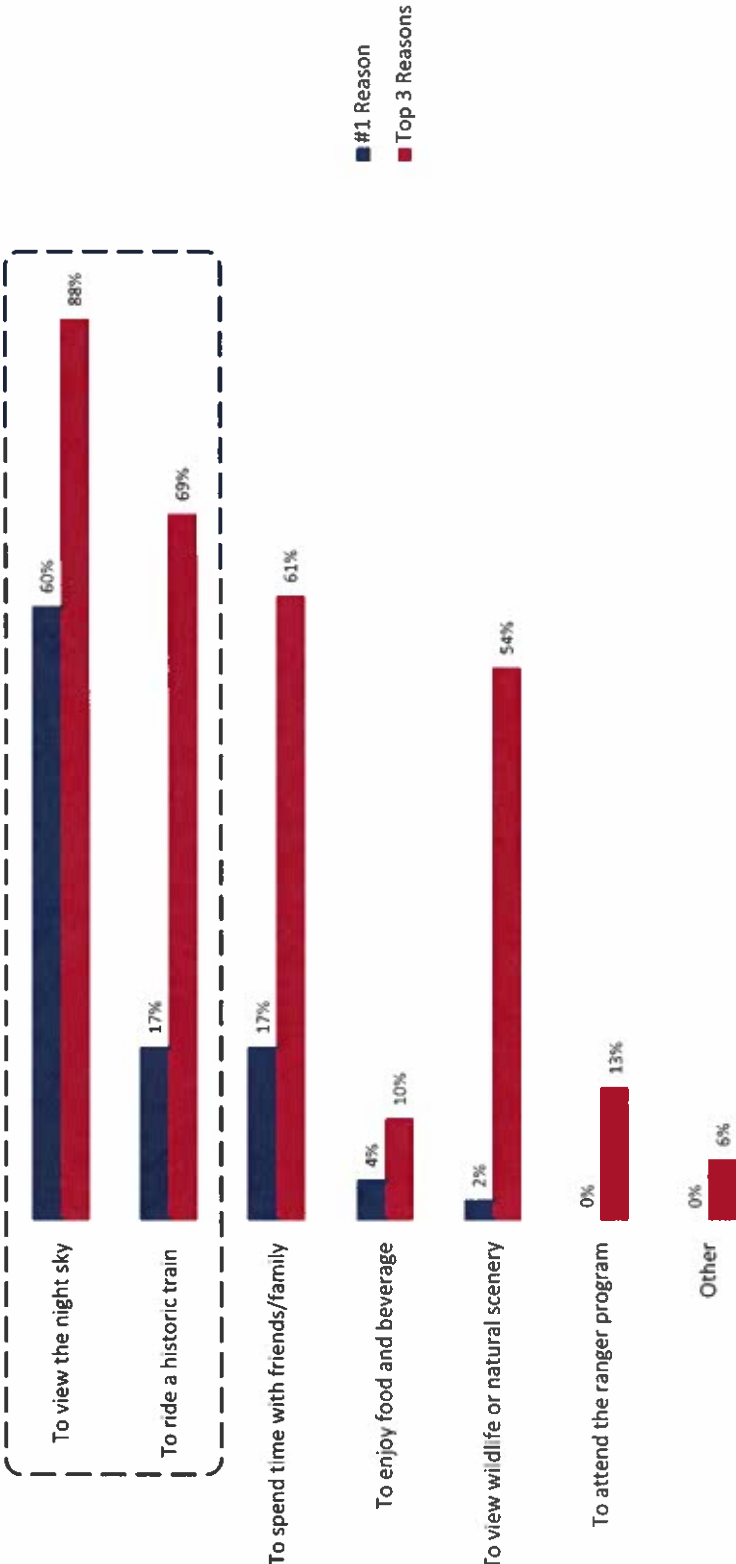


The primary reason for Patrons choosing the Star Train excursion is to view the night sky, with the least significant factor being the enjoyment of food and beverage.

60% state viewing the night sky is their #1 reason and 61% state enjoying food and beverage is in their bottom 2 reasons.

Reasons to Ride

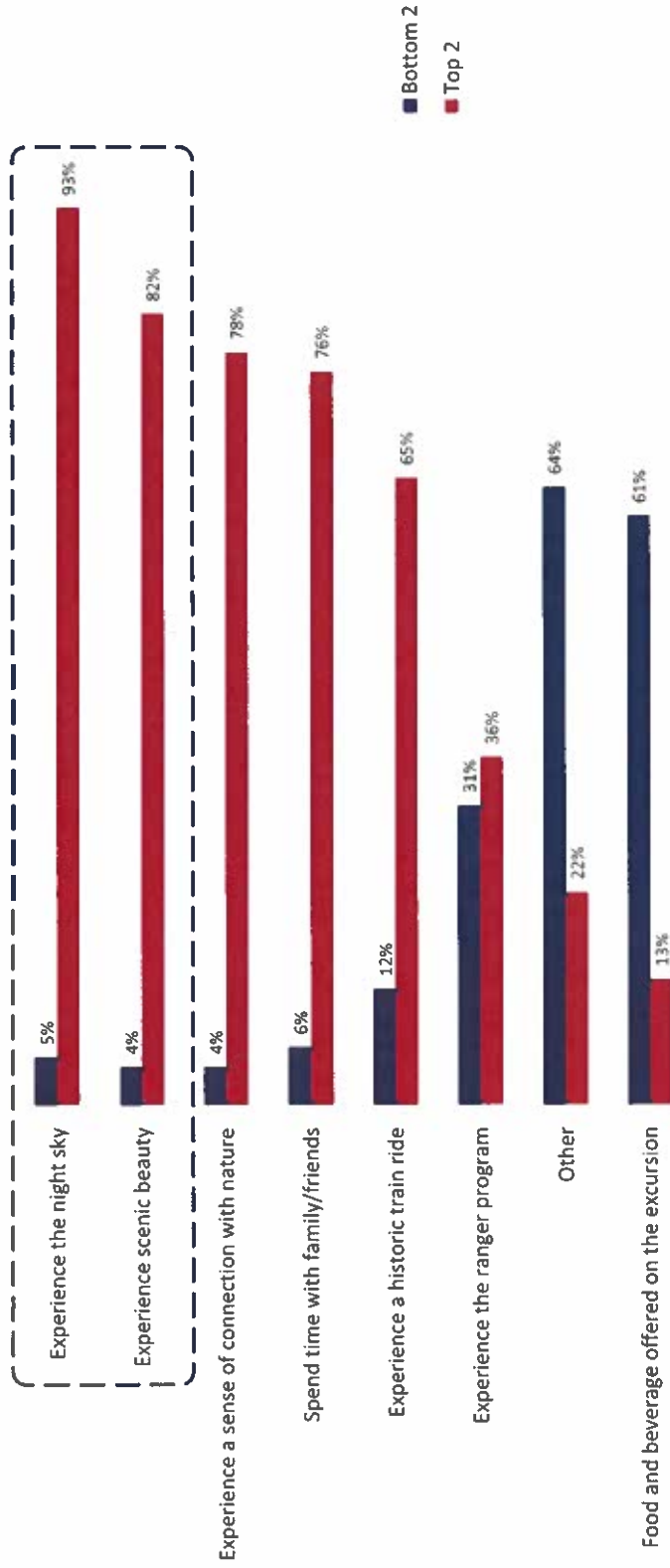
The top reasons Patrons note for taking the Star Train excursion include viewing the night sky and riding a historic train.



The most important factors Patrons note for taking the Star Train excursion are viewing the night sky and experiencing scenic beauty.



Most and least important factors
n=83

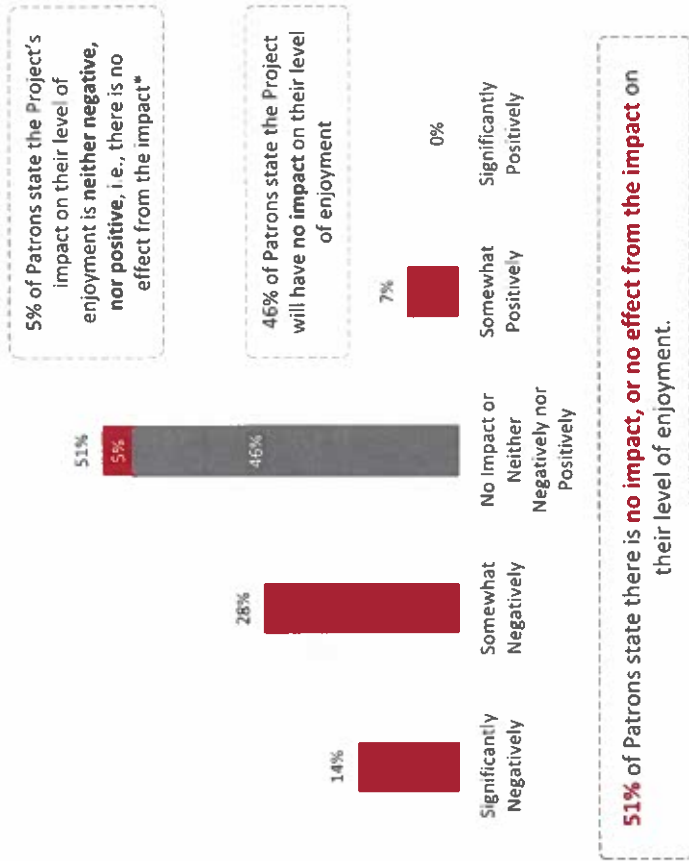


*Effects on Enjoyment and Willingness to Ride:
Hi-Line*

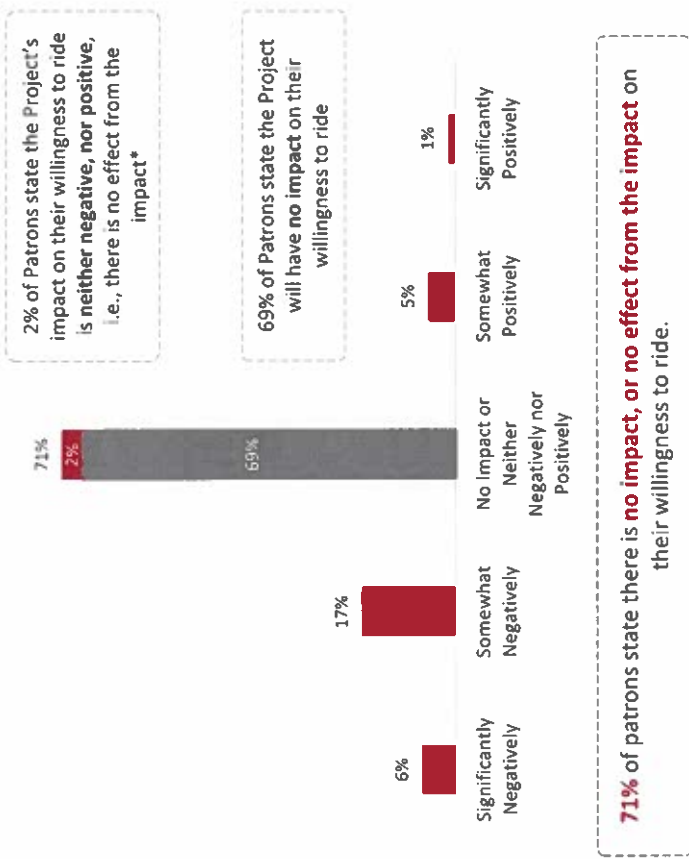
The majority of Patrons state the Project will have no impact on their level of enjoyment and willingness to ride the Star Train excursion.



Impact on level of enjoyment
n=83



Impact on willingness to ride
n=83



Q7a: How would the proposed pumped storage project impact your level of enjoyment when riding on this portion of the Hi-Line rail?
Q8a: How would the proposed pumped storage project impact your willingness to ride on this portion of the Hi-Line rail?
*If patron responded "Yes" to Q7/Q8 then answered Q7a/Q8a with "Neither Negatively or Positively"

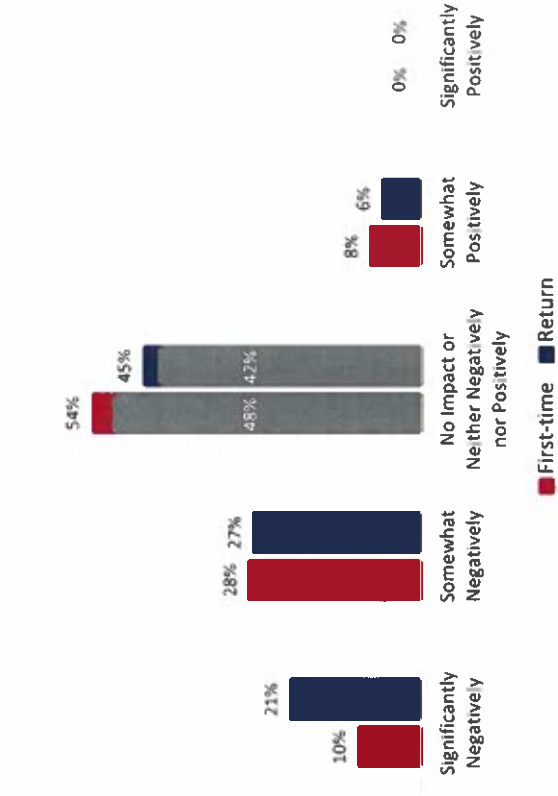
Return riders are more likely to state there are negative impacts and less likely to state there is no impact, or no effect from the impact because of the Project compared to first-time riders.



First-time vs. Return riders
First-time riders: n=50, Return riders: n=33

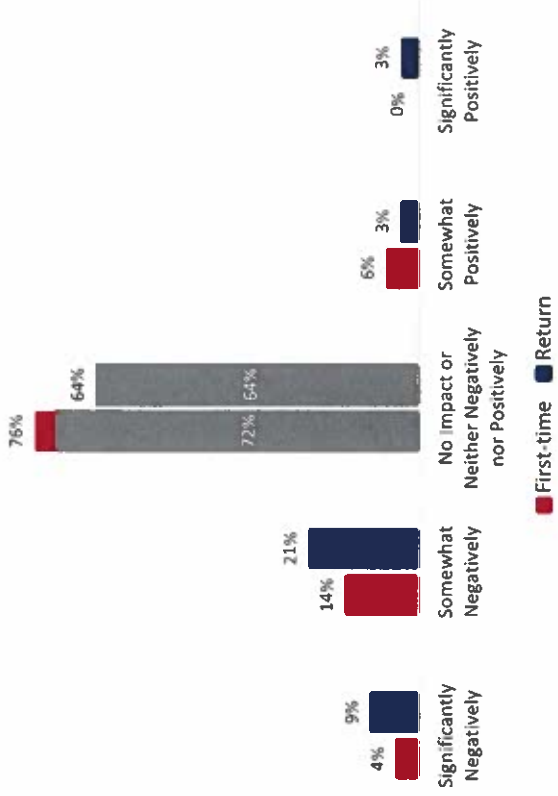


Impact on level of enjoyment



54% of first-time riders state there is **no impact, or no effect from the impact** on their level of enjoyment compared to **45%** of return riders.

Impact on willingness to ride



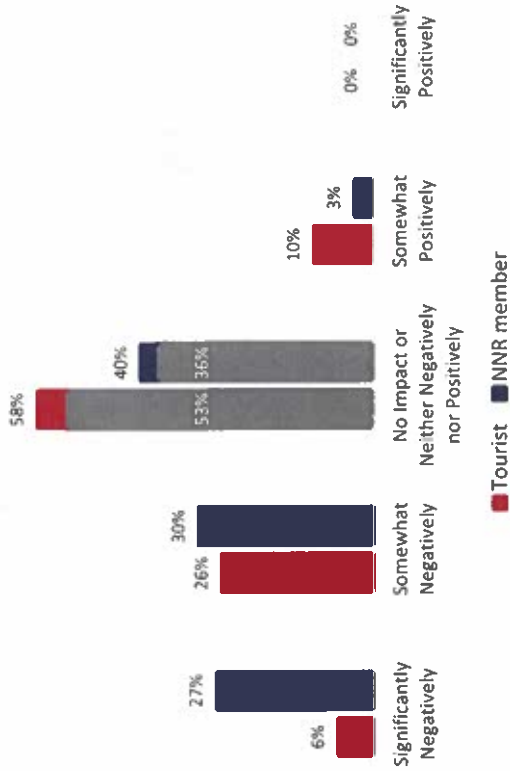
76% of first-time riders state there is **no impact, or no effect from the impact** on their willingness to ride compared to **64%** of return riders.

NNR members are more likely to indicate negative impacts and less likely to indicate no impact, or no effect from the impact because of the Project compared to tourists.



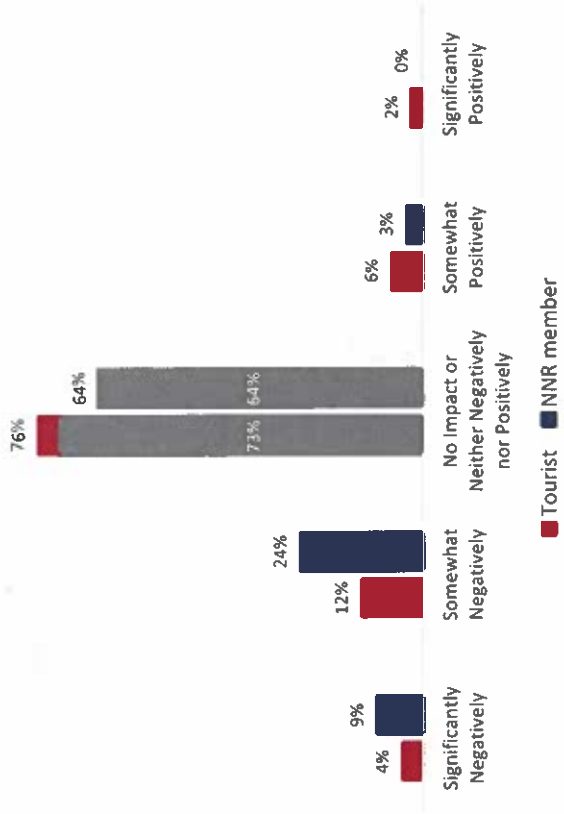
Tourists vs. NNR members
Tourists: n=50, NNR member: n=33
'Tourists' refers to Patrons who are not NNR Members and are not residents of the Ely area

Impact on level of enjoyment



58% of tourists state there is **no impact, or no effect from the impact** on their level of enjoyment compared to **40%** of NNR members.

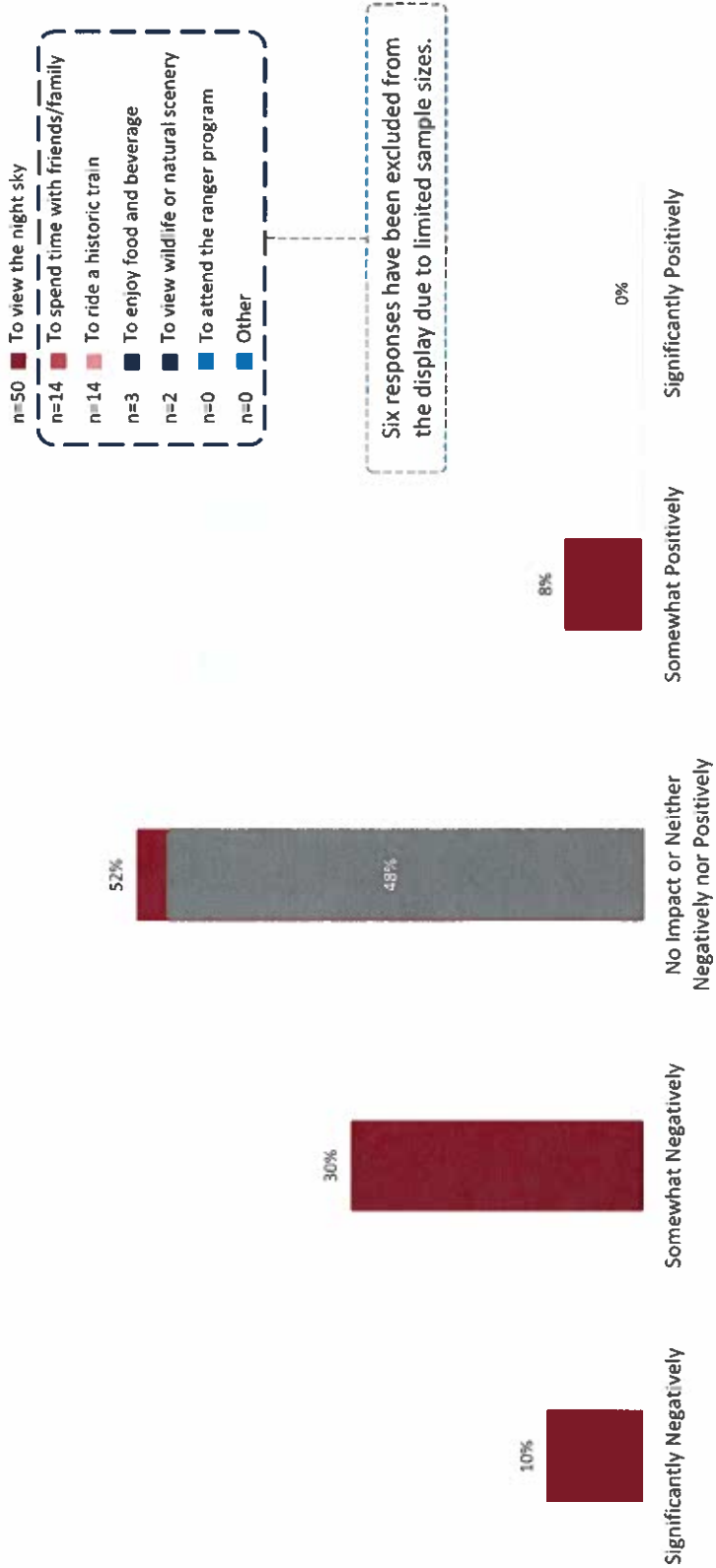
Impact on willingness to ride



76% of tourists state there is **no impact, or no effect from the impact** on their willingness to ride compared to **64%** of NNR members.

The majority of Patrons state there is either no impact, or no effect on their level of enjoyment because of the Project.

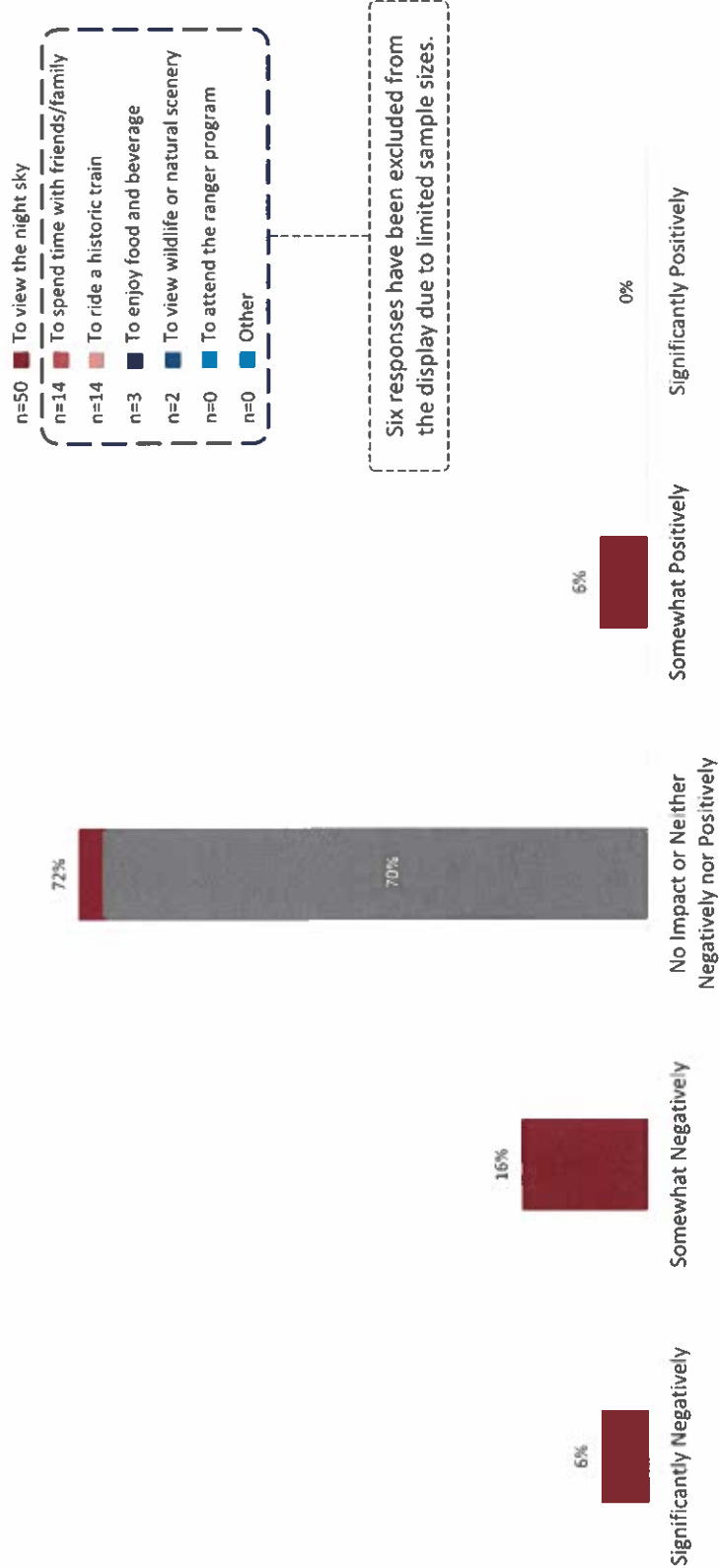
Impact on level of enjoyment
Top reason for riding
Top reason: n=83



Patrons overwhelmingly state there is no impact, or no effect from the impact on their willingness to ride because of the Project.

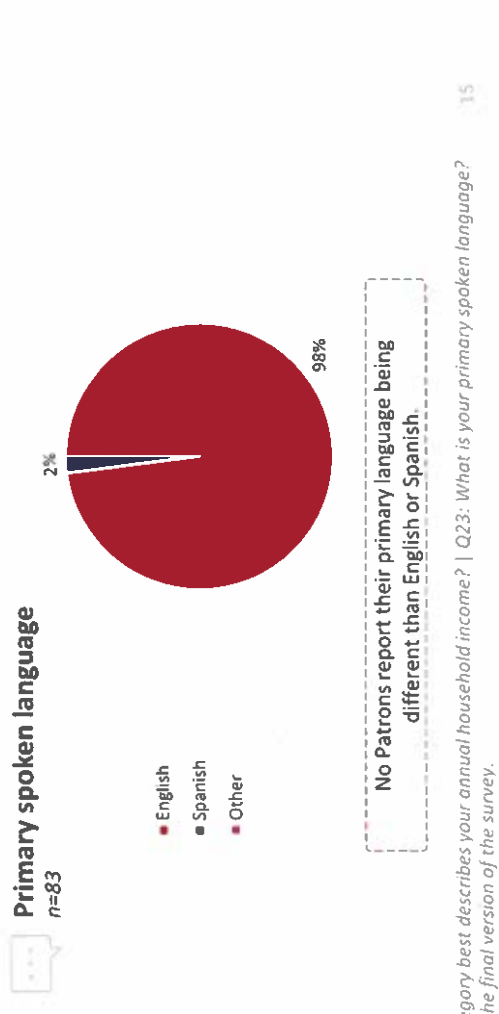
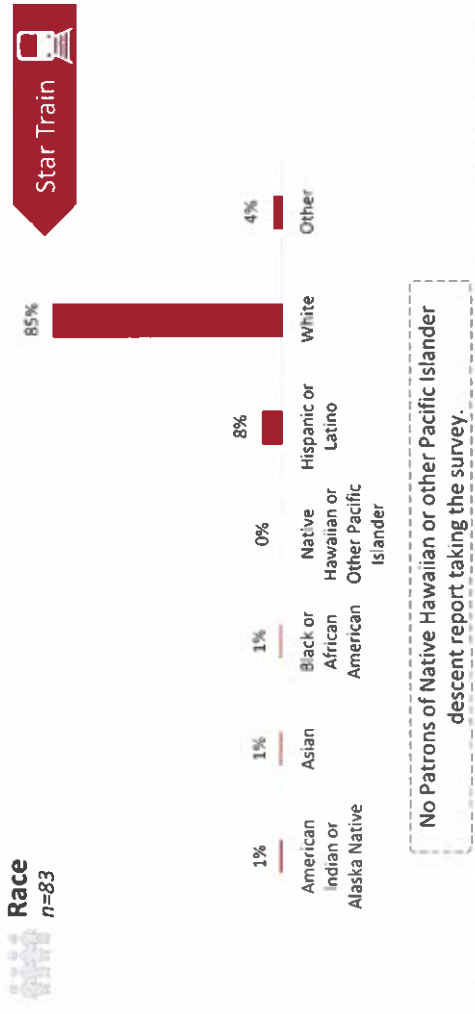


Impact on willingness to ride
Top reason for riding
Top reason: n=83



Additional Demographics

Additional Demographics | Age, Race, Income, and Language Distributions



Appendix

Appendix | KOP 16

Current Conditions



Post-Construction Conditions Low Water Level



Post-Construction Conditions High Water Level



Appendix | KOP 17.1

Current Conditions



Post-Construction Conditions Low Water Level



Post-Construction Conditions High Water Level



Appendix | KOP 17.2

Current Conditions



Post-Construction Conditions



Section 4:

NNR Santa's Reindeer Flyer Marketing and Demographic Study Report (January 12, 2024)

NNR Santa's Reindeer Flyer Marketing and Demographic Study Report

Prepared by Cicero Group®

White Pine County, Nevada

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1. Introduction

This Santa's Reindeer Flyer Marketing and Demographic Study Report describes the results of the Nevada Northern Railway ("NNR") Santa's Reindeer Flyer survey that Cicero Group® conducted from December 15th to December 17th, 2023. White Pine Waterpower, LLC (WPW) and the National Park Service ("NPS") agreed, as part of a compromise settlement, to conduct this survey.

WPW is proposing the licensing, construction, and operation of the White Pine Pumped Storage Project (FERC No. 14851) ("Project") in White Pine County, Nevada, approximately 8 miles northeast of the City of Ely. As part of the Project's licensing requirement, Cicero Group® previously conducted a prior study (i.e., the NNR Visitor Use and Assessment Report) to identify potential recreational effects on the NNR. It is of note that the Santa's Reindeer Flyer ("SRF") excursion operates in late November and December, and runs east along the Keystone line, meaning that the excursion does not pass the proposed Project site.

While this report shares some source questions with the NNR Visitor Use and Assessment Report, its objectives and methodology are foundationally distinct making it a standalone study. This means all data analyses and conclusions are complete in themselves and not related to each other. WPW and NPS agreed this study report will be standalone and all data analysis and conclusions will be independent, separate, and distinct from WPW's previously conducted studies. Because of this agreement and other factors, the Project was not mentioned in the survey questionnaire, data collection, or fielding events.

WPW, NPS, and the NNR consulted on and agreed to the survey methodology prior to Cicero Group® conducting the survey.

1.1 Report Purpose

Cicero Group® prepared the NNR Santa's Reindeer Flyer Marketing and Demographic Study Report for the benefit of project stakeholders (NNR, NPS, and WPW) and to provide additional insights into NNR Patrons during the end-of-year holiday program. The purpose of this study report is to highlight SRF patron opinions, identify patron profile(s), and to share demographic insights for this specific subset of NNR patrons. Attached, as an addendum, is a comprehensive slide deck detailing findings and data visualizations.

2. Methods

2.1 Survey Methodology

Cicero conducted live-intercept surveys using iPads and printed paper copies at the NNR depot to gauge visitor use, primarily interviewing Patrons before they boarded the train. Cicero conducted surveys from December 15th to December 17th, 2023. Surveyors attempted to reach a variety of visitors, and participation in the survey was voluntary. A \$20 honorarium was given to those who participated.

Survey methodology was designed to collect data from riders of the SRF excursion offered by the NNR to produce an analysis that could be representative of NNR end-of-year holiday program ridership. It is important to note that this NNR Santa's Reindeer Flyer Marketing and Demographic Report is limited to data collected only from SRF Riders. In 2023, the NNR operated an estimated 45 SRF excursions, of which seven were included in surveying efforts. The NNR operated nearly 300 train excursions in 2023, meaning

the SRF excursion accounts for a very small portion of total excursions and riders, and the analysis herein is therefore not representative of NNR patrons at large, but only the subset of SRF riders. Because there was no mention of the Project throughout the study, photo simulations were not shown to survey respondents.

Regarding terms used throughout the report, certain analyses are conducted for all 'Patrons' i.e., all 103 SRF survey responses, then repeated to include 'Residents' (i.e., the 19 survey responses of NNR visitors who were Ely area residents) and 'Non-residents' (i.e., the 84 survey responses of NNR visitors who were *not* Ely area residents).

Definitions for terms are below:

- **Patrons:** Refers to all individuals collectively in the sample (n=83).
- **NNR Members:** Refers to those who are subscribed members of the NNR (n=5).
- **Residents:** Refers to those who live in the Ely area (n=19).
- **Non-residents:** Refers to those who do *not* live in the Ely area (n=84).

3. Conclusions

The study provides many insights into the SRF excursion's demographic characteristics (e.g., age, racial background, language, etc.), perceptions, attitudes, and preferences. The following sections explore the various findings.

For market research generally, an acceptable margin of error is typically considered to fall between 4%-9% at a 95% confidence interval. Of equal, or perhaps greater importance than margin of error is the quality of sample – in this instance, survey participants are known to be actual Patrons of the NNR and therefore, constitute a very high-quality sample set. Table 1 illustrates the margin of error for this Report.

Table 1. Sample Distribution

| Population Size ¹ (total annual SRF riders) | Sample Size | Confidence Interval | Margin of Error ² |
|---|-------------|------------------------|------------------------------|
| ~3,000 | N=103 | 95% | 9% |

¹Population size estimated from [NNR report](#) included in the 09/14/23 Ely City Council Agenda

²Margin of error calculated using the Survey Monkey margin of error calculator

3.1 Estimated Use Levels

During 2023, all scheduled SRF excursions occurred. Although some locomotives were out of service, each scheduled excursion departed. The SRF excursion is scheduled nine times each week from Thanksgiving to Christmas. Exact train excursion numbers have not been shared by the NNR with the research team, but there are an estimated 45 SRF excursions in 2023.

3.2 Survey Results and Conclusions

3.2.1 Key Findings

1. The majority of Patrons ride the SRF excursion with their family and report that spending time with family/friends is their #1 reason for riding the SRF. 81% of Patrons are traveling with a group of 4+, and 49% identify spending time with family/friends as their #1 reason for riding.
2. Besides spending time with family/friends, experiencing a historic train ride and the railroad's holiday program are the second most common reasons for riding the SRF excursion. 76% and 75% of Patrons indicate riding a historic train and experiencing the holiday program, respectively, are in their top three reasons for riding.
3. Almost a fifth of NNR Patrons are local to the Ely area, few are NNR Members, and a majority have taken an NNR excursion before. 19% are local to the Ely area, 5% are NNR Members, and 52% have taken an NNR excursion before.

3.2.2 Additional Key Findings

1. 52% of SRF riders have previously taken an NNR excursion, of which, the SRF is the most common i.e., SRF riders are relatively likely to be return SRF riders.
2. For non-residents, the SRF excursion is the primary reason for coming to Ely. 93% of non-residents report that the primary reason for their trip to Ely is to ride the SRF excursion, while 7% report that it is one of multiple reasons.
3. Food and beverages on the SRF are relatively unimportant to Patrons. Only 9% of patrons indicated that the food and beverage offered on the SRF excursion is one of their top three reasons for riding.
4. Patrons are likely to take another NNR excursion in the future. 95% of Patrons are likely to take another NNR excursion, while 5% are unsure.
5. Patrons think NNR rides are unique. 78% of Patrons think the SRF excursion is extremely unique or unique compared to other non-NNR train excursions.

3.2.3 NNR SRF Patron Demographics

1. **Age:** Over 50% of Patrons (survey participants) are below the age of 40.
2. **Household Income:** The median income falls within the \$50,000 to \$74,999 income group.
3. **Racial Background:** 83% of Patrons are white. The remaining 17% are Hispanic/Latino, Asian, Native Hawaiian or other Pacific Islander, American Indian/Alaska Native, or other.
4. **Primary Language:** 100% of Patrons speak English as their primary language.

3.2.4 Reasons to Ride

1. The top 3 stated purposes for the excursion are to spend time with friends/family, to ride a historic train, and to attend the railroad's holiday program.
2. The top 3 most important factors for taking the excursion are to spend time with friends/family, to ride a historic train, and to attend the railroad's holiday program. The food and beverage offered on the excursion is the least important reason for the excursion.

3.2.5 Visual Representations

Figure 1 illustrates that the majority of Patrons ride the SRF excursion with their family and report that spending time with family/friends is their #1 reason for riding the SRF.

Figure 1. Top Reasons for Taking an NNR Excursion

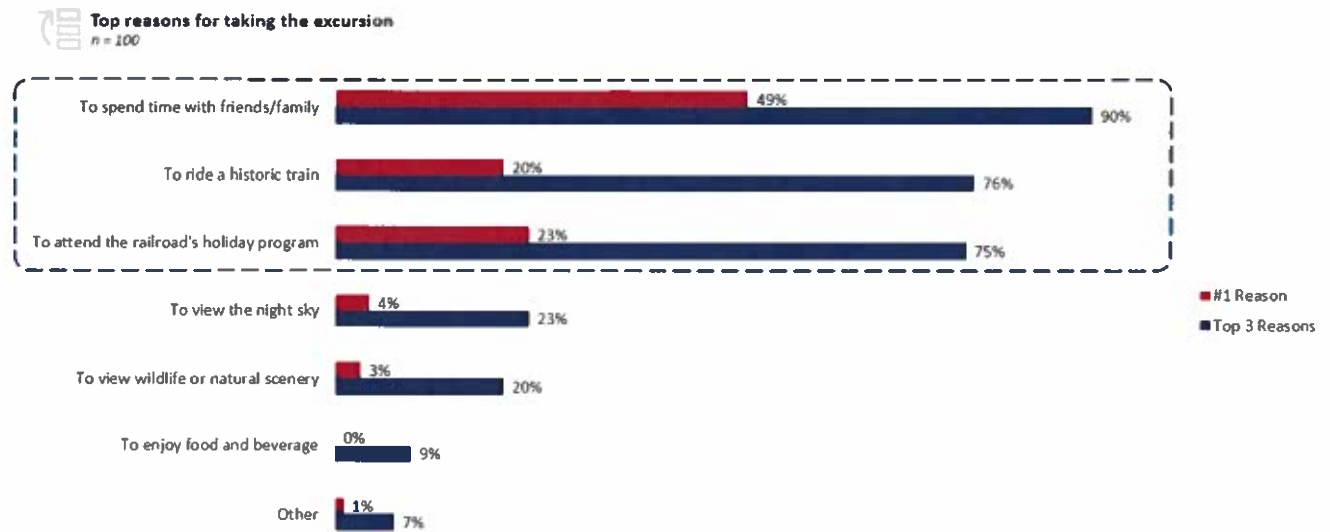


Figure 2 illustrates that the majority of Patrons are from Nevada; primarily White Pine and Clark Counties.

Figure 2. Patron Demographics

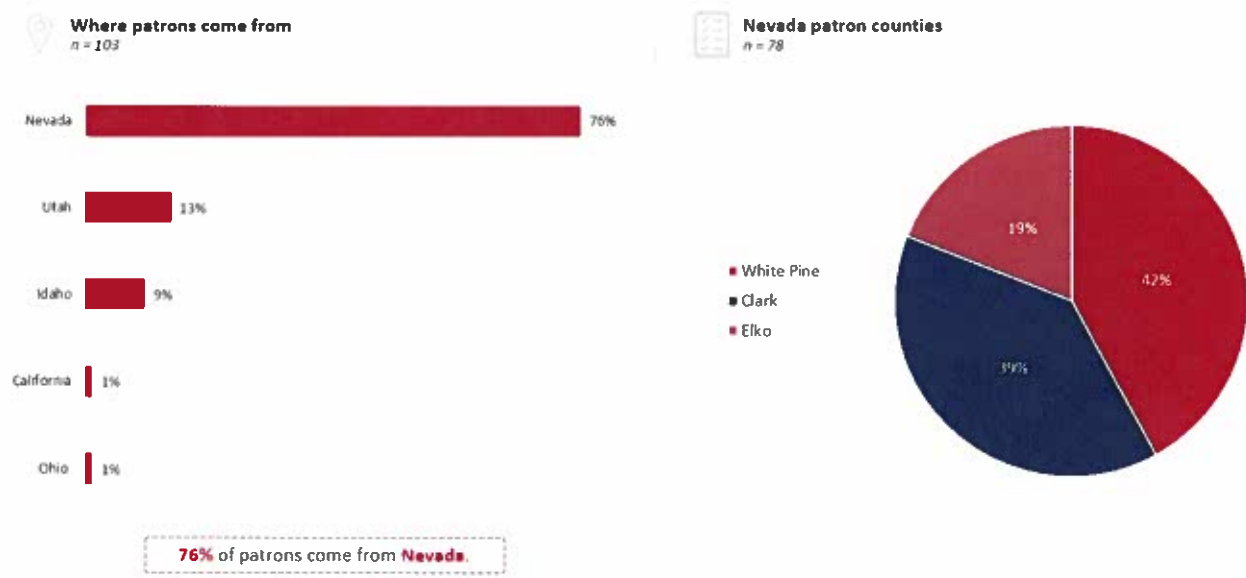
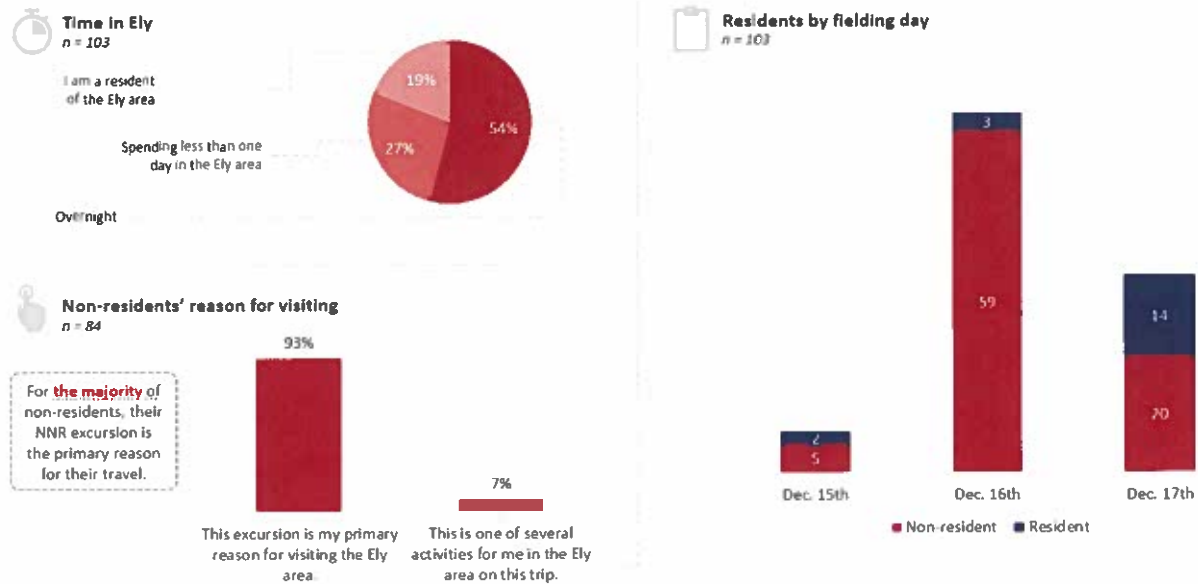


Figure 3 illustrates that only 19% of Patrons are residents of the Ely area, with the most residents participating in the Dec. 17th fielding event.

Figure 3. Patron Profile





NNR Santa's Reindeer Flyer Marketing and Demographic Study

**Summary Report and Findings of Survey Data
January 2024**

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Executive Summary | Glossary

Key Terms

| | |
|------------------------------|---|
| Patrons n= 103 | Refers to all individuals collectively in the sample, i.e., all 103 survey participants. |
| NNR Members n=5 | Refers to those who are subscribed members of the NNR. ¹ |
| Residents N=19 | Refers to those who live in the Ely area. ² <i>The sample size for Residents (n=19) is insufficient for robust analysis. Data for this population may be informative, but not conclusive.</i> |
| Non-residents n=84 | Refers to those who do NOT live in the Ely area. ³ |

¹ Answered "Yes" to Q19: Are you a member of the Nevada Northern Railway?

² Answered "I am a resident of the Ely area" to Q21. Are you staying overnight in the Ely Area, spending less than one day in the Ely area, or are you a resident of the Ely area?

³ Answered "Overnight" or "Spending less than one day in the Ely area" to Q21

Executive Summary | Study Overview & Methodology



Methodology

Cicero conducted live-intercept surveys using iPads and printed paper copies at the Nevada Northern Railway (NNR) depot to gauge visitor use of the Santa's Reindeer Flyer (SRF) excursion, primarily interviewing Patrons before they boarded the train. Surveyors attempted to reach a variety of visitors, though participation in the survey was voluntary.

Participants were asked about their reasons for riding the train, their experience in Ely, and demographic questions. All participants who completed the survey were provided with a \$20 honorarium.

Surveys fielded between December 15th and 17th



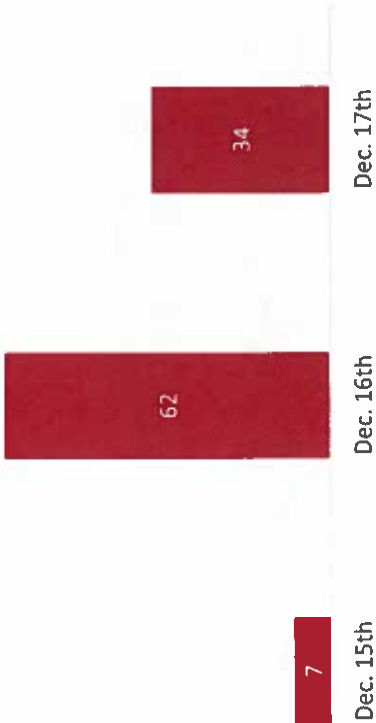
Sample Distribution

| Population Size ¹ (total annual SRF riders) | Sample Size | Confidence Interval | Margin of Error ² |
|---|-------------|---------------------|------------------------------|
| ~3,000 | N=103 | 95% | 9% |

For market research generally, an acceptable margin of error is typically considered to fall between 4%-9% at a 95% confidence interval. Of equal, or perhaps greater importance than margin of error is the quality of sample – in this instance, survey participants are known to be actual Patrons of the NNR and therefore, constitute a very high-quality sample set.



Patrons Surveyed per Fielding Day



Executive Summary | Timeline



| | December 15 | December 16 | December 17 |
|--------------------------------------|---|---|---|
| % completed towards 103 survey total | 7% | 60% | 33% |
| Number of surveyed Patrons per day | 7 | 62 | 34 |
| Relevant call-outs and notes | <ul style="list-style-type: none"> Low ridership compared to the other days of survey fielding Patrons on both scheduled trains were surveyed | <ul style="list-style-type: none"> Of all three fielding days, Saturday had the highest ridership Patrons on all three scheduled trains were surveyed | <ul style="list-style-type: none"> 41% of Sunday riders were local to Ely as compared to 29% and 5% of Friday and Saturday riders, respectively Riders on two of the three scheduled trains were surveyed, and the participant quota was reached after the return of the second train |

Executive Summary | Key Findings



The majority of Patrons ride the SRF excursion with their family and report that spending time with family/friends is their #1 reason for riding the SRF.

81% of Patrons are traveling with a group of 4+, and 49% identify spending time with family/friends as their #1 reason for riding.



Besides spending time with family/friends, experiencing a historic train ride and the railroad's holiday program are the second most common reasons for riding the SRF excursion.

76% and 75% of Patrons indicate riding a historic train and experiencing the holiday program, respectively, are in their top three reasons for riding.



Almost a fifth of NNR Patrons are local to the Ely area, few are NNR Members, and a majority have taken an NNR excursion before.

19% are local to the Ely area, 5% are NNR Members, and 52% have taken an NNR excursion before.

Executive Summary | Additional Key Findings



A majority of SRF riders have taken an NNR excursion before.

52% of Patrons have previously taken an NNR excursion, of which, the SRF is the most common i.e., SRF riders are relatively likely to be return SRF riders.



For non-residents, the SRF excursion is the primary reason for coming to Ely.

93% of non-residents report that the primary reason for their trip to Ely is to ride the SRF excursion, while 7% report that it is one of multiple reasons.



Food and beverages on the SRF are relatively unimportant to Patrons.

Only 9% of patrons indicated that the food and beverage offered on the SRF excursion is one of their top three reasons for riding.



Patrons are likely to take another NNR excursion in the future.

95% of Patrons are likely to take another NNR excursion, while 5% are unsure.



Patrons think NNR rides are unique.

78% of Patrons think the SRF excursion is extremely unique or unique compared to other non-NNR train excursions.

Executive Summary | NNR Patron Profile

Ridership Stats

- 97% of SRF Patrons have taken, or plan to take, an NNR excursion
- For 47% of SRF Patrons, this is their first NNR excursion

Travel Accommodations

- 19% of SRF Patrons are residents of the Ely area
- 51% stay in a lodge, hotel, or motel during their stay

Money Spent

- 38% of the median amount of money SRF Patrons spend in Ely is spent at the NNR

NNR Membership & Awareness

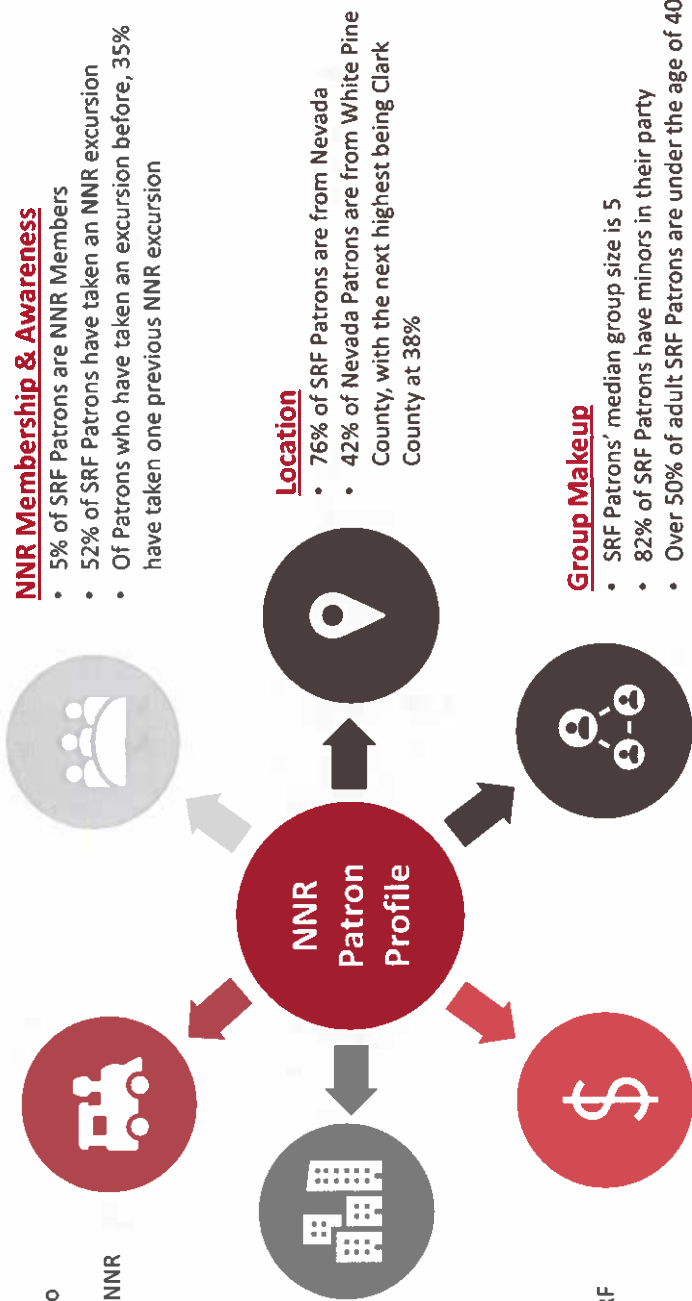
- 5% of SRF Patrons are NNR Members
- 52% of SRF Patrons have taken an NNR excursion
- Of Patrons who have taken an excursion before, 35% have taken one previous NNR excursion

Location

- 76% of SRF Patrons are from Nevada
- 42% of Nevada Patrons are from White Pine County, with the next highest being Clark County at 38%

Group Makeup

- SRF Patrons' median group size is 5
- 82% of SRF Patrons have minors in their party
- Over 50% of adult SRF Patrons are under the age of 40



Executive Summary | Reasons to Ride



Top 3 stated purposes for the excursion:

1. To spend time with friends/family
2. To attend the railroad's holiday program
3. To ride a historic train



Spending time with family/friends and attending the holiday program are the two most important reasons for taking the excursion.



The food and beverage offered on the excursion and viewing the night sky are the two least important reasons for the excursion.¹



95%

Are likely to take an NNR excursion in the future



Love the reindeer flyer train ride, will be back next year.



Highly recommend coming each year.



I am thrilled that we are keeping this history alive.



61%

Say the NNR's SRF excursion is extremely unique



I love it! Such a unique interesting experience and I want to share it with others in the future.



This place is great. You don't see this everyday.



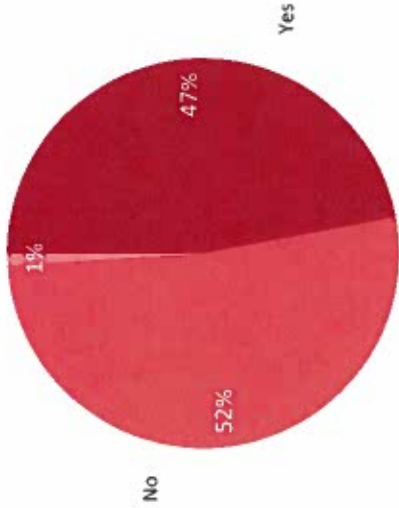
I love the train yard. It is magical.

NNR SRF Patron Profile

A slight majority of Patrons report that this is not their first NNR excursion. For those who have previously ridden NNR, most have taken between 1 – 3 excursions.

First ever NNR excursion
n = 103

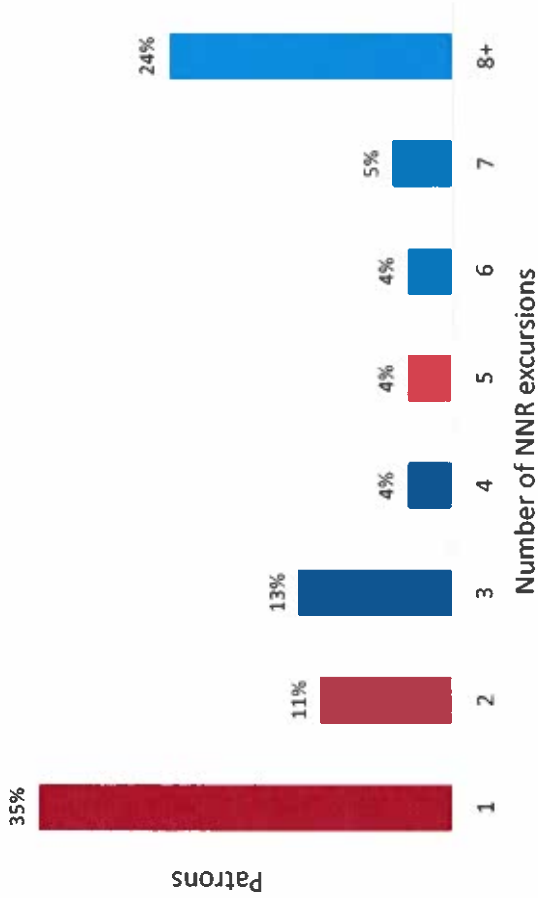
I have never taken, and am
not taking, an NNR excursion
today



47% of Patrons have **not** ridden an NNR excursion before.

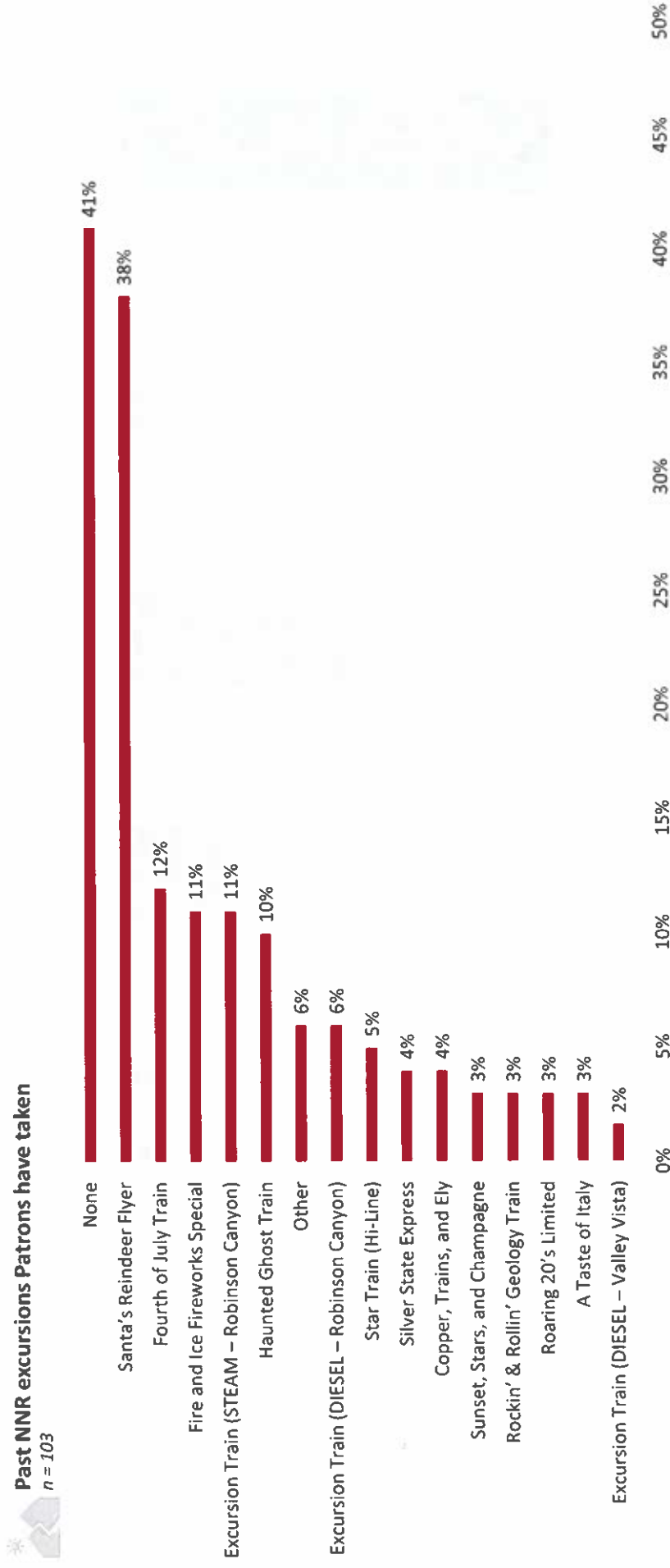


Number of past NNR excursions taken, if any
n = 54



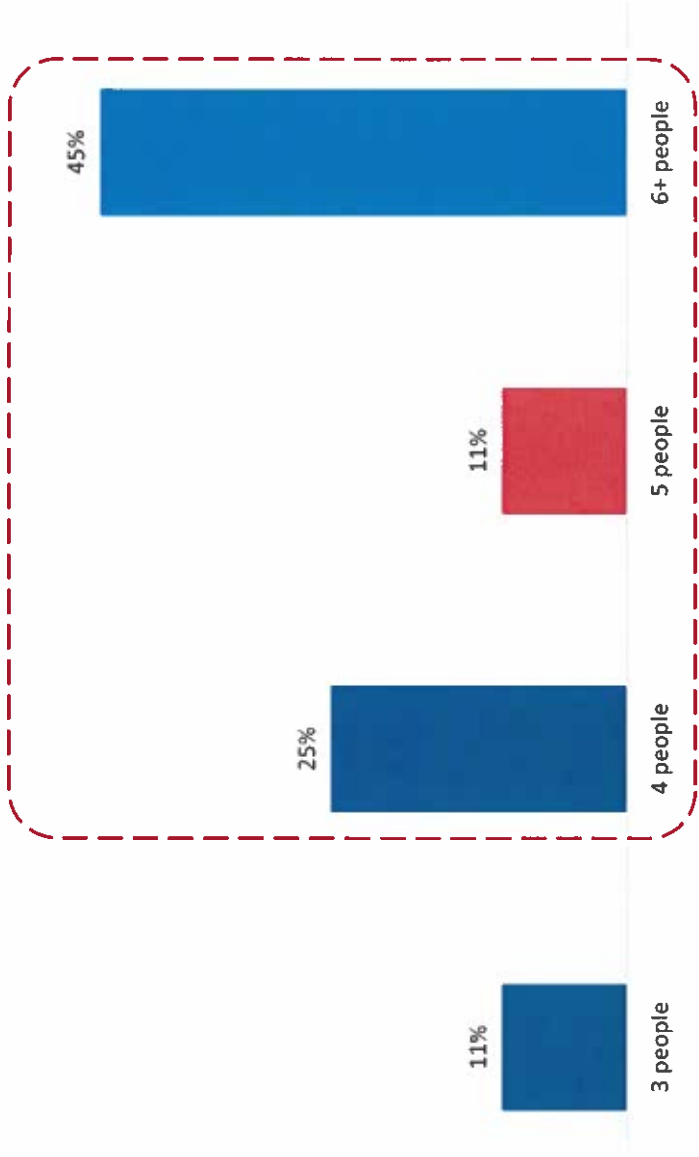
The median number of times Patrons have taken NNR train excursions is **three**.

The Santa Reindeer Flyer is the most common excursion that previous riders have taken.

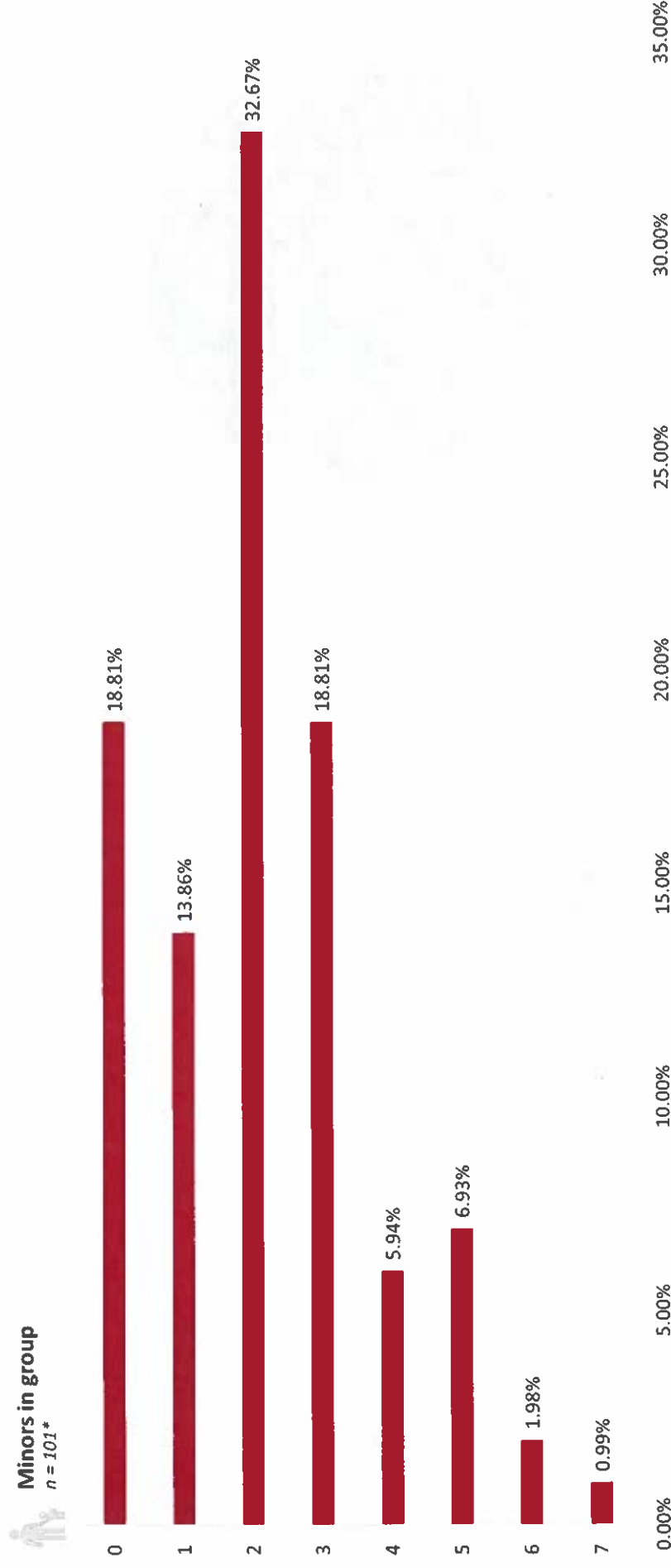


Over three-quarters of Patrons are traveling in a group of four or more. Groups of two or less account for a small portion of Patrons.

 Group size
n = 103

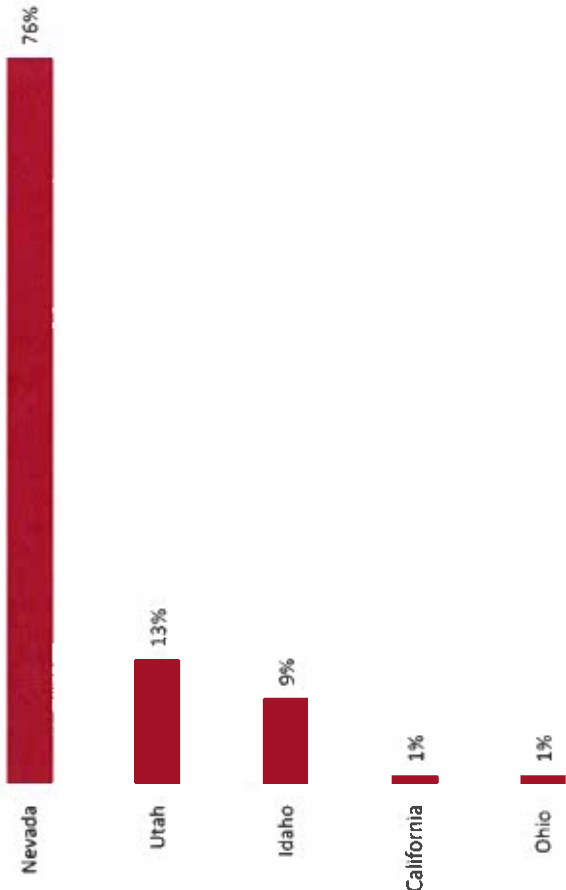


81% of Patrons have minors in their group; a large majority have at least two minors in their group.



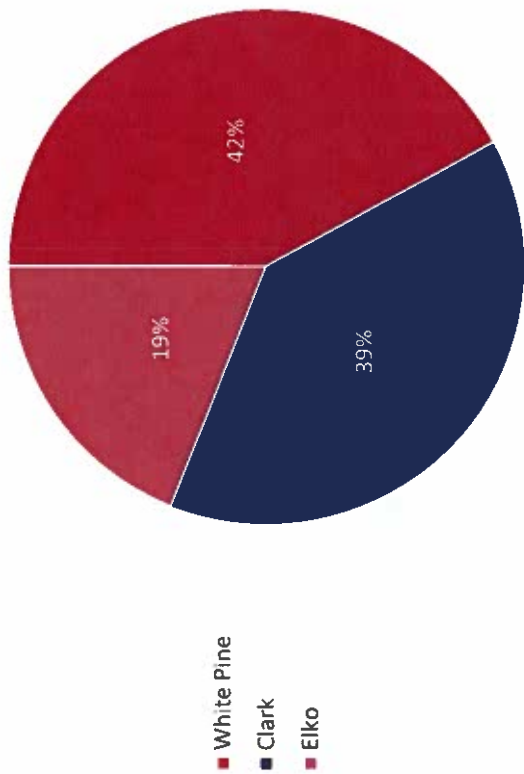
The majority of Patrons are from Nevada; primarily White Pine and Clark Counties.

Where patrons come from
n = 103

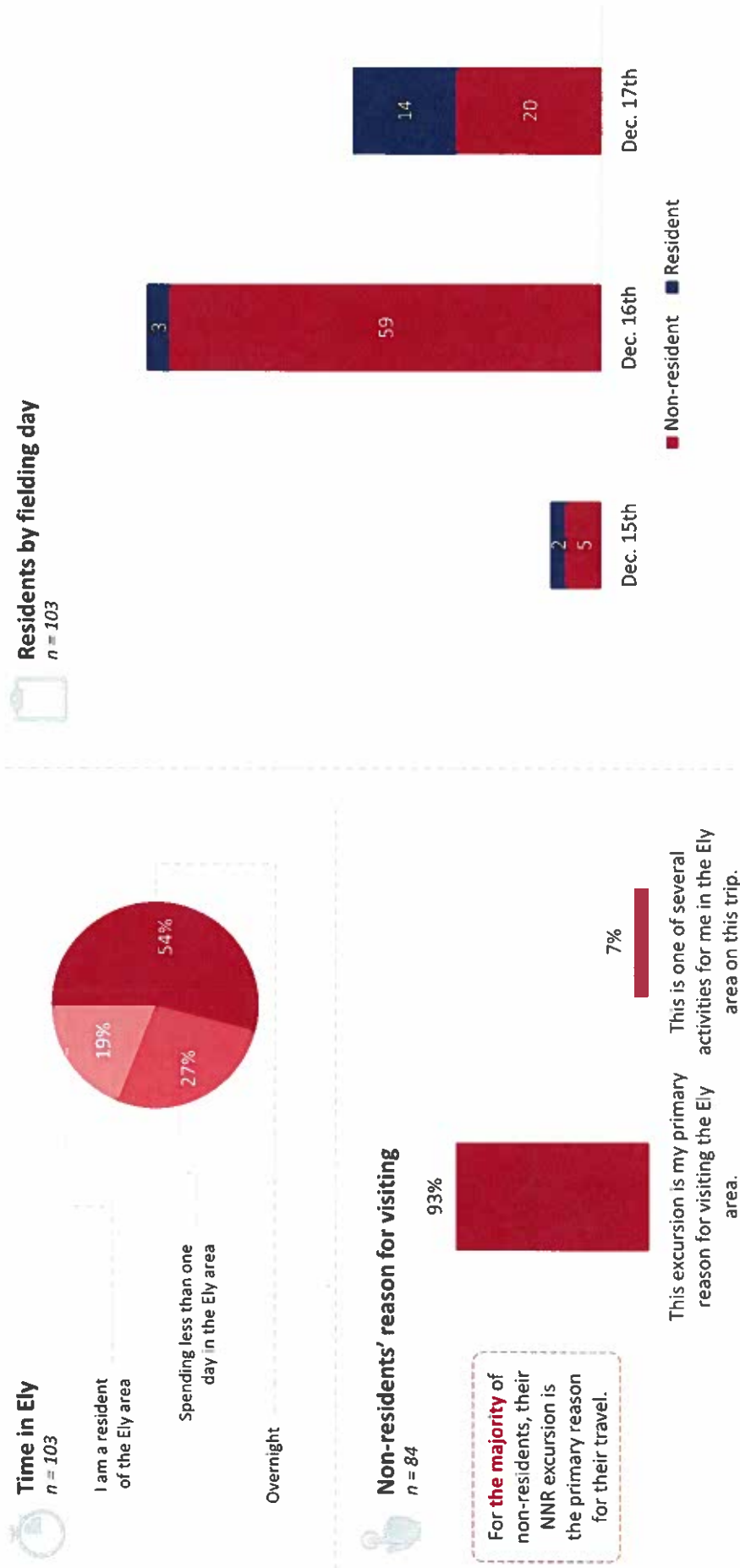


76% of patrons come from Nevada.

Nevada patron counties
n = 78



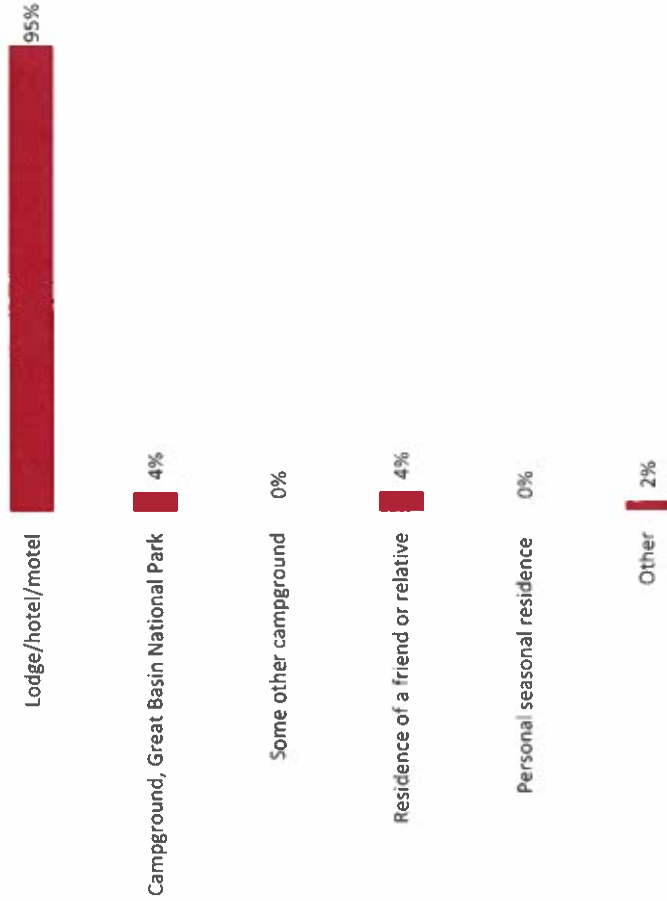
Only 19% of Patrons are residents of the Ely area, with the most residents participating in the Dec. 17th fielding event.



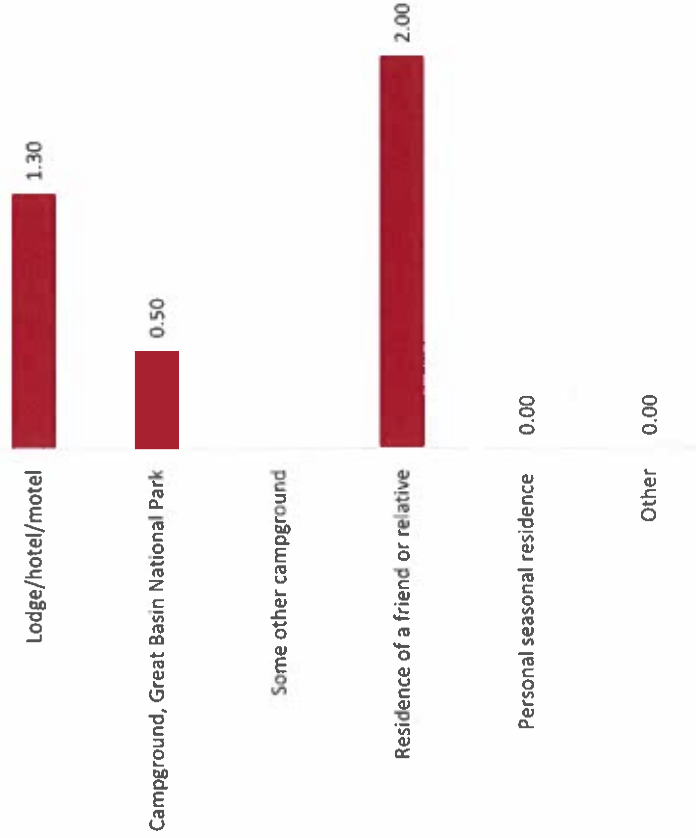
The most common accommodation for Patrons is a lodge, hotel, or motel, though they are more likely to stay for a longer period of time at a friend or family's residence.



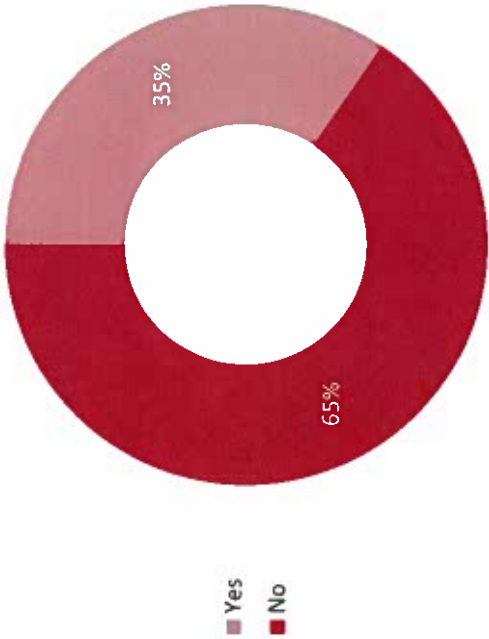
Expected accommodations
n = 58



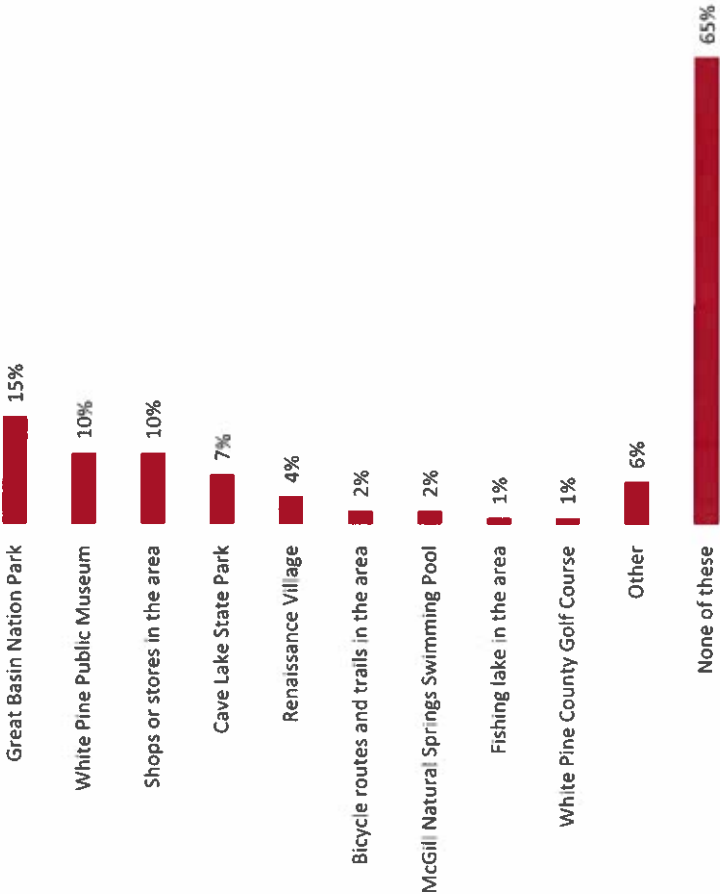
Average nights at each accommodation
n = 58



The majority of non-resident Patrons only plan to ride the SRF while in the Ely area.

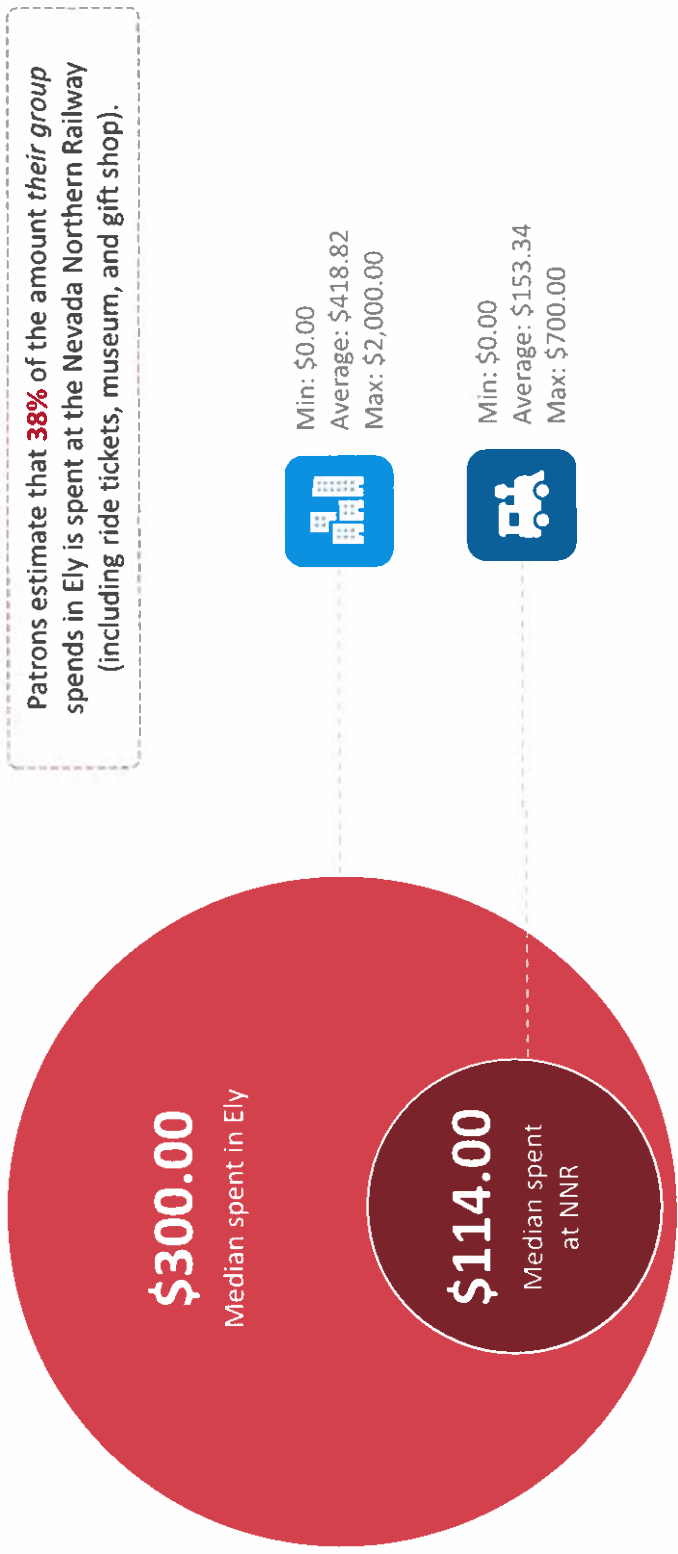


55 out of **84** total non-resident Patrons report have no plans to visit any other attractions in the Ely area.



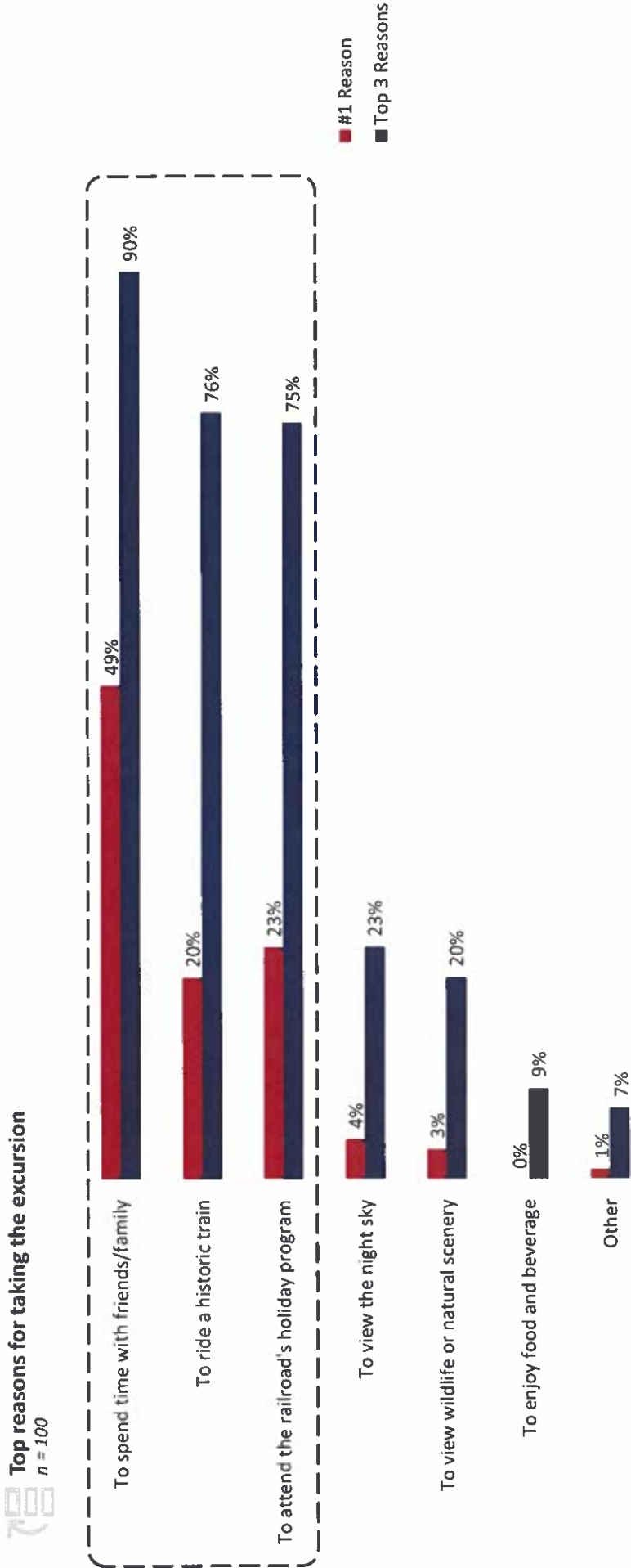
Patrons estimate that one third of their total monetary spend in the Ely area is spent at the NNR.

Money spent at NNR estimate
n = 103



Reasons to Ride

The top reasons for taking an excursion include spending time with family/friends, riding a historic train, and attending the railroad's holiday program.

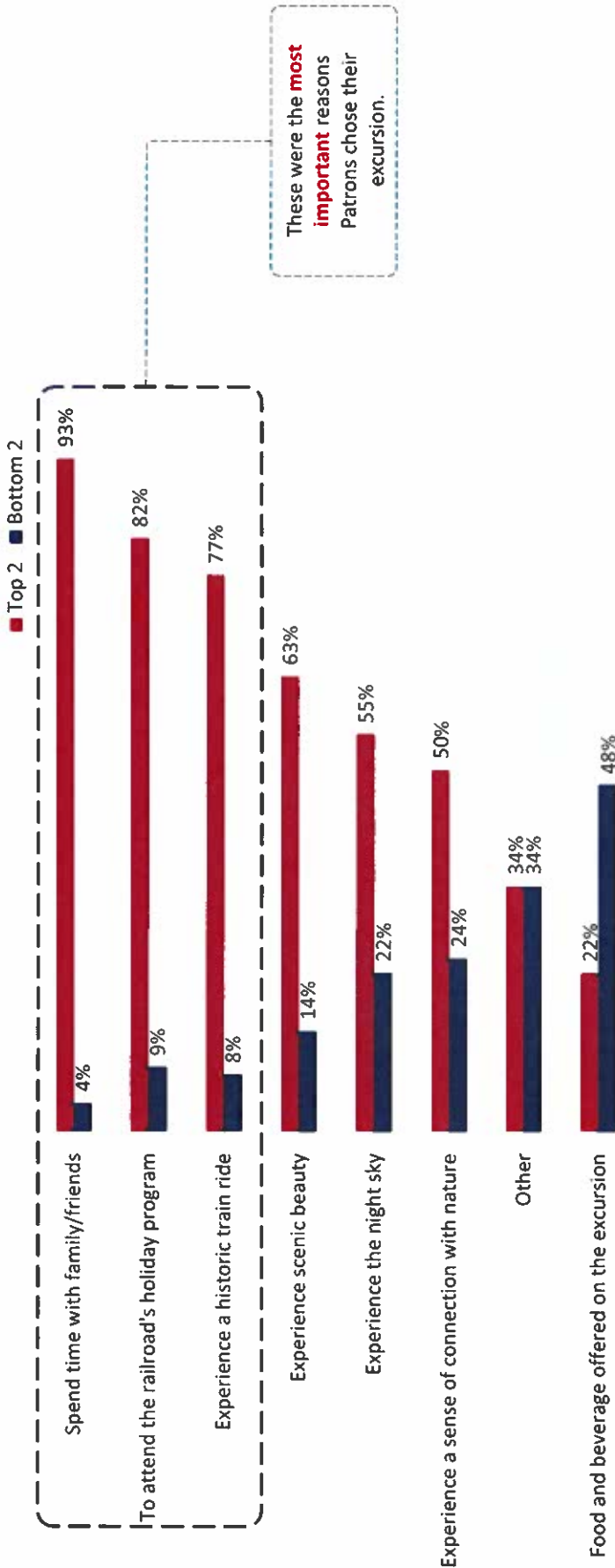


The most important factors Patrons highlight as significant for choosing the excursion closely mirror the reasons motivating them to take the excursion.



Most and least important factors

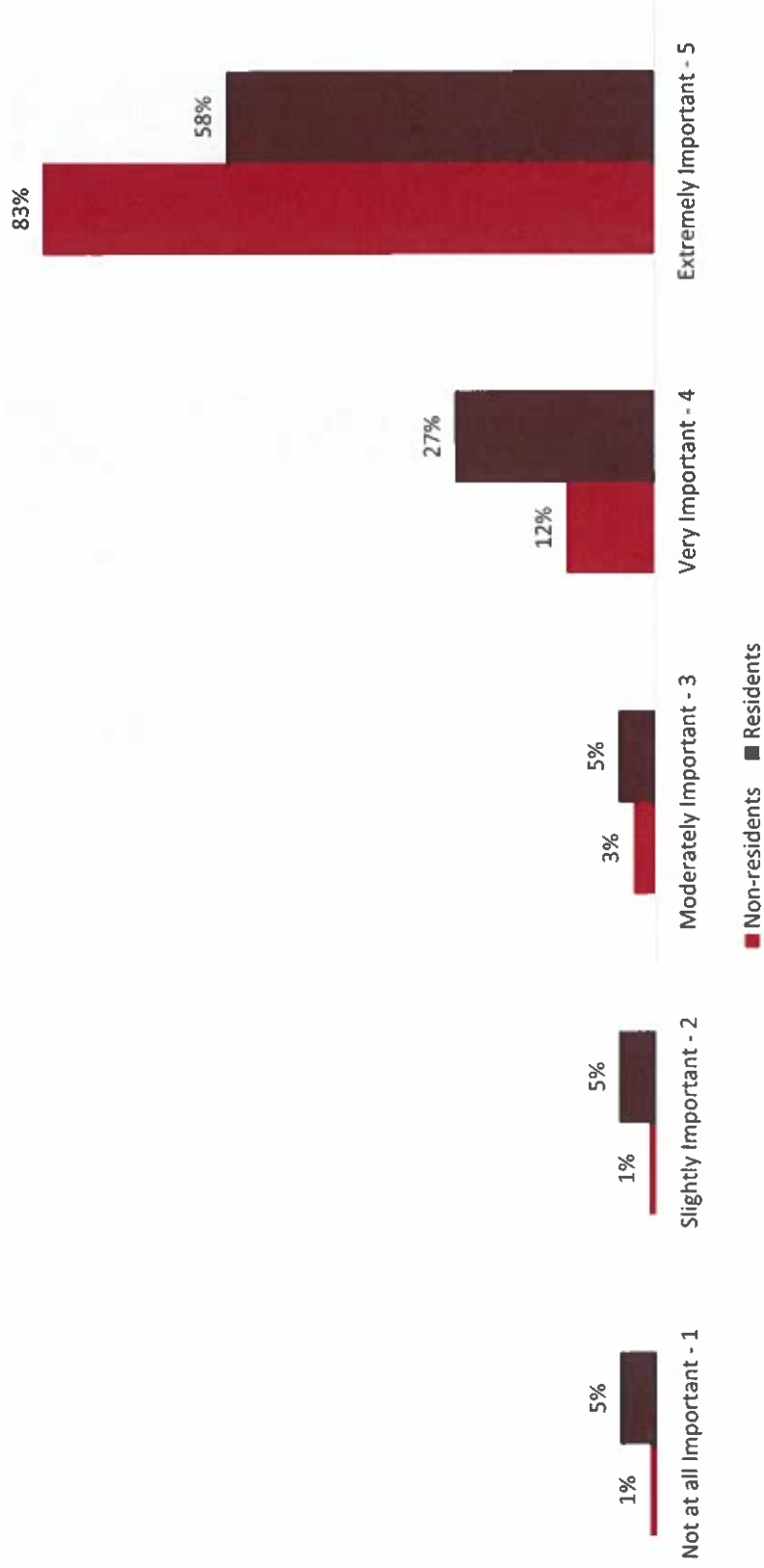
n = 100



Spending time with family/friends is extremely important to all Patrons regardless of being a resident or non-resident.



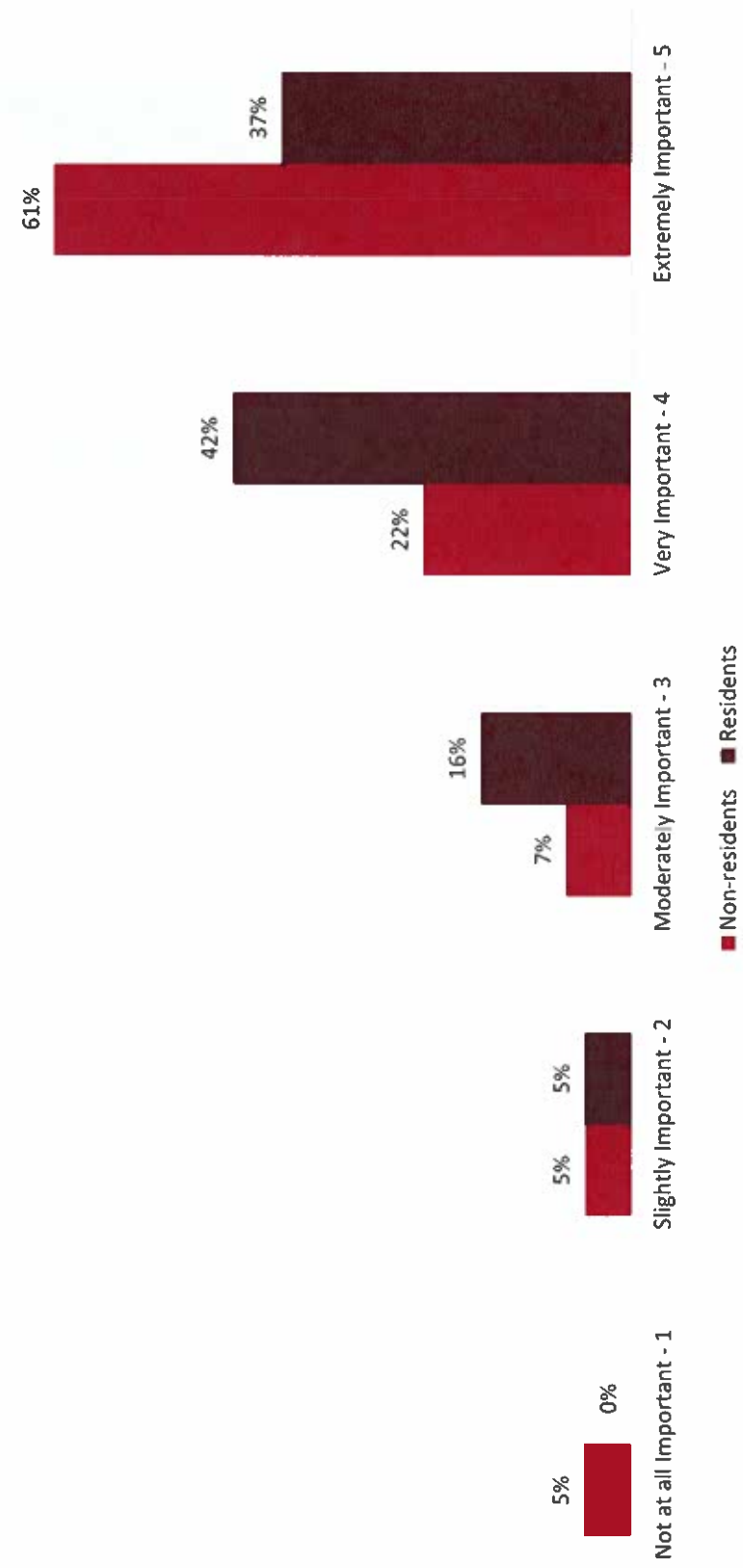
Importance of spending time with family and friends
n = 100 (81 non-residents, 19 residents*)



Experiencing the railroad's holiday program is more important to Patrons who are non-residents than it is to Patrons who are residents of the Ely area.



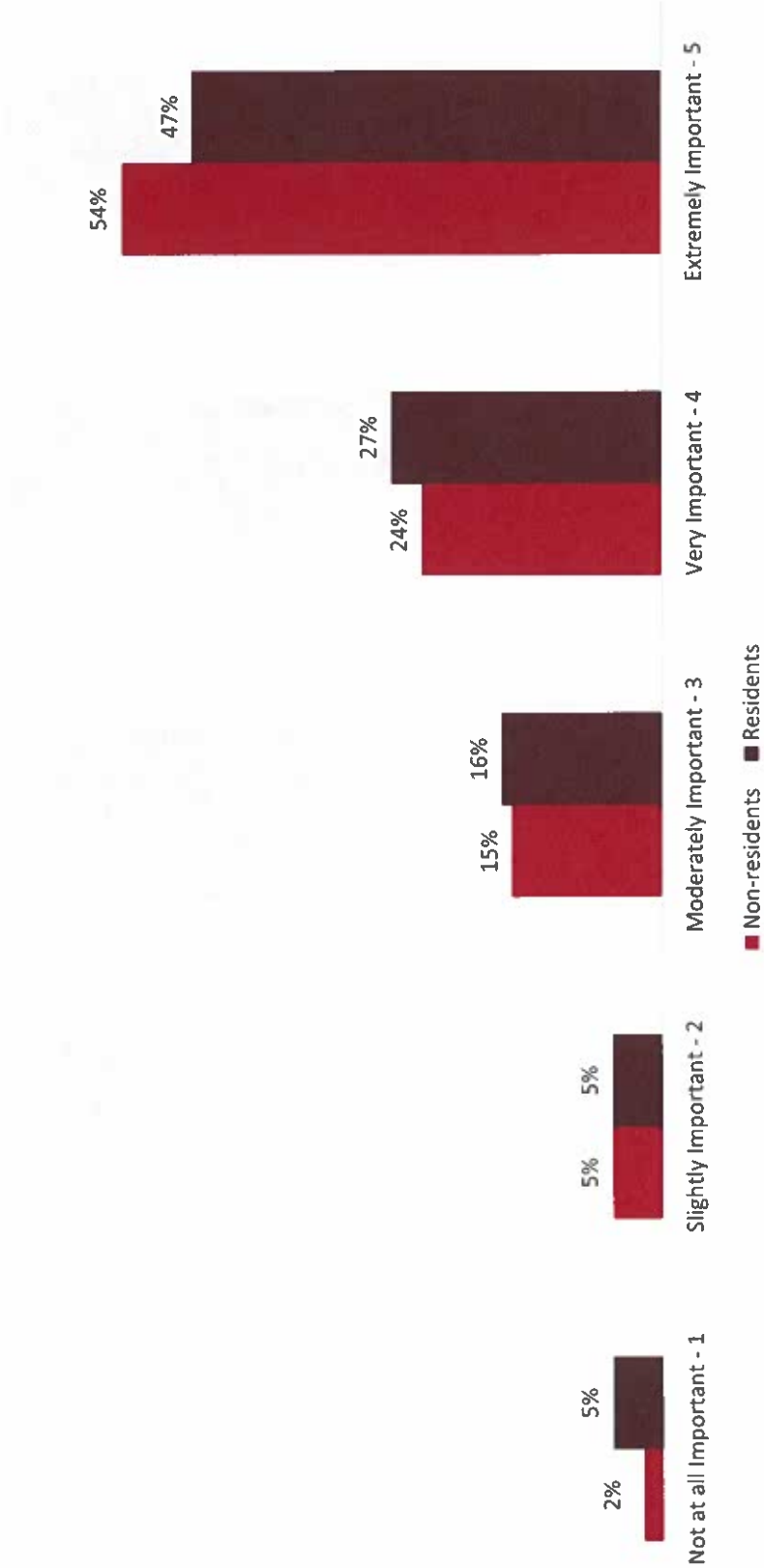
Importance of attending the railroad's holiday program
n = 100 (81 non-residents, 19 residents)



Experiencing a historic train ride is of relatively equal importance to Ely area residents and non-residents.

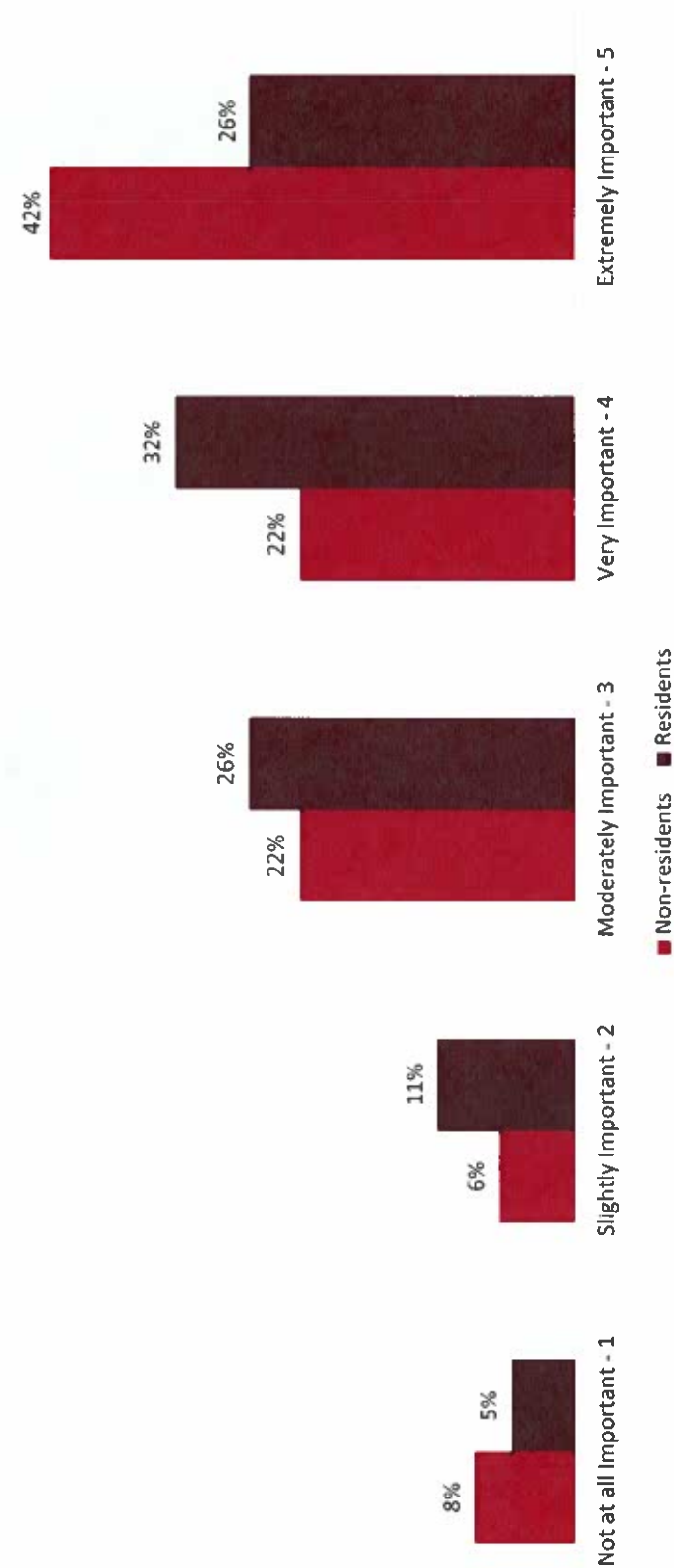


Importance of experiencing a historic train ride
n = 100 (81 non-residents, 19 residents)



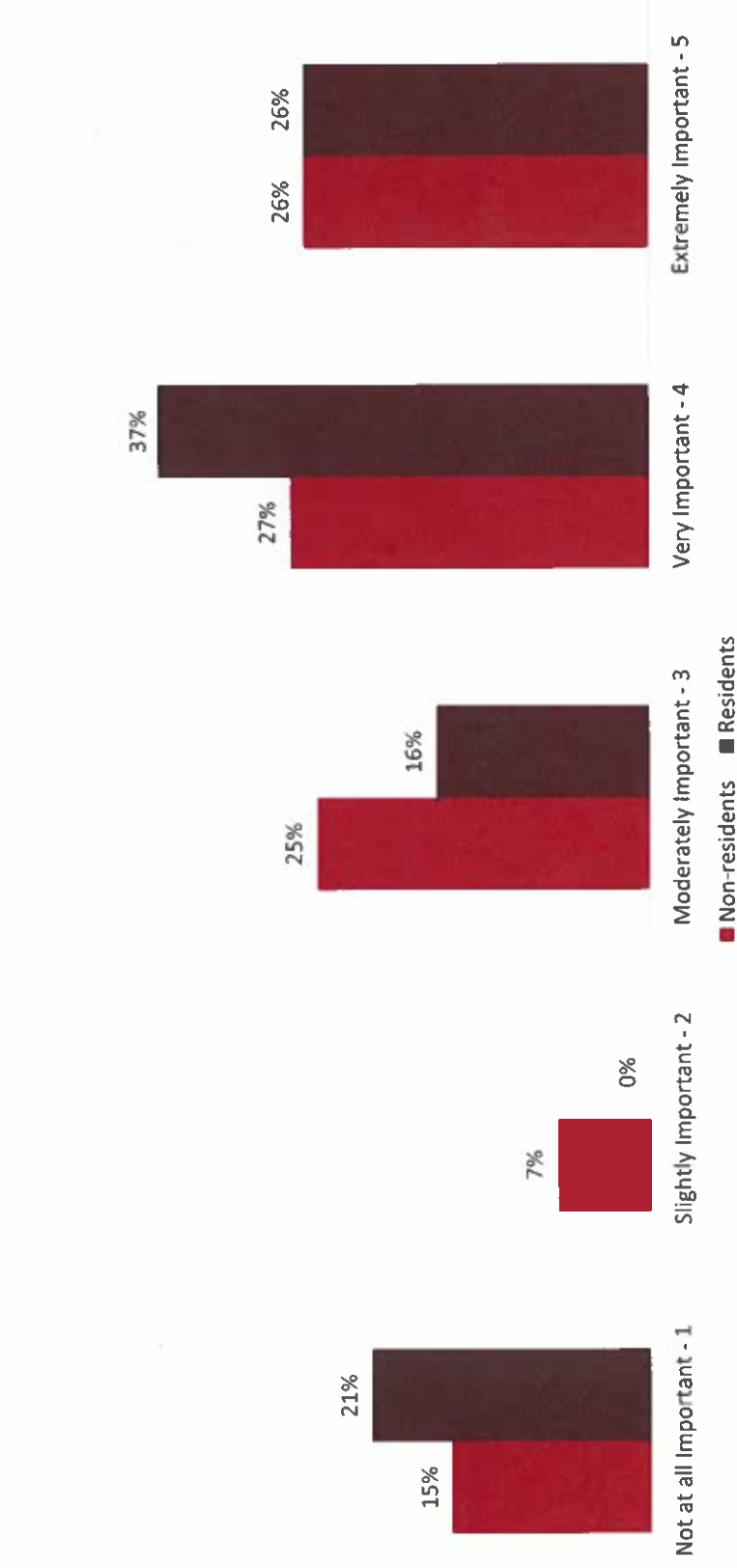
Experiencing scenic beauty is more important to Patrons who are non-residents than it is to Patrons who are residents of the Ely area.

Importance of experiencing scenic beauty
n = 100 (81 non-residents, 19 residents)



Viewing the night sky is more important to Patrons who are residents of the Ely area than it is to Patrons who are non-residents.

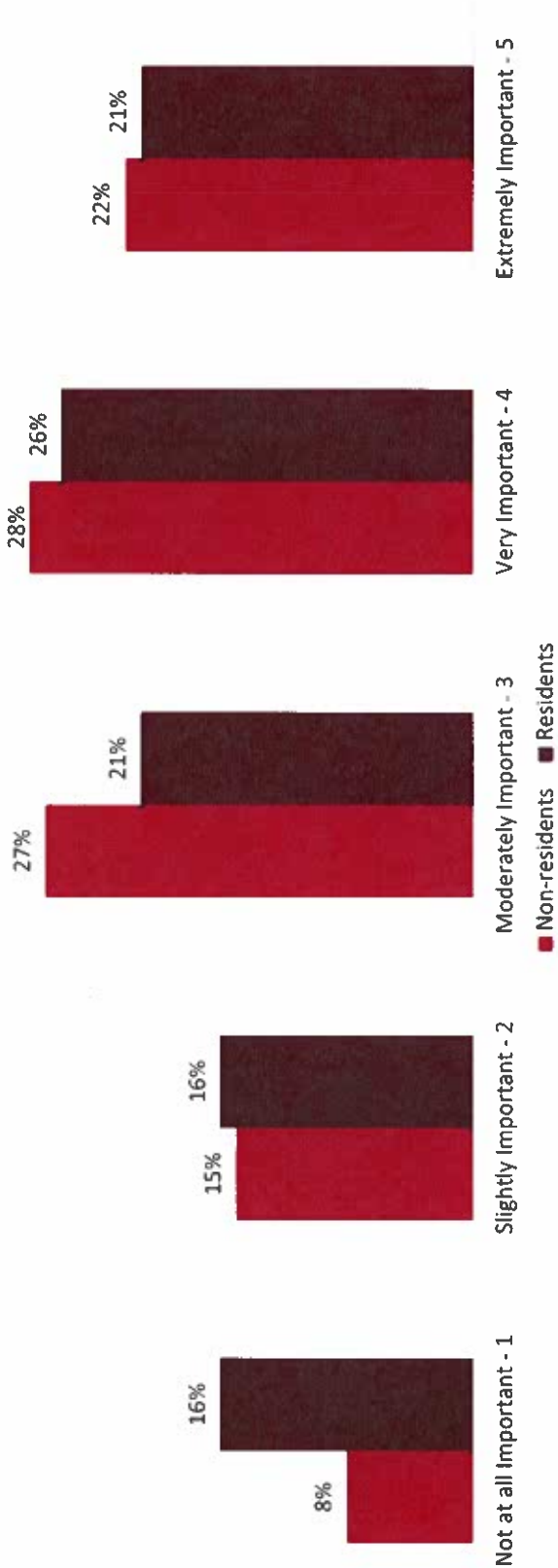
Importance viewing the night sky
n = 100 (81 non-residents, 19 residents)



Experiencing a sense of connection with nature is of similar importance for Ely area residents and non-residents.



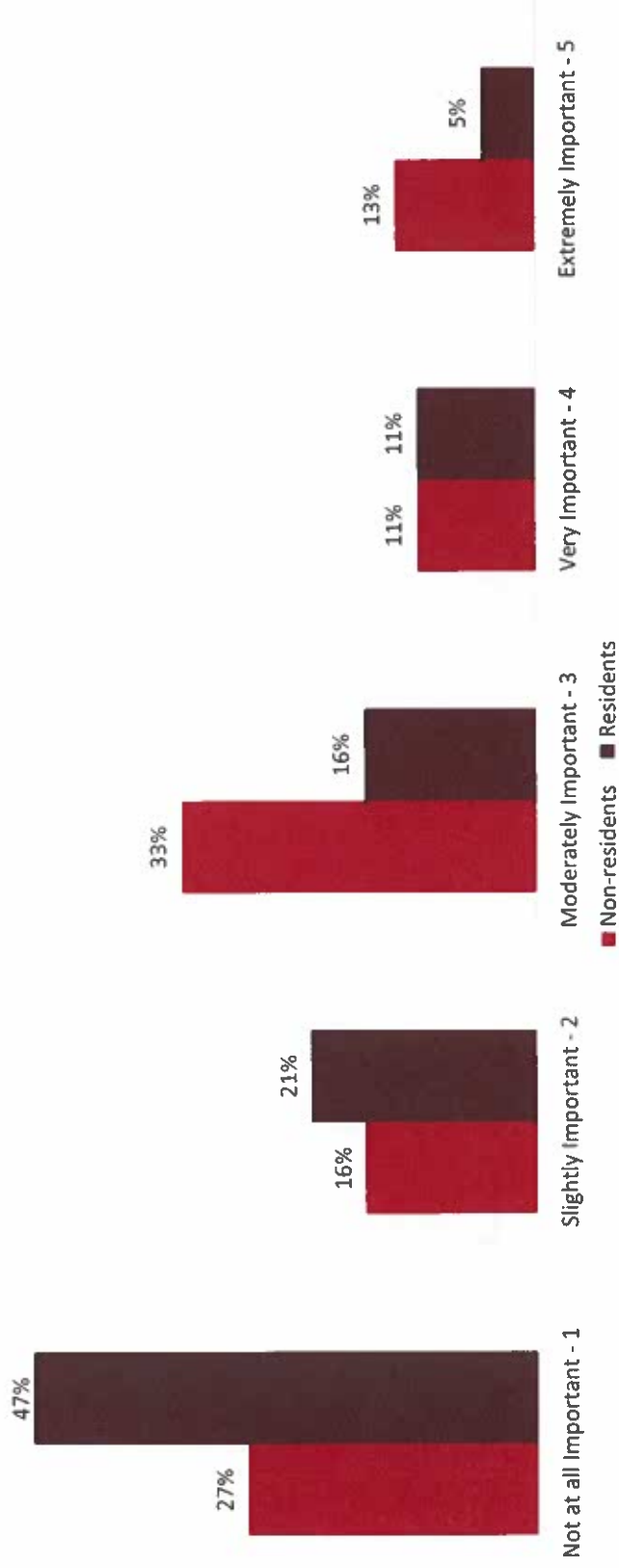
Importance of experiencing a sense of connection with nature
n = 100 (81 non-residents, 19 residents)



Food and beverage offered on the excursion is less important to Ely area residents than it is to non-residents.

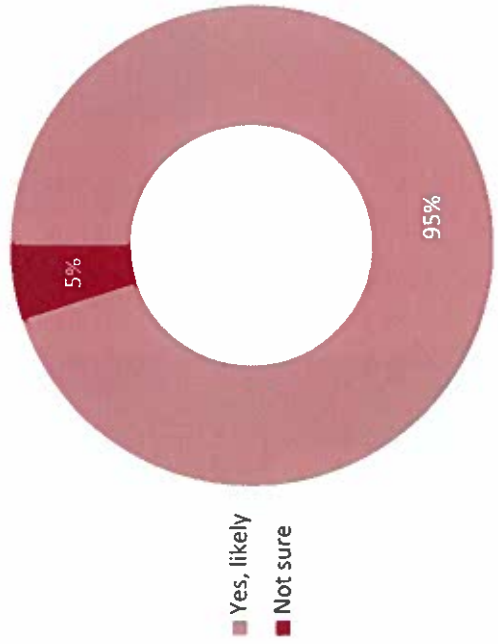


Importance of food and beverage offered on the excursion
n = 100 (81 non-residents, 19 residents)



Patrons would overwhelmingly go on another excursion, with several Patrons citing the history of the NNR as the reason for their return.

Likelihood of taking another excursion
n = 102



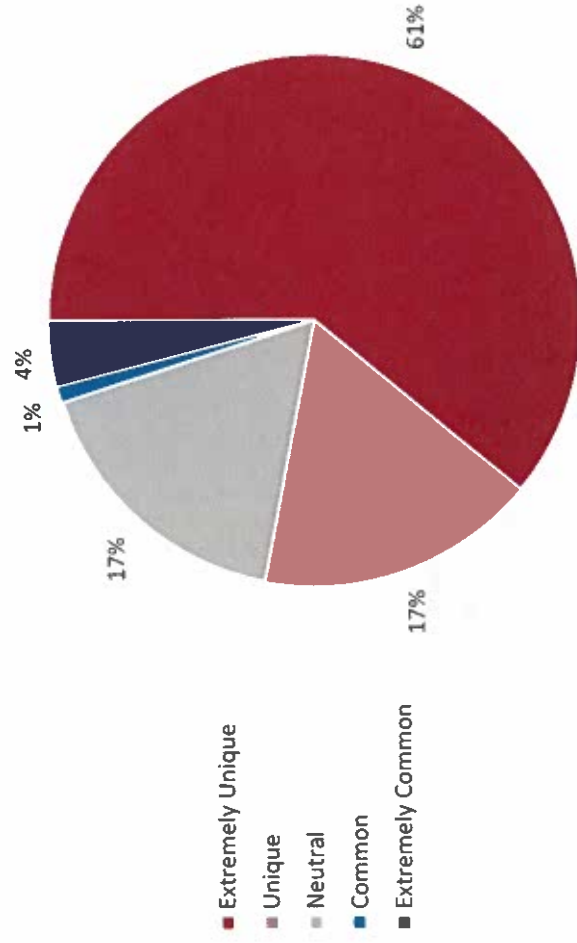
No respondents chose the option **'No, unlikely'** for this question despite it being one of the available response choices.

- "Because NNR is my special get away place, just to enjoy peace and quiet."
- "It's awesome!"
- "It was a lot of fun."
- "Love the train."
- "Fun family experience and a lot of history."
- "Love the history of the NNR."
- "Great people."
- "Love this experience."

Most Patrons believe the excursions are unique, noting the atmosphere, scenery, trains themselves, and family feeling as some reasons why.



Relative uniqueness of excursion
n = 103



78% of Patrons state that NNR excursions are either **unique** or **extremely unique**.

"The **atmosphere** of Christmas was **perfect**."

"Feeling of **family** togetherness."

"I love the **train yard**. It is **magical**."

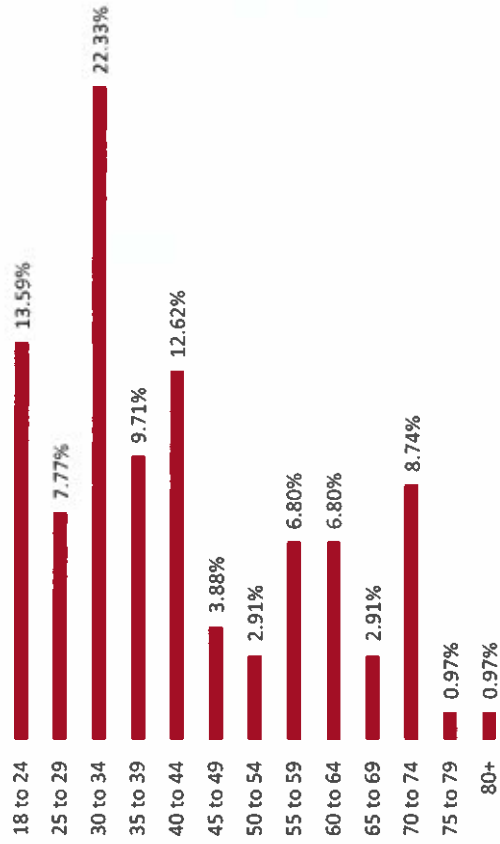
"Wonderful **atmosphere** and really **fun**!"

"Each kid gets to see **Santa**!"

"The **age** of the **train cars**."

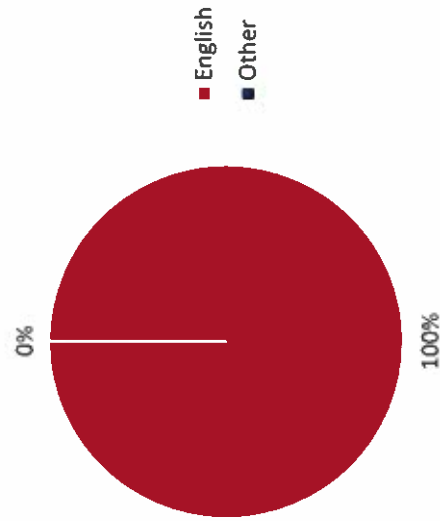
Additional Demographics | Age and Language Distribution

Age
n = 103



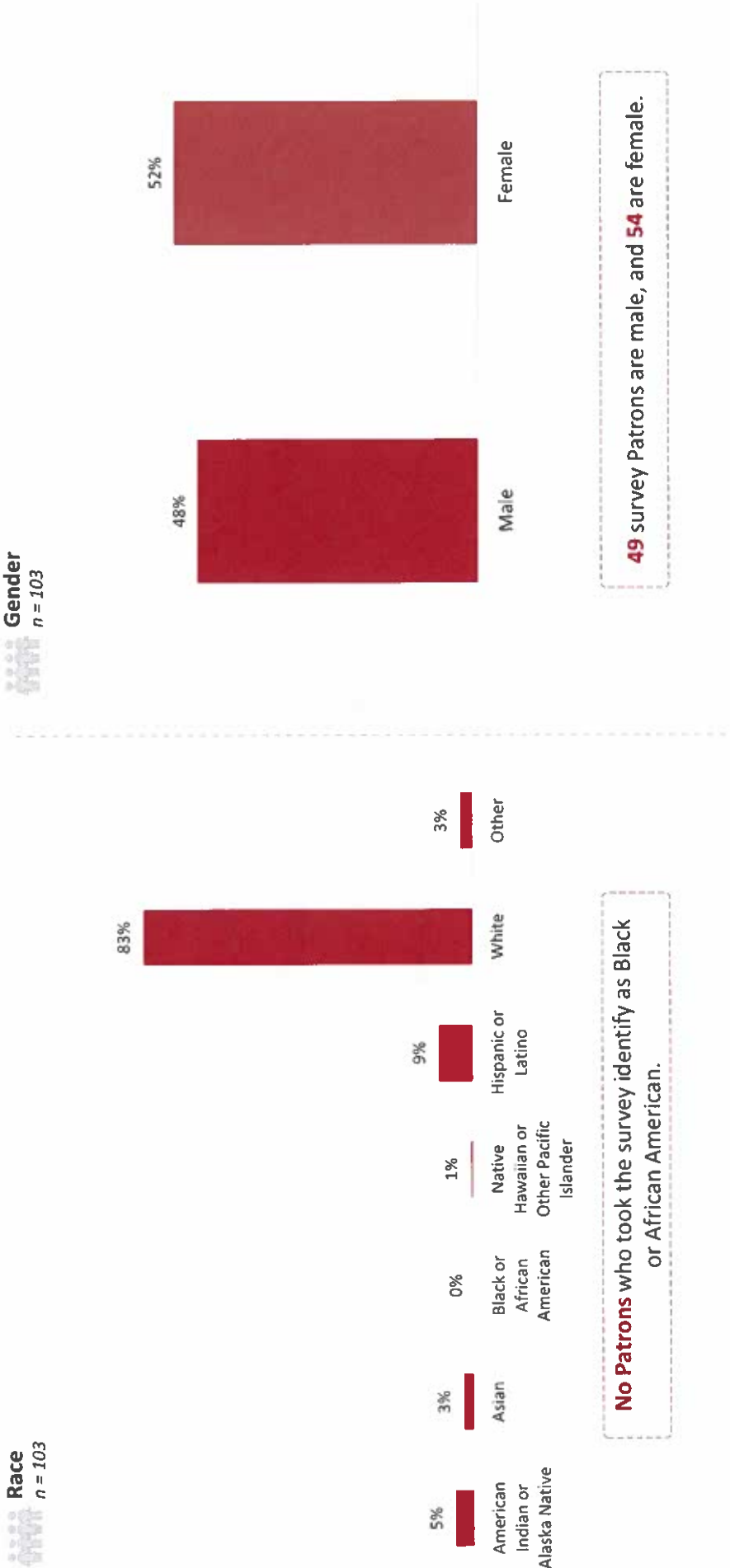
The median age group is **35 to 39**.

Language
n = 103



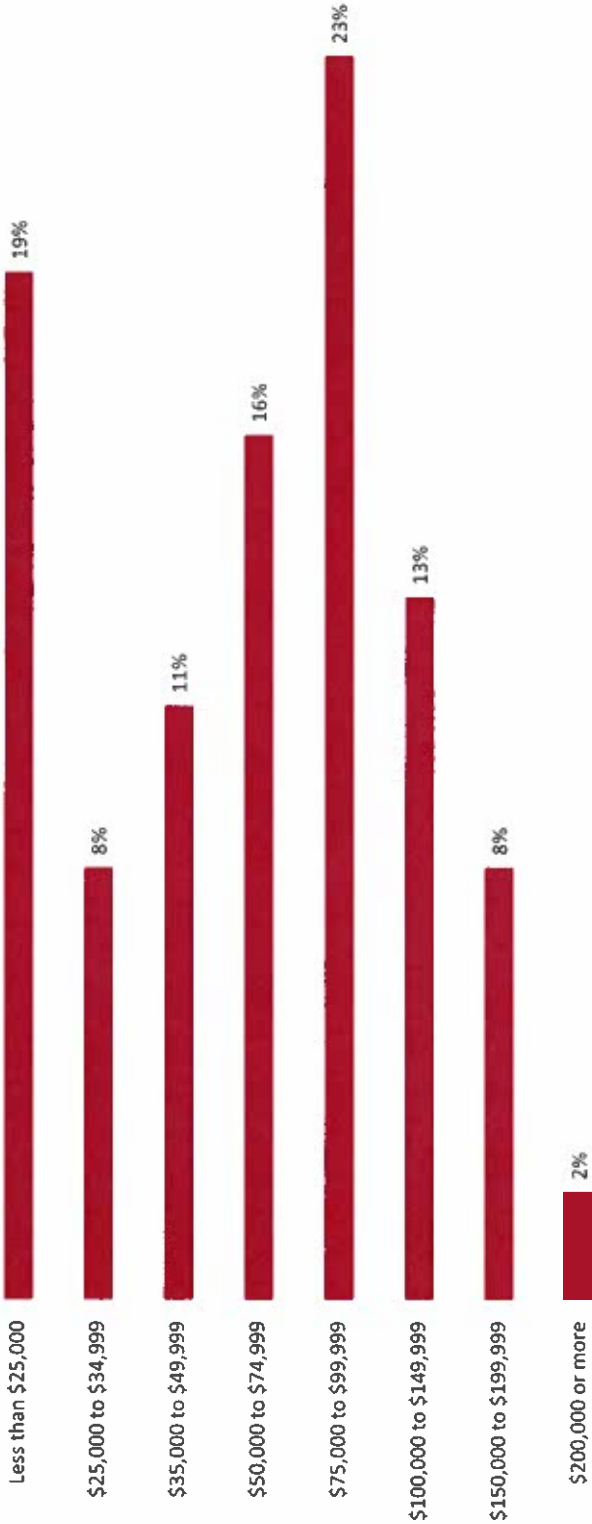
All patrons who report taking the survey state that English is their primary language.

Additional Demographics | Racial and Gender Background



Additional Demographics | Household Income

Annual household income
n = 103

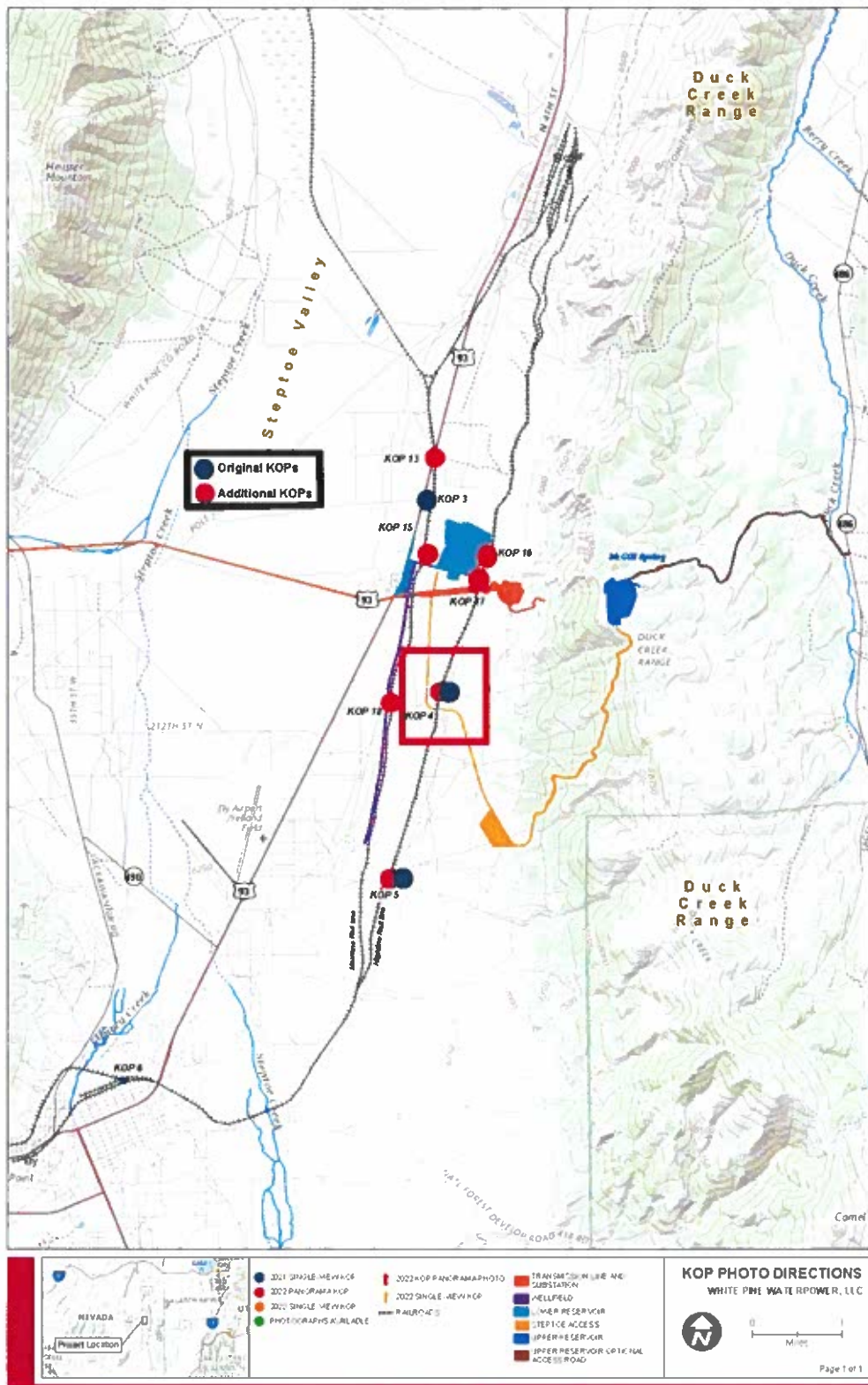


The median income falls within the **\$50,000 to \$74,999** income group.

Section 5:

Redo of Photo Simulations at KOP #4 (January 23, 2024)

Redo of Photo Simulation at KOP #4



KOP 4: Existing Conditions (60 degrees to 180 degrees)



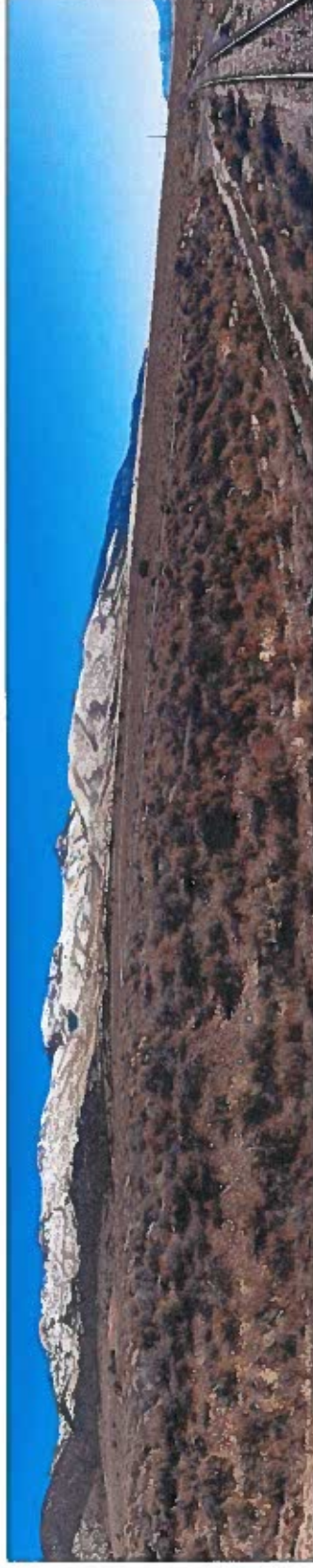
KOP 4: Post Construction Conditions (60 degrees to 180 degrees)



KOP 4: Existing Conditions (60 degrees to 195 degrees) Expanded to include railroad crossing



KOP 4: Post Construction Conditions (60 degrees to 195 degrees) Expanded to include railroad crossing



KOP 4: Cropped and zoomed in Photo Simulation showing railroad crossing and Upper Reservoir Access Road



Section 6:

Post Restoration Photo Simulations at Supplemental Key
Observation Points (August 23, 2024)

Post Restoration Photo Simulations at Supplemental Key Observation Points

August 23, 2023

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KOP 4: Photo Simulations Following Restoration



KOP 5: Photo Simulations Following Restoration



KOP 13: Photo Simulations Following Restoration



KOP 15: Photo Simulations Following Restoration



KOP 17.1: Photo Simulations Following Restoration – High Water Level



KOP 17.1: Photo Simulations Following Restoration – Low Water Level



KOP 17.2: Photo Simulations Following Restoration



KOP 18: Photo Simulations Following Restoration

