

Evaluation of the 2013 ITS for the Town of Estes Park, Colorado

August 2014



*Paul S. Sarbanes
Transit In Parks*

Technical Assistance Center

UNDERSTANDING

RESOURCES

SOLUTIONS

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by the Paul S. Sarbanes Transit in Parks Technical Assistance Center*

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ACRONYMS

The following list includes acronyms used throughout the report.

Central Federal Lands Highway Division	CFLHD
Dynamic Message Sign	DMS
Estes Park Visitor Center	EPVC
Fairgrounds Park-n-Ride	Fairgrounds PNR
Highway Advisory Radio	HAR
Intelligent Transportation System	ITS
Paul S. Sarbanes Transit in Parks Technical Assistance Center	TRIPTAC
Rocky Mountain National Park	ROMO
Town of Estes Park	TOWN
Western Transportation Institute	WTI

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INTRODUCTION

In 2011, Rocky Mountain National Park (ROMO) in cooperation with the Town of Estes Park (TOWN) implemented an intelligent transportation system (ITS) for the first time. Lessons learned from that first deployment informed and guided the second deployment in 2012, which provided additional lessons learned for the third deployment in 2013.

The overarching goal of the ITS deployments was to reduce congestion within the TOWN and ROMO. The specific objectives for the first deployment centered on reducing typical seasonal congestion in the Bear Lake Road corridor. The objectives for subsequent deployments focused on directing users to the shuttle systems in order to access the Bear Lake Road corridor due to construction in the area. There were periods of time during the construction when access to the Bear Lake Road corridor was by shuttle only.

In 2011, the Paul S. Sarbanes Transit in Parks Technical Assistance Center (TRIPTAC) conducted an evaluation of the first ITS deployment. In 2012, the Federal Highway Administration's Central Federal Lands Highway Division (CFLHD) evaluated the second deployment. For the 2013 deployment, the TOWN retained the same questions from the 2012 survey and made it available in 2013 so that comparisons could be made. The TOWN requested that TRIPTAC compile the results. This report presents a summary of the findings from the 2013 surveys and a comparison of the results with those from the previous two years.

In September of 2013, the foothills of the Rockies, including cities like Fort Collins and Lyons, were hit by heavy flooding. These events resulted in the destruction of the US 34 and US 36 roadways, which provide primary access to most visitors of ROMO and the TOWN. Therefore, recommendations presented in this report may have to be modified depending on how these access routes are repaired.

The PREVIOUS STUDIES (2011 & 2012) section presents highlights related to ITS implementation in the TOWN and ROMO for these years. The 2013 PROJECT BACKGROUND section presents the background information related to this project. The 2013 SURVEY DATA section presents the data collected from the surveys distributed at the Fairgrounds Park-n-Ride (PNR) and the Estes Park Visitor Center (EPVC) for this year. In the SURVEY COMPARISONS & RESULTS section, the findings from the Fairgrounds PNR and EPVC surveys are compared and contrasted, as are the results of all of the surveys from 2011, 2012 and 2013. The final section, CONCLUSIONS, presents conclusions and recommendations based on the findings of the report.

PREVIOUS STUDIES (2011 & 2012)

This section summarizes key details of the ITS deployments in 2011 and 2012, focusing on the content and duration of the traveler information messages displayed during each deployment. Furthermore, this section identifies relevant reports in case the reader would like additional information. Finally, this section presents findings from the 2011 and 2012 evaluations that are relevant to the current evaluation.

2011

In 2011, ITS devices were only deployed on US 36. The system was composed of both dynamic message signs (DMS) (four total devices) and highway advisory radio (HAR) (two total devices). The ITS was deployed with a regional approach, with devices placed as far away as the intersection of SR 66 with US 36, near Lyons, Colorado. The devices were on from 9:45am through 6pm, daily. On the weekends, during the peak period hours of 11am through 2pm, an alternative message was disseminated by the HAR to encourage visitors to visit ROMO in the afternoon (unless thunderstorms were expected). Additional information about the actual messages can be found in *Rocky Mountain National Park Dynamic Message Sign/Highway Advisory Radio Operations Plan* (1). Table 1 and Table 2 show the DMS messages at select locations on US 36.

Table 1: DMS Content, Off-Peak, July 15, 2011 – August 5, 2011

DAILY, 9:45AM – 6PM			
	FRAME 1	FRAME 2	FRAME 3
US 36/PINYON	PARK AND	SHUTTLE	TUNE
	RIDE IN	TO	TO
	ESTES	RKY MTN	AM 1630
US 36/COMMUNITY	PARK AND	NEXT	
	RIDE IN	LEFT	
	ESTES		

Table 2: DMS Content, Off-Peak, August 6, 2011 – September 5, 2011

DAILY, 9:45AM – 6PM			
	FRAME 1	FRAME 2	FRAME 3
US 36/PINYON	PARK AND	FREE	TUNE
	RIDE AT	VISITORS	TO
	FAIRGRDS	SHUTTLE	AM 1630
US 36/COMMUNITY	PARK AND	FREE	NEXT
	RIDE AT	VISITORS	LEFT
	FAIRGRDS	SHUTTLE	

The TOWN and ROMO requested an evaluation for this deployment, in part because it was the first ITS deployment initiated by the two agencies. The plan for the evaluation is entitled *Rocky Mountain National Park Intelligent Transportation System Evaluation Plan* (2). The resulting report is entitled *Evaluation of an Intelligent Transportation System for Rocky Mountain National Park and Estes Park* (3). The surveys that were conducted in 2011 to evaluate the ITS were directly administered to

riders by TRIPTAC employees and trained volunteers. Surveys were administered at the Fairgrounds PNR, EPVC, and Bond Park. Figure 1 below shows the survey locations.

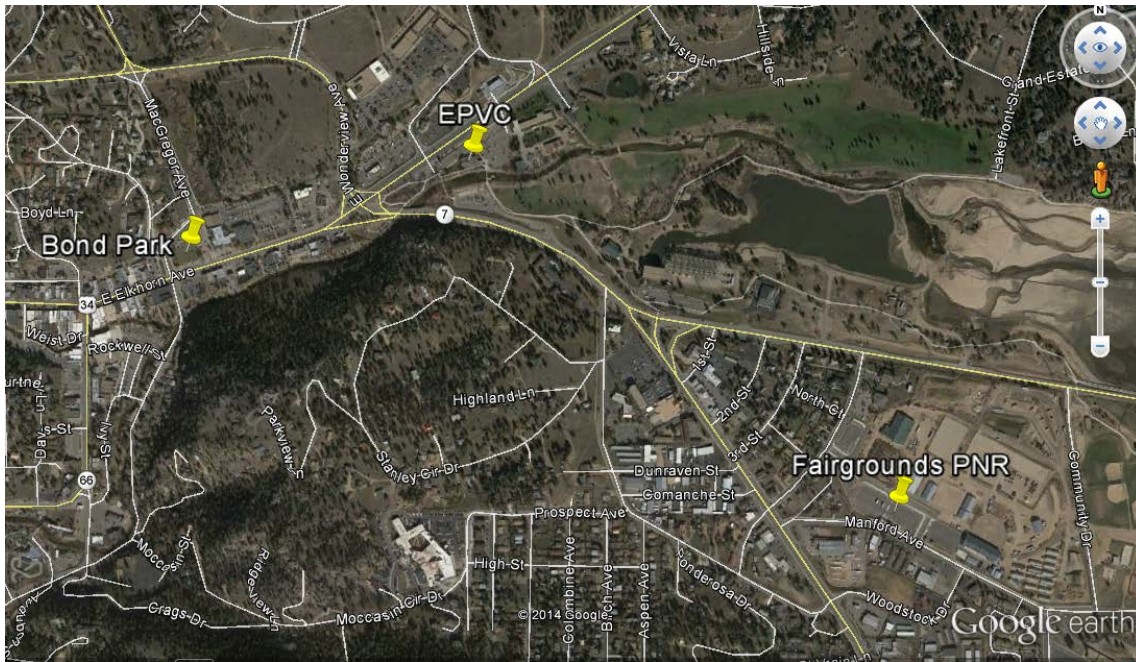


Figure 1: Survey Locations (4)

In 2012 and 2013, however, the surveys were distributed passively (i.e., they were available to be taken but there was no one handing them out to people). Administering surveys in this manner may result in fewer surveys being collected in a shorter period of time, but it also allows surveys to be collected over a longer period of time (i.e. it may take five days to collect ten because an average of two are collected per day). There may be some self-selectivity bias in that most people who take the survey may like to take surveys, as compared to when you specifically ask a person to take a survey. By administering them with a person, you also can design the administration to be random (i.e. every X person is surveyed), to control for one survey administered per group, and to ensure that the respondent is at least 18 years of age. However, this approach also costs significantly more money due to the need for people to administer each survey. The change in methodological approach makes direct comparisons between the findings inaccurate.

The following findings were specific to the surveys administered to Silver Route shuttle riders. In 2011, the Silver Route only ran between the EPVC and the Fairgrounds PNR. As such, Silver Route riders can be expected to have made use of the Fairgrounds PNR. This summary focuses on these findings because it is plausible to compare them to the findings from the surveys made available in 2012 and 2013 at the Fairgrounds PNR.

Key findings from the 2011 Silver Route survey include:

- Approximately thirty-eight percent of the respondents of the Silver Route surveys indicated that they were first time visitors. The remaining sixty-two percent were return visitors.
- Approximately sixty-five percent of respondents were categorized as “visitors.” This means that they could not otherwise be categorized as locals (thirteen percent) or employees (twenty-two percent).

- Sixteen percent of respondents were from outside of the U.S. For the respondents who provided U.S. zip codes, the largest single source of Silver Route riders was from the TOWN (twenty-nine percent). Thirty-one percent of the remaining zip codes were from other Colorado cities. The remaining zip codes (forty percent) were from other states.
- Group sizes of one, two, three to five, and greater than or equal to 6 were found to represent thirty-five percent, forty percent, sixteen percent, and nine percent of riders, respectively.
- Approximately thirty-four percent of respondents were day visitors.
- More than ninety percent of respondents were staying for 4-12 hours. The breakdown for 1-3, 4-6, and 7-12 hours was nine percent, forty-three percent, and forty-eight percent, respectively.

2012

In 2012, the ITS only consisted of DMS. However, the installation occurred on both US 34 and US 36. Information pertaining to the recommendations for the ITS deployment in 2012 can be found in the *Rocky Mountain National Park Intelligent Transportation System, Static Signage, and Shuttle Recommendations for the 2012 Bear Lake Road Corridor Construction* (5). The evaluation report is called *Evaluation of Transportation Demand Management Strategies used in Summer 2012* (6).

The following messages were used starting the Tuesday after Memorial Day (May 29, 2012) and ran through Labor Day (September 3, 2012). They were disseminated from 8am through 3:30pm, daily.

Table 3: 2012 DMS Content

DAILY, 8 AM – 3:30 PM			
	FRAME 1	FRAME 2	FRAME 3
US 34/DRAKE	RMNP	SHUTTLE	
	BEAR LK	ACCESS	
	ROADWORK	ONLY	
US 34/MALL	RMNP	PARK AND	
	SHUTTLE	RIDE AT	
	ACCESS	FAIRGRND	
US 36/PINYON	RMNP	SHUTTLE	PARK AND
	BEAR LK	ACCESS	RIDE AT
	ROADWORK	ONLY	FAIRGRND
US 36/COMMUNITY	PARK AND	NEXT	THEN
	RIDE AT	LEFT	FOLLOW
	FAIRGRND		SIGNS

All of the questions on the survey made available to shuttle riders in 2012 are the same as those presented to riders in 2013.

Fairgrounds PNR surveys were made available, but not administered, to shuttle riders from July 21, 2012 through September 26, 2012. A total of seventy-one surveys were collected. EPVC surveys were made available during the same period; a total of fourteen surveys were collected.

Key findings from the Fairgrounds PNR surveys include:

- Fifty-two percent of survey respondents were day visitors

- The majority of survey respondents visited TOWN/ROMO 6 times or more in the past year
- The majority of survey respondents arrived on US 36, although a large proportion arrived on US 34
- Seventy-six percent of survey respondents saw the DMS
- Eighty-six percent of survey respondents were planning to visit Bear Lake
- Seventy-six percent of survey respondents knew about the construction
- Seventy-three percent of survey respondents knew about the access restrictions
- Sixty-nine percent of survey respondents knew about the 9-3pm shuttle requirement
- The majority of survey respondents learned about the Fairgrounds PNR via the DMS
- The majority of survey respondents chose to use the Fairgrounds PNR to access Bear Lake
- Seventy-five percent of survey respondents did not have problems finding the Fairgrounds PNR
- Forty-six percent of survey respondents had not previously used the shuttles in ROMO/TOWN
- Fifty-three percent of survey respondents providing usable zip codes were from Colorado
- Only seven percent of groups were traveling with a child under 5 years old

Key findings from the surveys collected at the EPVC include:

- All survey respondents were staying for more than a day
- The majority of survey respondents visited the TOWN/ROMO 6 times or more in the past year
- The majority of survey respondents arrived on US 36
- Fifty-five percent of survey respondents saw the DMS
- Seventy-one percent of survey respondents were planning to visit Bear Lake
- Eighty-six percent of survey respondents knew about the construction
- Eighty-six percent of survey respondents knew about the access restrictions
- Eighty-six percent of survey respondents knew about the 9-3pm shuttle requirement
- The majority of survey respondents learned about the shuttle stop via the EPVC
- Responses for why survey respondents chose the free shuttle varied
- Seventy percent of survey respondents knew about the Fairgrounds PNR and associated shuttle service
- Fifty-seven percent of survey respondents had not previously used the shuttles in TOWN/ROMO
- Fifteen percent of survey respondents providing usable zip codes were from Colorado
- Only seven percent of groups were traveling with a child under 5 years old

2013 PROJECT BACKGROUND

In 2013, only DMS were deployed, as in 2012. However, the installation occurred on all three access roadways into the TOWN and ROMO: US 36, US 34 and SR 7. No operation plan was developed in 2013. In 2013, the shuttle system implemented a significant route change by creating a direct connection of the Hiker Shuttle to the Fairgrounds PNR. While the shuttle continued to stop at the EPVC, this configuration would no longer require users to transfer from the Silver Route to the Hiker Shuttle, and users were guaranteed not to miss the Hiker Shuttle.

The following message sets were started the Tuesday after Memorial Day (May 28, 2013) and ran through July 19, 2013.

Table 4: 2013 DMS Content, Monday through Friday

MONDAY – FRIDAY; Daily, 6 AM – 9 PM			
	FRAME 1	FRAME 2	FRAME 3
SR 7	RMNP	NO AUTO	USE
	BEAR LK	ACCESS	VISITOR
	ROADWORK	9AM-4PM	SHUTTLES
US 34/DRAKE	RMNP	SHUTTLE	
	BEAR LK	ACCESS	
	ROADWORK	9AM-4PM	
US 34/MALL	RMNP	SHUTTLE	
	BEAR LK	ACCESS	
	ROADWORK	9AM-4PM	
US 36/PINYON	RMNP	NO AUTO	USE
	BEAR LK	ACCESS	VISITOR
	ROADWORK	9AM-4PM	SHUTTLES
US 36/COMMUNITY	PARK AND	NEXT	THEN
	RIDE AT	LEFT	FOLLOW
	FAIRGRND		SIGNS

Table 5: 2013 DMS Content, 6am Saturday through 5pm Sunday

6AM SATURDAY – 5PM SUNDAY			
	FRAME 1	FRAME 2	FRAME 3
SR 7	RMNP	USE	PARK AND
	BEAR LK	VISITOR	RIDE IN
	ROADWORK	SHUTTLES	ESTES
US 34/DRAKE	RMNP	USE	
	BEAR LK	VISITOR	
	ROADWORK	SHUTTLES	
US 34/MALL	RMNP	USE	
	BEAR LK	VISITOR	
	ROADWORK	SHUTTLES	
US 36/PINYON	RMNP	USE	PARK AND
	BEAR LK	VISITOR	RIDE IN
	ROADWORK	SHUTTLES	ESTES
US 36/COMMUNITY	PARK AND	NEXT	THEN
	RIDE AT	LEFT	FOLLOW
	FAIRGRND		SIGNS

Table 6: 2013 DMS Content, Sunday Evening

SUNDAY; 5PM – 9PM			
	FRAME 1	FRAME 2	FRAME 3
SR 7	RMNP	NO AUTO	USE
	BEAR LK	ACCESS	VISITOR
	ROADWORK	9AM-4PM	SHUTTLES
US 34/DRAKE	RMNP	SHUTTLE	
	BEAR LK	ACCESS	
	ROADWORK	9AM-4PM	
US 34/MALL	RMNP	SHUTTLE	
	BEAR LK	ACCESS	
	ROADWORK	9AM-4PM	
US 36/PINYON	RMNP	NO AUTO	USE
	BEAR LK	ACCESS	VISITOR
	ROADWORK	9AM-4PM	SHUTTLES
US 36/COMMUNITY	PARK AND	NEXT	THEN
	RIDE AT	LEFT	FOLLOW
	FAIRGRND		SIGNS

Surveys were available at the Fairgrounds PNR from Friday, June 14, 2013 through Friday, July 19, 2013 and at the EPVC from approximately late June through September 2, 2013.

Surveys were made available to users of the shuttle systems at the EPVC and Fairgrounds PNR but were not administered by a person.

In previous years, potential Fairgrounds PNR users became dissuaded from using the lot because it was not clearly visible or marked once drivers turned off of US 36. In 2011, two static signs were installed late during the deployment, but survey findings highlighted the need for additional signage (Figure 2). Part of the way through the 2012 season and for all of the 2013 season, a greater number of static signs were installed than in 2011, and remained in place, on Community Drive and Manford Avenue with shuttle images and arrows.



Figure 2: Static Signage, Image and Arrows

However, a continuing issue in 2013 was the lack of signage at the kiosk to inform visitors of where they needed to wait for the shuttle. A small blue sign was added to the building sometime during the 2012 season and then again for the 2013 season (Figure 3).



Figure 3: Blue Sign

2013 SURVEY DATA

This section summarizes the responses from the 2013 surveys made available at the Fairgrounds PNR and the EPVC. Copies of both surveys can be found in the Appendix.

FAIRGROUNDS PNR SURVEY

The Fairgrounds PNR survey included twelve questions across two pages. Surveys were made available to shuttle users from June 14 through July 19, 2013. Surveys were not made available after July 19 because another survey study, related to a separate effort, was expected to start during this time period. There was concern that visitors could potentially be “oversurveyed.” A total of forty-nine surveys were collected.

FAIRGROUNDS PNR, QUESTION 1

The first question asked, “How long do you plan to spend visiting Estes Park/Rocky Mountain NP?” Respondents were requested to provide the length of their visit in terms of hours or days. Only one respondent did not provide information for this question. Twenty-seven respondents (55%) provided visitation durations in hours. In addition to providing the duration of the visit in hours, one of these respondents also identified himself or herself as a local. Nineteen respondents (40%) provided visitation durations in days. The remaining two respondents did not directly answer the question, but instead indicated that they were local residents (Local, We live here). Based on this information, it appears as if a slight majority of users of the Fairgrounds PNR connection are day visitors. Survey respondents indicating that they were staying for only a day had stays ranging from 4 to 20 hours, with 6 hours being the average and 5 hours the median. Survey respondents who stated that they were staying for multiple days indicated that they were staying from 2 to 90 days, with 11 days being the average and 2 days the median.

FAIRGROUNDS PNR, QUESTION 2

The second question asked, “Approximately how many times have you visited Estes Park/Rocky Mountain NP in the past?” Five options were given (This is my first, 1 time, 2-3 times, 4-5 times, and 6 times or more). The responses for each category are shown in Figure 4.

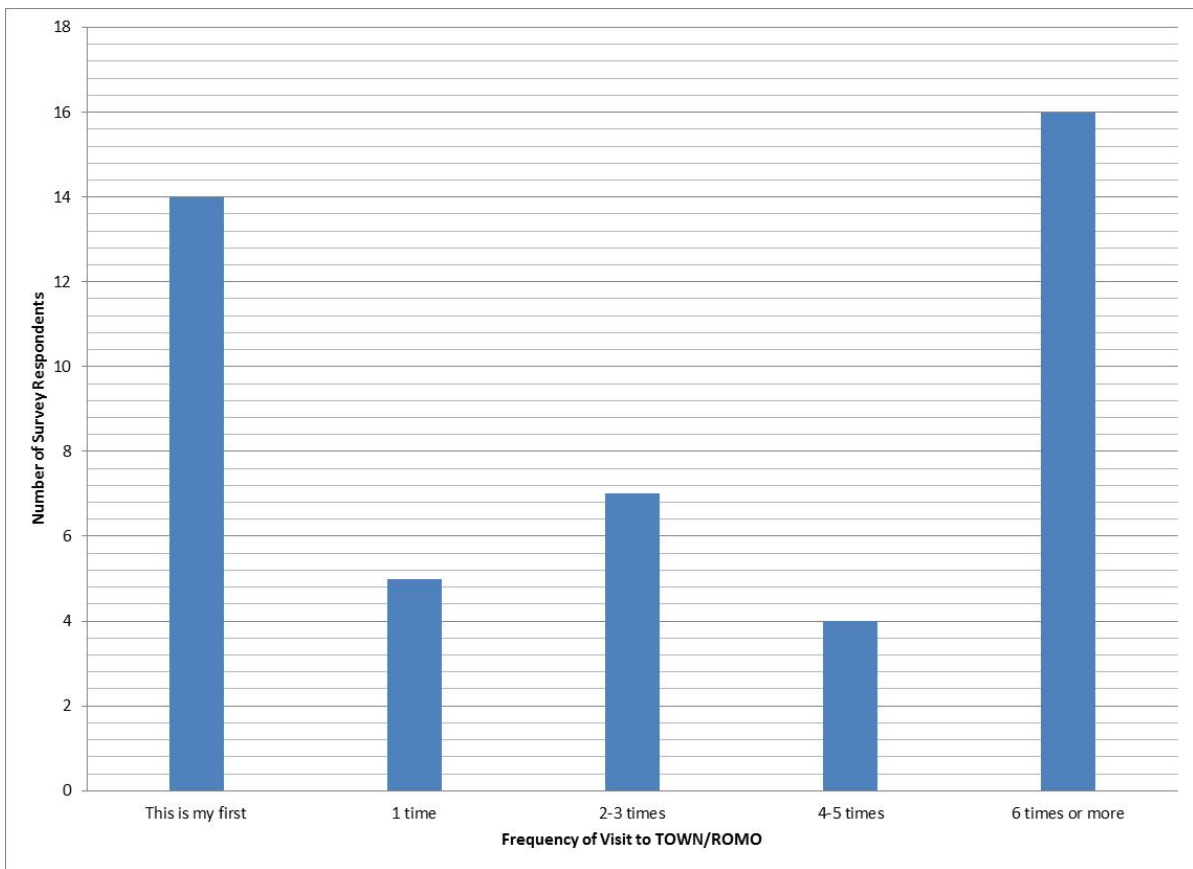


Figure 4: Frequency of Visits to TOWN/ROMO, Fairgrounds PNR Surveys

The results show that the Fairgrounds PNR most frequently captures first time visitors or frequent visitors (6 times or more).

FAIRGROUNDS PNR, QUESTION 3

The third question asked, “Which route did you use to get to Estes Park/Rocky Mountain NP?” Four responses are provided (US 36, US 34, SR 7, and Other). Figure 5 shows that the majority of Fairgrounds PNR users arrived on US 36.

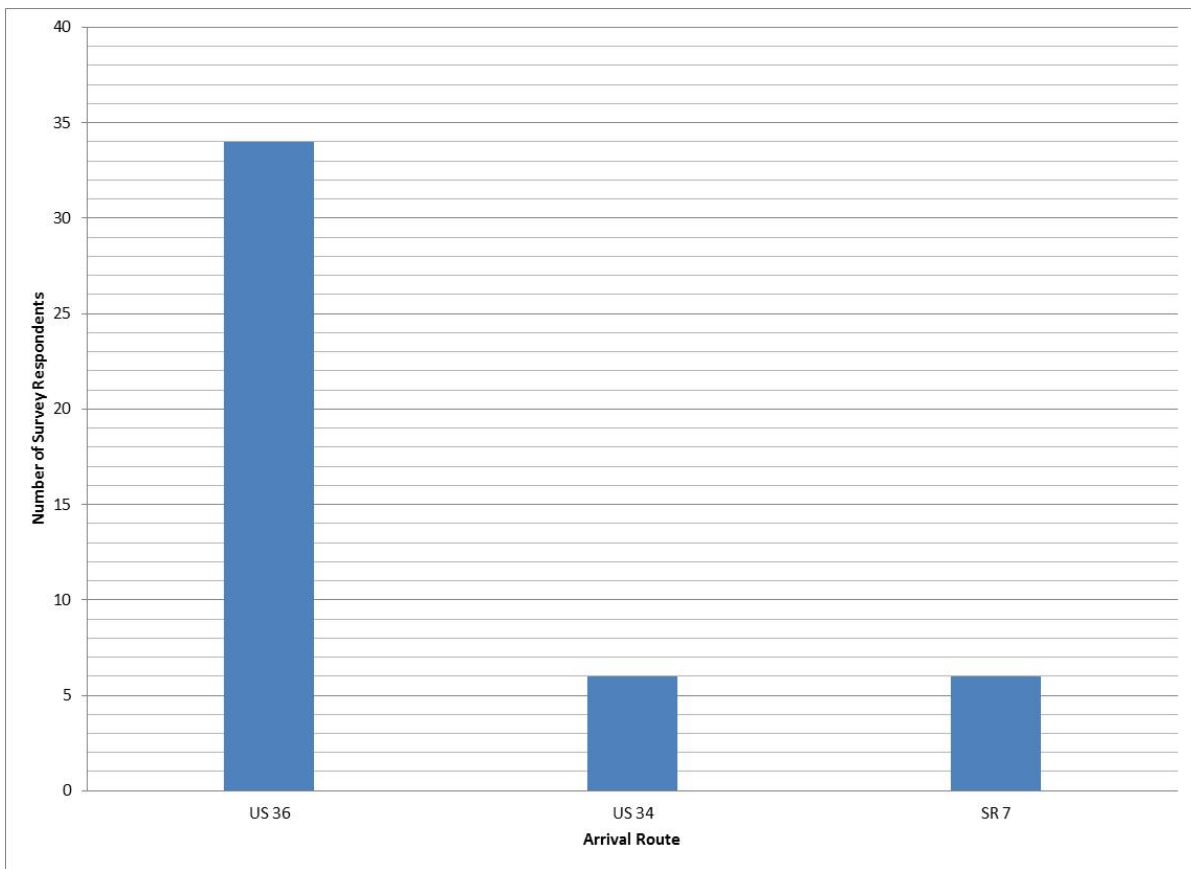


Figure 5: Arrival Route, Fairgrounds PNR Surveys

Five survey respondents provided information in “Other.” The responses include Resident, Local, Shuttle 36, Live here, and Local resident.

FAIRGROUNDS PNR, QUESTION 4

The fourth question asked, “Did you see an electronic message sign(s) while traveling to Estes Park/Rocky Mountain NP?” Thirty-five respondents (71%) indicated yes. Two respondents did not fill in an answer to the question. Of those respondents indicating that they did not see the DMS, eight, two and one visitor arrived on US 36, US 34, and SR 7, respectively. One of the respondents who did not see the DMS indicated that he or she arrived via an “other” means. This survey respondent indicated that he or she was a “local resident.”

FAIRGROUNDS PNR, QUESTION 5

The fifth question was a four part question.

The first part of the question asked, “Are you planning to visit Bear Lake in Rocky Mountain National Park during this trip?” Thirty-four respondents (69%) indicated that they were planning to visit Bear Lake. Three respondents did not provide an answer.

The second part of the question asked, “Are you aware of the construction along the Bear Lake Road corridor?” Thirty-five respondents (71%) indicated that they were aware of the construction. Three respondents did not provide an answer.

The third part of the question asked, “Are you aware of the access restriction to Bear Lake?” Thirty-four respondents (69%) indicated that they were aware of the access restrictions to Bear Lake. Three respondents did not provide an answer.

The fourth part of the question asked, “Are you aware that from 9AM to 3PM, it is shuttle access only to Bear Lake?” Thirty-three respondents (67%) were aware of the shuttle-only access from 9AM to 3PM. Three respondents did not provide an answer.

The responses to Question 5 were pretty consistent; approximately sixty-nine percent of the survey respondents were aware of the access restrictions to the Bear Lake area as a result of the construction.

FAIRGROUNDS PNR, QUESTION 6

The sixth question asked, “How did you learn about the Fairgrounds Park-n-Ride (check all that apply)?” Thirteen potential responses were provided. Figure 6 shows the frequency of responses for each option. Thirteen of the respondents chose more than one option, with typically only a second option being selected.

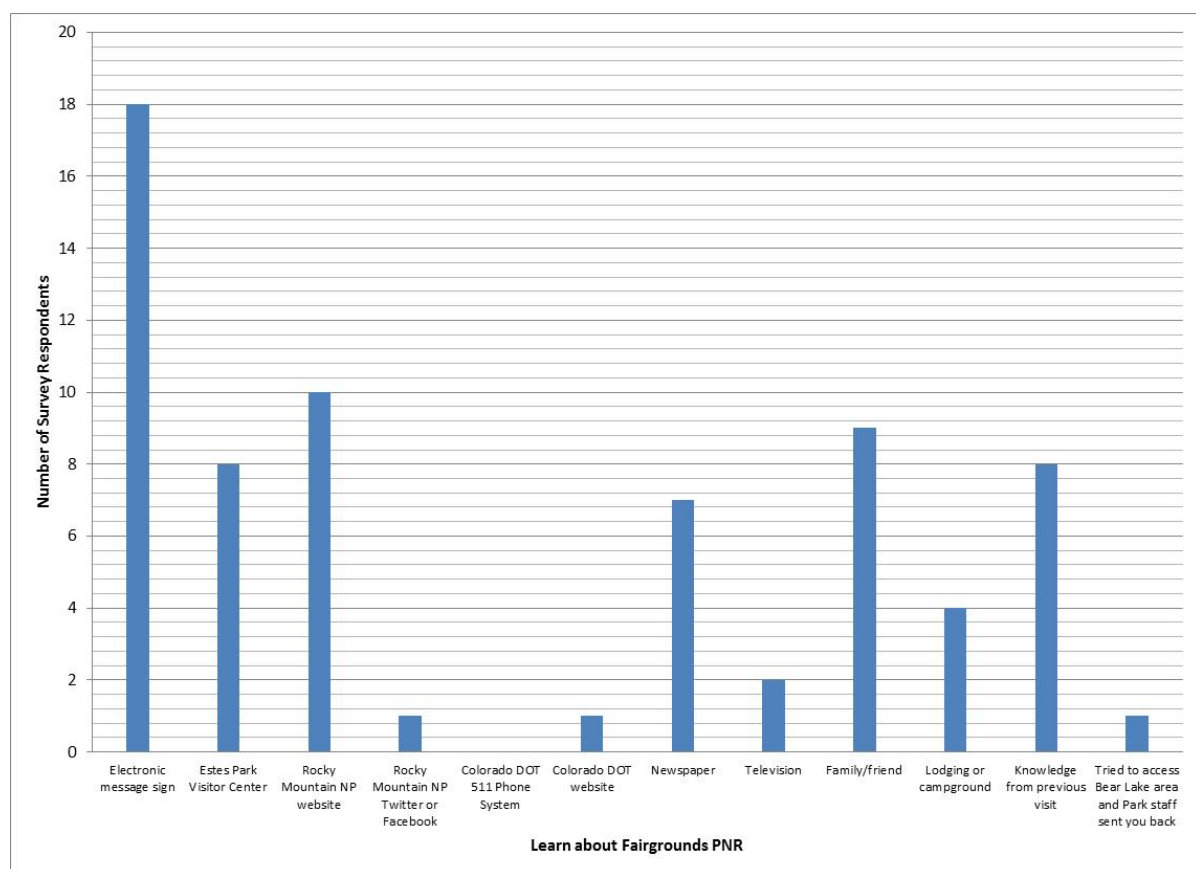


Figure 6: Learn about Fairgrounds PNR

The results imply that the most effective mechanism to inform visitors about the Fairgrounds PNR is the electronic message sign (aka DMS). The number of respondents that chose this option was almost twice as many as any other provided option. Responses provided in the “Other” category

include: live in Estes Park, book: Estes Park Vacationland, local, live here, road signs, am a local, and Rocky Mountain Nature Association Quarterly Newsletter.

FAIRGROUNDS PNR, QUESTION 7

The seventh question asked, “Why did you choose to use the Fairgrounds Park-n-Ride lot (check all that apply)?” Ten potential responses were provided. Figure 7 shows the frequency of responses for each option. Eighteen of the respondents chose more than one option.

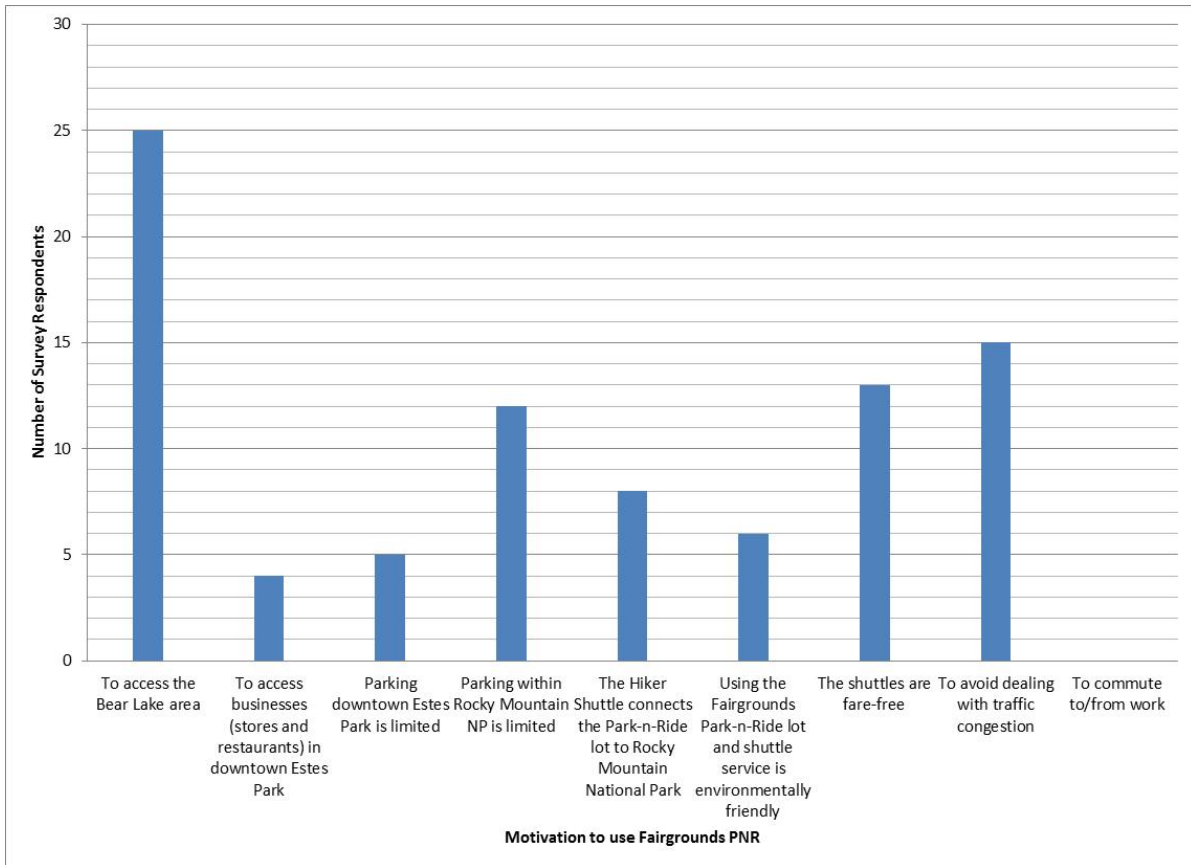


Figure 7: Motivation to use Fairgrounds PNR

The most commonly selected response was to access the Bear Lake area. The “Other” category included:

- To look & not drive!
- RV difficult to navigate
- Enjoy the view
- Recommended due to parking
- Can’t access otherwise
- Close to where I stay
- Rodeo
- Volunteer @ Thaft store

FAIRGROUNDS PNR, QUESTION 8

The eighth question asked, “Did you experience any difficulties in finding the Fairgrounds Park-n-Ride?” Eighty-four percent of respondents indicated that they did not have difficulty finding the Fairgrounds PNR. Respondents were also given some space to identify any problems if they encountered them. Four survey respondents did not provide an answer; an additional four survey respondents indicated that they had difficulties with finding the Fairgrounds PNR. Of the four survey respondents who had difficulties in finding the lot, the following are some explanations:

- I went to the lot next to it
- Didn’t realize where the shuttle was
- We missed the signs by the ball park and went the wrong way
- Signs should be bigger & more of them

FAIRGROUNDS PNR, QUESTION 9

The ninth question asked, “Have you used a shuttle to travel around Estes Park/Rocky Mountain National Park on a prior visit?” Twenty-one of forty-nine respondents (43%) indicated that they had previously used the shuttles.

FAIRGROUNDS PNR, QUESTION 10

The tenth question asked, “What is your zip code or country of residence?” Three survey respondents did not provide an answer. One zip code was not for a valid location (81517); however, considering the other information provided, it appears as if this respondent had intended 80517, which is the Estes Park zip code. One survey respondent provided both a US zip code and another country, Sweden. It is assumed that this person was identifying the origins for multiple members of a group. The only other additional country represented was China. Other states within the US that were identified by their zip codes include: Arizona, California, Georgia, Illinois, Indiana, Maryland, Minnesota, Missouri, Nebraska, New Hampshire, Oklahoma, and Texas. Twenty-five of the zip codes (58%) were from Colorado. Figure 8 shows the spatial location of the Colorado zip codes. Only Estes Park, shown in red, was identified by multiple survey respondents.

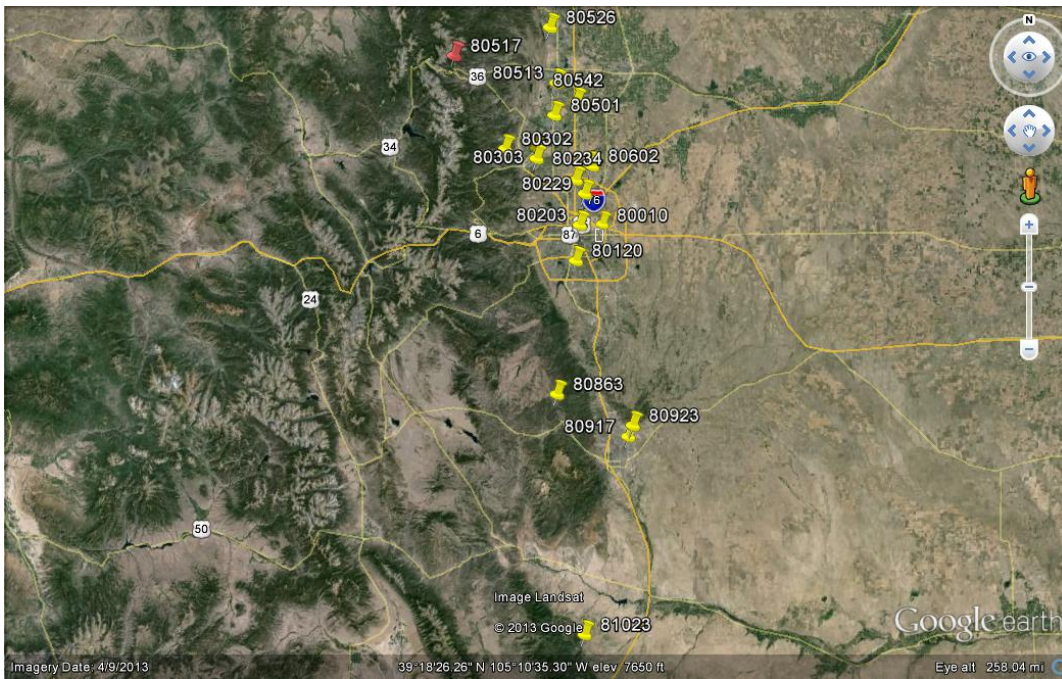


Figure 8: Colorado Zip Codes, Fairgrounds PNR Surveys (4)

FAIRGROUNDS PNR, QUESTION 11

The eleventh question asked, “How many people are you traveling with today, including yourself?” Four categories were provided:

- # of children (5 years or younger),
- # of children (6-17 years),
- # of adults (18-64 years), and
- # of adults (65 and older).

Three survey respondents did not provide any information for this question. Eleven survey respondents indicated that their group contained children; none of them indicated that the children were five or younger. Two large groups, both from China, used the shuttle. The most frequently represented group was two adults, ages 18 through 64 (24%). The second most frequently represented group was one adult, age 18 through 64 (16%).

FAIRGROUNDS PNR, QUESTION 12

The twelfth question asked, “Please provide any comments you have related to your transportation experience (including parking and shuttle issues) in the Estes Park and Rocky Mountain NP area.” The following lists the comments that were provided by fifteen survey respondents:

- So far, so good
- Thanks!
- Wonderful vacation
- None
- Beautiful
- Its __ the free shuttle.
- Since I don’t have a car, I think it’s too far for walkers!
- Its very nice to have the Free Shuttle wish more people would use it!

- Great so far.
- Love the free shuttles!
- Need to figure out how to get more people to use.
- It was good experience with friendly staff at fairground park-n-ride
- Thank you for these shuttles!
- We appreciate the shuttle service
- Fun drivers some I knew from working at ymca

EPVC SURVEY

The EPVC survey included twelve questions across two pages. The questions were intentionally developed to be similar to the Fairgrounds PNR survey questions. Surveys were made available to shuttle riders and in the EPVC from late June through September 2, 2013. Therefore, non-shuttle riders may have elected to take the survey. The exact start date was not documented. Only nineteen survey responses were received; this is a very small number of surveys. Therefore, it will be difficult to draw sound conclusions from the responses, and all discussion points below should be considered with this limitation in mind.

EPVC, QUESTION 1

The first question asked, “How long do you plan to spend visiting Estes Park/Rocky Mountain NP?” Respondents were requested to provide the length of their visit in terms of hours or days. All survey respondents provided information for this question. Only three respondents (16%) provided visitation durations in hours. The remaining respondents provided visitation durations in days. Based on this information, it appears as if the majority of the survey respondents at the EPVC are not day visitors. Survey respondents indicating that they were staying for only a day had stays ranging from 7 to 10 hours, with 7 hours being the average and 7 hours the median. Survey respondents indicating that they were staying for multiple days indicated that they were staying from 1 to 21 days, with 6 days being the average and 4 days the median.

EPVC, QUESTION 2

The second question asked, “Approximately how many times have you visited Estes Park/Rocky Mountain NP in the past?” Five options were given (This is my first, 1 time, 2-3 times, 4-5 times, and 6 times or more). The responses for each category are shown in Figure 9.

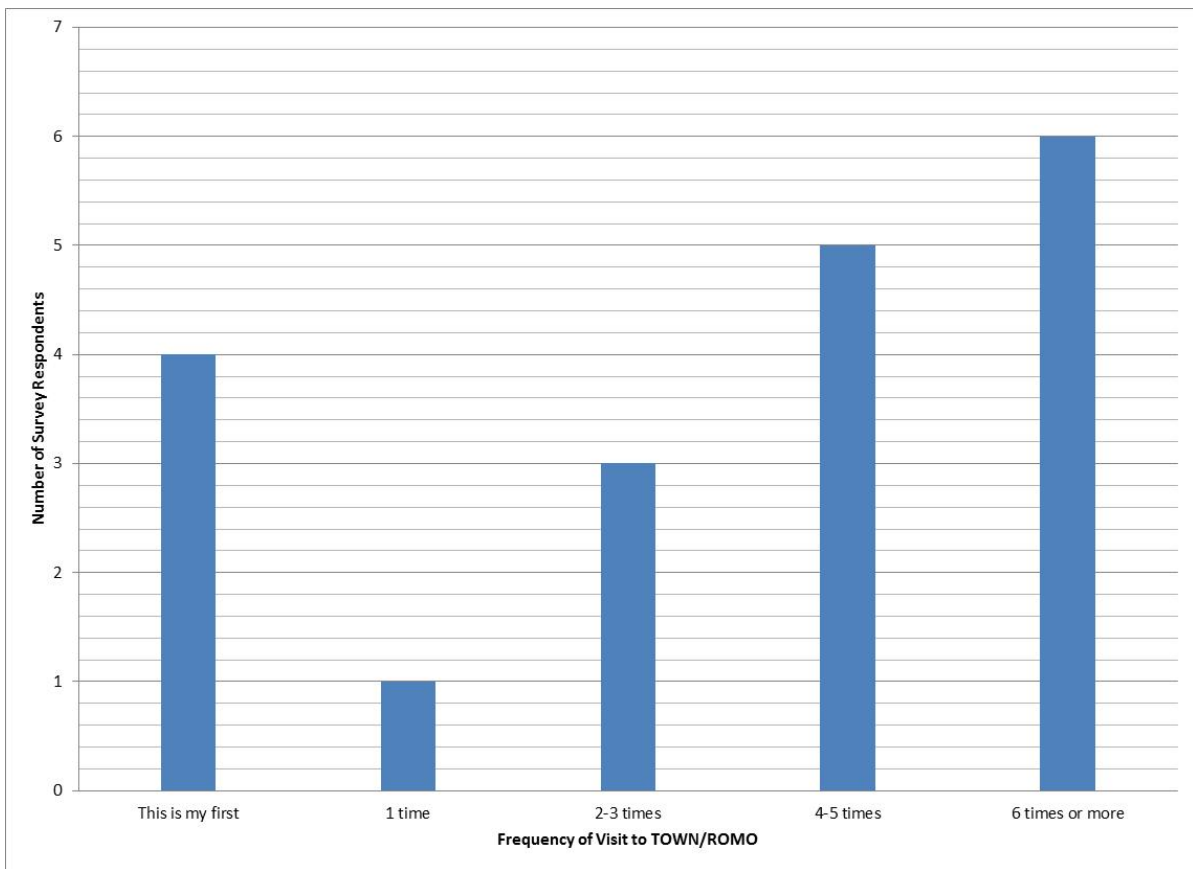


Figure 9: Frequency of Visits to TOWN/ROMO, EPVC Surveys

Survey respondents at the EPVC seemed to be frequent visitors to TOWN/ROMO, as the categories of 4-5 times and 6 times or more are clearly the dominant responses.

EPVC, QUESTION 3

The third question asked, “Which route did you use to get to Estes Park/Rocky Mountain NP?” Four responses are provided (US 36, US 34, SR 7, and Other). Figure 10 shows that the survey respondents at the EPVC primarily arrived on US 36.

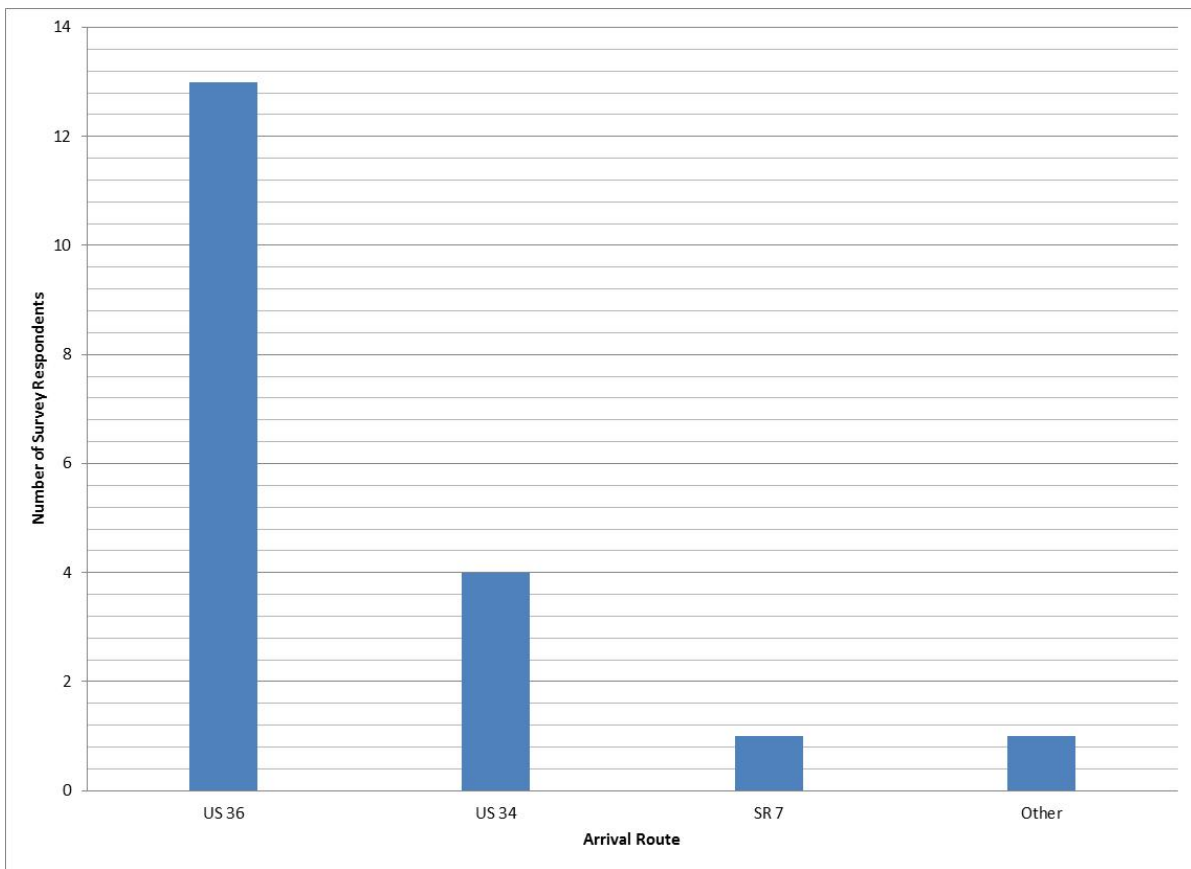


Figure 10: Arrival Route, EPVC Surveys

The survey respondent that chose “Other” did not provide further information.

EPVC, QUESTION 4

The fourth question asked, “Did you see an electronic message sign(s) while traveling to Estes Park/Rocky Mountain NP?” Seven respondents (37%) indicated yes. Of those respondents indicating that they did not see the DMS, nine, one and one visitor arrived on US 36, US 34, and SR 7, respectively. One of the respondents that did not see the DMS had chosen “Other.”

EPVC, QUESTION 5

The fifth question was a four part question.

The first part of the question was, “Are you planning to visit Bear Lake in Rocky Mountain National Park during this trip?” Eleven respondents (58%) indicated that they were planning to visit Bear Lake.

The second part of the question was, “Are you aware of the construction along the Bear Lake Road corridor?” Eleven respondents (58%) indicated that they were aware of the construction. Two respondents did not provide an answer.

The third part of the question was, “Are you aware of the access restriction to Bear Lake?” Eight respondents (42%) indicated that they were aware of the access restrictions to Bear Lake. Two respondents did not provide an answer.

The fourth part of the question was, “Are you aware that from 9AM to 3PM, it is shuttle access only to Bear Lake?” Nine respondents (47%) were aware of the shuttle-only access from 9AM to 3PM. Two respondents did not provide an answer.

While conclusions that can be made are limited due to the small number of surveys, only about half were planning to visit Bear Lake and were aware of the construction.

EPVC, QUESTION 6

The sixth question asked, “How did you learn about the visitor center shuttle (check all that apply)?” Thirteen potential responses were provided. Figure 11 shows the frequency of responses for each option.

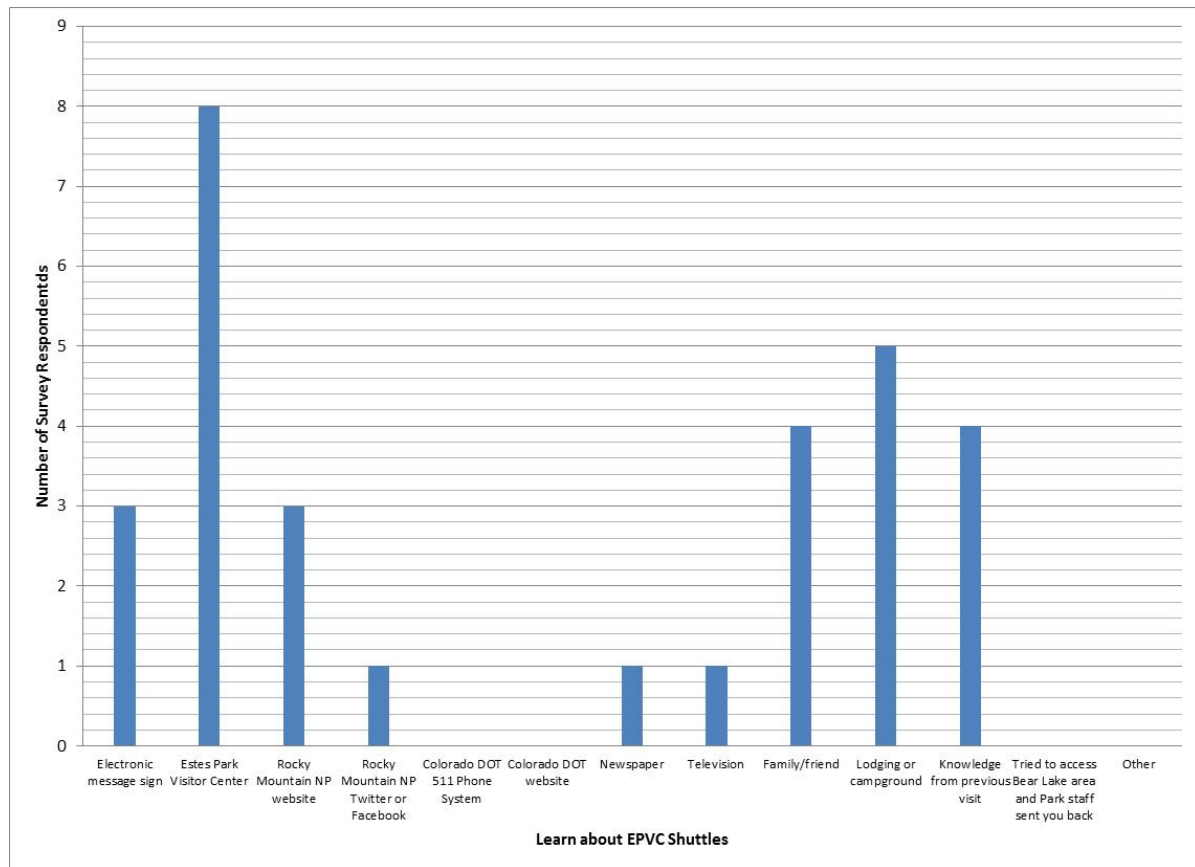


Figure 11: Learn about EPVC shuttles

The most effective mechanism to inform visitors about the visitor center shuttles was the EPVC. The number of respondents that chose this option was almost twice as many as any other provided option. However, this is not surprising considering that these surveys were those made available to shuttle riders originating from the EPVC and to those visitors at the EPVC. Responses provided in the “Other” category include: Bear Lake Road Reconstruction Brochure, shuttle brochure, shuttle driver, Deer Crest, and Guide book.

EPVC, QUESTION 7

The seventh question asked, “Why did you choose to use the free shuttle (check all that apply)?” Ten potential responses were provided. Two respondents did not provide input. Figure 12 shows the answers.

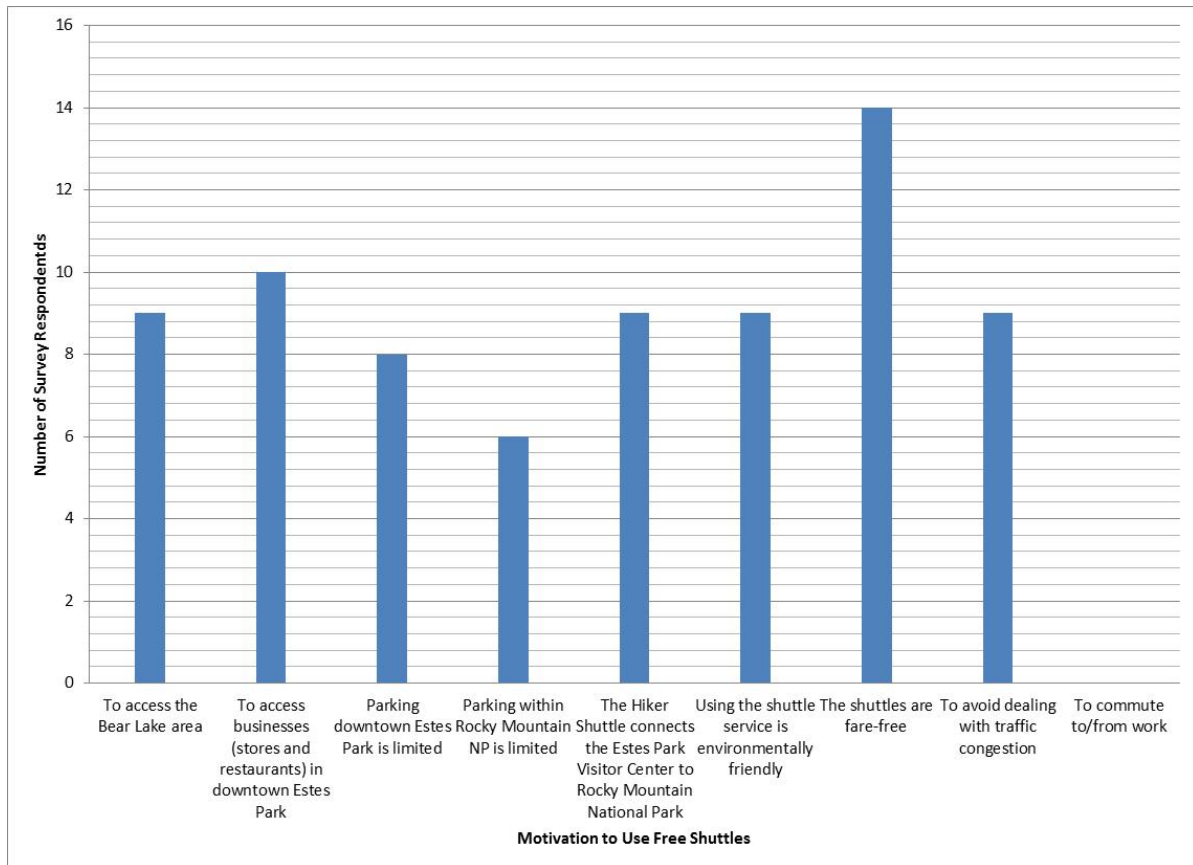


Figure 12: Motivation to use free shuttles

The most commonly selected response was the shuttles are fare-free. However, there is not much difference between the chosen responses, except for To commute to/from work, which none of the respondents selected.

The “Other” category included: Great way to tour Estes Park, to get from one trailhead to another, To do one way hikes, Did not have a car, Did not use it, Only 1 car – 2 destinations, and Wanted to ride the trolley.

EPVC, QUESTION 8

The eighth question asked, “Are you aware of the Fairgrounds Park-n-Ride and shuttle service connection?” Respondents were also given some space to identify why they did not park at the Fairgrounds PNR. One survey respondent did not provide an answer. Seven respondents (37%) indicated that they knew of the Fairgrounds PNR. Some explanations for not using it include: Staying at lodging property in town, We wanted to see the VC, Friend’s home, Not staying on that side of town, and No car. It seems that survey respondents at the EPVC were informed about the presence of the Fairgrounds PNR, but they determined it was not a good fit for them.

EPVC, QUESTION 9

The ninth question asked, “Have you used a shuttle to travel around Estes Park/Rocky Mountain National Park on a prior visit?” Six respondents (32%) indicated that they had previously used the shuttles. One respondent did not provide input.

EPVC, QUESTION 10

The tenth question asked, “What is your zip code or country of residence?” One survey respondent erroneously provided a county, instead of zip code. Other states within the US that were identified by their zip codes, which represented fifteen of the respondents, include: Florida, Illinois, Iowa, Kansas, Michigan, Nebraska, Ohio, Oklahoma, Texas, and Virginia. Kansas has the highest representation at four. Only four zip codes (21%) were from Colorado. They include the cities of Aurora, Broomfield, Longmont, and Loveland.

EPVC, QUESTION 11

The eleventh question asked, “How many people are you traveling with today, including yourself?” Four categories were provided:

- # of children (5 years or younger),
- # of children (6-17 years),
- # of adults (18-64 years), and
- # of adults (65 and older).

One survey respondent did not provide any information for this question. Seven survey respondents indicated that their group contained children, including two groups with children five or younger. The most frequently represented group was two adults, ages 18 through 64 (26%). The second most frequently represented group was two adults, older than 65 years old (21%).

EPVC, QUESTION 12

The twelfth question asked, “Please provide any comments you have related to your transportation experience (including parking and shuttle issues) in the Estes Park and Rocky Mountain NP area.” The following lists the comments that were provided by fifteen survey respondents:

- Great shuttle & trolley
- Love the shuttle buses but it took 90 minutes to get from bear lake to fern lake last Tuesday. Shuttles not frequent enough to handle visitor volume on a busy day frequent shuttles will keep congestion down also provide voluntary donation containers on buses help fund the service through donations
- We thought it was wonderful and run exceptionally smooth – staff great!
- Todays 8-13-2013 drivers were the most friendly ever. We give them a 10 for their safe, informational & friendly service. Thanks!
- Noreen should train all your drivers. Smoothest most in control driver (none of the drivers are bad but she is the best)
- We have used shuttle services at many other national parks – very happy to see Estes Park area has gone to this concept. Hopefully someday this area will be shuttle only!
- Blue line too long/too many stops; Silver line – excellent; Drivers are awesome, especially silver line; shuttle service is why I choose to come to E.P.
- We did not know there was a shuttle service

- I think destinations of buses is confusing.
- FREE shuttles are great! Thanks!

SURVEY COMPARISONS & RESULTS

This section discusses the results of the surveys. First, comparisons are made between the results from the Fairgrounds PNR and EPVC surveys collected in 2013. Subsequently, the results of the 2012 and 2013 surveys are compared based on where the surveys were collected. Finally, the results of all of the surveys related to the Fairgrounds PNR collected in 2011, 2012 and 2013 are compared.

2013 SURVEY COMPARISON

This section compares the results of the 2013 surveys collected at the Fairgrounds PNR and the EPVC. However, the reader should take caution when making conclusions from these comparisons due to the small sample size of the EPVC survey.

With regard to duration of stay, the survey respondents at the Fairgrounds PNR were fairly evenly split, with a slight bias towards day visitors. However, those at the EPVC were primarily long term visitors, with a few day visitors reporting. In general, these are the results that we would expect to see.

The Fairgrounds PNR primarily captured first time and frequent visitors, with minimal representation of visitors in the interior categories (1 time, 2-3 times, and 4-5 times). In contrast, the EPVC surveys were pretty well represented in all categories except “one time.” The most represented category from the EPVC surveys was frequent visitors. It is theorized that the frequent visitors from the Fairgrounds PNR could represent some of the locals that come for the summer period and stay in the TOWN.

The majority of the survey respondents from both the Fairgrounds PNR and EPVC reported arriving to the area via US 36. This result would imply that the most effective use of the DMS would be to deploy it on US 36. However, the majority of both of the Fairgrounds PNR and EPVC respondents who indicated that they did not see the DMS indicated that they arrived on US 36. It is unclear how they did not see the DMS unless they arrived outside of the hours of operation of the DMS.

When asked whether they were going to visit the Bear Lake area, knew of the on-going construction, knew of the access restrictions to the Bear Lake area, and knew of the shuttle-only requirement, the survey respondents at the Fairgrounds PNR appeared to be more aware than those at the EPVC (Figure 13).

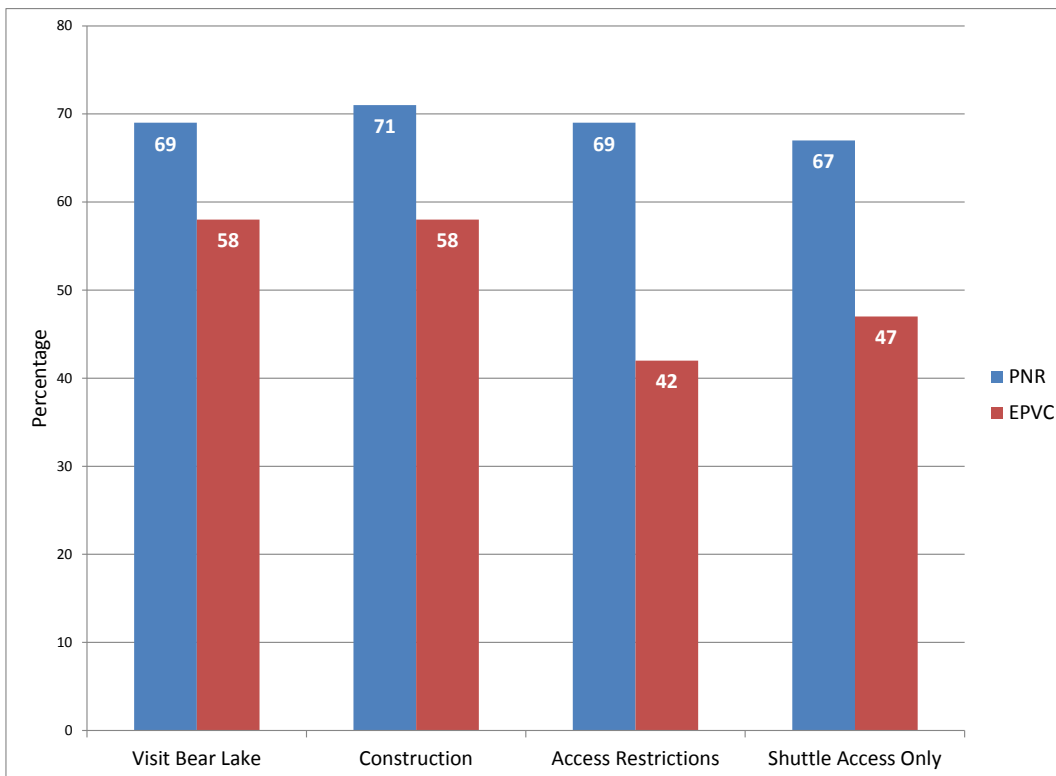


Figure 13: Comparison of Fairgrounds PNR to EPVC Knowledge of Bear Lake Corridor Construction

While the surveys were purposefully constructed to have similar questions, the responses to number six, seven and eight cannot be directly compared, because they address specific aspects of the individual locations.

Both the Fairgrounds PNR and EPVC survey respondents reported a relatively low percentage of having previously used the shuttles in ROMO/TOWN (43% and 32%, respectively).

A larger proportion of the survey respondents at the Fairgrounds PNR as compared to those at the EPVC were from Colorado (58% vs. 21%).

At both the Fairgrounds PNR and the EPVC, the most represented group size and composition was two adults, ages 18 through 64 (24% and 26%, respectively). Both locations had survey respondents who indicated they were traveling with children. However, a larger percentage (37% vs. 22%) of groups with children under 5 was reported at the EPVC.

As indicated in the introduction, these comparisons should be taken with caution due to the small sample size of the respondents at the EPVC.

2012 VS 2013 SURVEY COMPARISONS

Because the design of the survey and the survey distribution/administration were similar in 2012 and 2013, the comparison of the 2012 and 2013 surveys is of particular interest. The next two sections first compare the surveys collected in 2012 and 2013 at the Fairgrounds PNR and then the surveys collected in 2012 and 2013 at the EPVC.

FAIRGROUNDS PNR

Comparing the results of the surveys collected at the Fairgrounds PNR in 2012 and 2013 provides the most compelling findings.

With regard to Question 1, which asks the survey respondents the duration of time that they will be visiting TOWN/ROMO, the results from the 2012 and 2013 are consistent. 55% of respondents were staying for less than a day in 2012. While slightly lower, the proportion of respondents staying for less than a day in 2013 was 52%. Similarly, 40% and 38% of survey respondents were staying for a period of time longer than a day in 2012 and 2013, respectively. Of the 2013 survey respondents indicating that they were not staying for a day or a longer duration, the majority of respondents indicated that they were “locals.” Therefore, there is the potential that the slightly greater percentages for each category in 2012 could reflect the reduced number of surveys being filled out by locals. They might have tired of providing their input via a survey.

The second question on the surveys asks how many times the survey respondent has visited TOWN/ROMO in the past year. Both 2012 and 2013 found that the majority of the respondents were first time visitors or frequent visitors (6 times or more). However, while in 2012 the frequent visitors (6 times or more) dominated the representation of survey respondents, in 2013, the magnitude of respondents choosing this option was closer to that of first time visitors. This result could imply one of two things: either the frequent visitors are not using the Fairgrounds PNR, or they are not filling out the surveys.

The third question on the survey asks the respondents which route they used to access TOWN/ROMO. In 2012, while many more survey respondents arrived on US 36 (54%), there was still a large proportion that arrived on US 34 (35%). In 2013, very few survey respondents (13%) indicated that they arrived on US 34. In addition, although there was a DMS installed on SR 7, the proportion of survey respondents arriving on SR 7 only increased from 4% to 13%. Considering the cost associated with the implementation and operation of each DMS, these results imply that using a DMS on US 34 and SR 7 is not nearly as effective as using a DMS on US 36 when trying to direct viewers to the Fairgrounds PNR. The messages on the DMS on SR 7 and US 36 are the same, except that there is an additional DMS on US 36 that specifically tells viewers to take the next left. There is a potential that this message could be the reason why there is a higher proportion of visitors using the Fairgrounds PNR from US 36 when compared with any other access roadway.

The fourth question on the survey asks the respondents if they saw an electronic message sign (aka DMS). Seventy-six percent of survey respondents saw it in 2012. Seventy-one percent of survey respondents saw it in 2013. Therefore, the proportion of those using the Fairgrounds PNR as a result of seeing the DMS seems to remain fairly consistent. While acknowledging the limitations of the surveying mechanism, from the information obtained, this could imply that if DMS was not used, there is a potential that use of the Fairgrounds PNR would be seventy percent less. One might argue that maybe only the first time visitors would be lost if the DMS was not provided; however, the frequent visitors may also bypass the Fairgrounds PNR if the DMS was not provided because they may assume that the shuttles no longer serviced this area.

The fifth question on the survey was a four part question. The most significant difference between the responses for 2012 and those of 2013 were for the first question: “Are you planning to visit Bear Lake in ROMO during the trip?” Compared to the 86% of respondents that were planning to do so in

2012, only 69% of survey respondents in 2013 were planning on visiting Bear Lake. The percentage of survey respondents that knew of the construction, access restrictions, and the shuttle requirement during set hours remained fairly consistent, although dropping slightly, between 2012 and 2013 (76% vs. 71%; 73% vs. 69%; 69% vs. 67%, respectively). This could possibly indicate that there was less information disseminated to visitors in 2013. A significant effort was made in 2012 as compared to 2013 to disseminate information about the presence of construction within the Bear Lake Corridor. More details can be found in *Evaluation of Transportation Demand Management Strategies used in Summer 2012* (6).

When survey respondents were asked how they learned about the Fairgrounds PNR, the predominant response in both 2012 and 2013 was electronic message sign. However, whereas Friends/Family was the second most popular response in 2012, the ROMO website took this position in 2013. The more interesting result is that the “Knowledge from previous visit” response gained popularity. This could imply that users of the Fairgrounds PNR in 2012 came back to make use of it again in 2013.

The seventh question asked survey respondents why they chose to use the Fairgrounds PNR. In 2012, the answer that dominated was “To access Bear Lake.” While it was still the response chosen by the majority of survey respondents in 2013, far fewer respondents chose it. Interestingly enough, while the magnitude for this response decreased, the pattern for the other responses remained the same: “Avoid traffic congestion” was ranked second highest, just above “Fare free”, etc. This could imply that those who tried the Fairgrounds PNR for accessing the Bear Lake area in 2012 found it to be a challenging experience. In 2012, the Hiker Shuttle did not directly connect to the Fairgrounds PNR. A user had to first take the Silver Route shuttle and connect to the Hiker Shuttle at the EPVC. There was the potential that additional delay could be added as a result of this connection. Furthermore, transfers are often perceived poorly by transit users. Another interesting point is that no commuters were represented in the survey respondents of 2013. Some were captured in 2012 with the passive surveying mechanism.

The eighth question asked survey respondents if they had any difficulty in finding the Fairgrounds PNR. The recommendation from the 2012 evaluation was to further improve the wayfinding to the Fairgrounds PNR lot. In 2013, the static wayfinding signage was installed for the entire season. It appears effective, as 84% of survey respondents in 2013 indicated that they did not have difficulty compared with the 75% in 2012. One should consider that there is a potential that a visitor who desired to use the Fairgrounds PNR was lost en-route. The survey would therefore never capture this potential respondent. However, as an alternative, the positive change in response from 2013 to 2012 could imply otherwise. It could also be, however, that as implied by some of the other responses, those using the Fairgrounds PNR in 2012 used it again in 2013. Therefore, the signage, or challenges of it, had no effect. One important point to note regarding static signage is the need to better identify the shuttle pick-up locations. When a potential user arrives at the parking lot, they are surrounded by a few unmarked buildings. While a small blue sign like that shown on the side of the shelter in Figure 3 has since been added to the rear of the shelter for shuttle users, it may not be visible to all. Therefore, this is a continued need.

The ninth question asked survey respondents if they had previously ridden shuttles in the TOWN/ROMO. In 2012, the percentage of respondents indicating affirmatively was 25% compared

with 43% in 2013. This result could imply that users of the Fairgrounds PNR in 2012 were returning in 2013.

The tenth question asked survey respondents for their zip code. Of the usable zip codes, approximately half of the respondents in both 2012 and 2013 were from Colorado (53% vs. 58%). The result is relatively consistent.

The eleventh question asked survey respondents about their group size. While only a small portion of the respondents in 2012 indicated that they were traveling with a child under the age of 5 (6.7%), no respondents indicated they were traveling with a small child in 2013. Therefore, while the representation of visitors with small children is likely small, these results indicate that the use of the Fairgrounds PNR for visitors with children under 5 is challenging.

EPVC

Surveys collected at the EPVC in 2012 and 2013 were few in number. During the 39 days over which surveys were collected in 2012, only 14 surveys were obtained. Surveys were collected for over approximately 64 days in 2013, so about 25 more days than in 2012. However, only a total of 19 surveys were collected. Therefore, due to the small sample size, all results presented below should be considered with caution.

With regard to Question 1, which asks survey respondents the duration of time that they will be spending in the TOWN/ROMO, none of the respondents in 2012 indicated that they were staying for only the day. In 2013, three respondents (16%) indicated that they were staying for less than a day. In general, it seems that most survey respondents at the EPVC are long term visitors. Compare this to the Fairgrounds PNR survey respondents, of whom more than half are consistently day visitors. Therefore, indications are that the Fairgrounds PNR is capturing mostly day visitors.

The second question asked survey respondents how long they were visiting the TOWN/ROMO area. The lack of consistency between the 2012 and 2013 results could either indicate that the sample size based on survey respondents is not representative of the larger population or that there is a change in use. It is interesting that the number of individuals choosing “This is my first” and “6 times or more” was consistent. In 2012, while no survey respondent chose the category “4-5 times,” it was chosen by five survey respondents in 2013. Additionally, the representation of survey respondents for the remaining two categories flip-flopped in representation.

The third question asked survey respondents how they arrived. In 2013, there were some “Other” responses. However, the results remained fairly consistent: the majority of survey respondents arrived on US 36. In fact, the proportion of survey respondents arriving via US 36 increased from 2012 to 2013. It is interesting that the majority of survey respondents at the Fairgrounds PNR were also on US 36. Considering these results together, it appears as if the majority of visitors arrive on US 36. This would imply that the most effective use of DMS is on US 36.

The fourth question asked survey respondents if they saw the DMS en-route. In 2012, 55% had seen the DMS. In 2013, only 37% indicated that they saw the DMS. While this implies that there is a reduction in the number of survey respondents who saw the DMS and did not use the Fairgrounds PNR, this could just be the variability associated with the small sample size. It could also indicate that some aspect of the message was more effective in motivating those that saw the DMS to use the Fairgrounds PNR. For example, comparing the messages for US 36/Pinyon in 2012 and 2013 (Table

3 to Table 4), “SHUTTLE ACCESS ONLY; PARK AND RIDE AT FAIRGROUNDS” may be less effective than “NO AUTO ACCESS 9AM-4PM; USE VISITOR SHUTTLES.” The “NO AUTO” comes across as a more restrictive message than the informational “SHUTTLE ACCESS ONLY.”

The fifth question asked survey respondents about their intention to visit Bear Lake, the presence of construction, access restrictions, and shuttle access only to Bear Lake. The proportion of survey respondents indicating that they were planning on visiting Bear Lake was down in 2013 when compared with 2012 (58% vs. 71%). More notable changes were related to the survey respondents’ awareness of the presence of construction, access restrictions and shuttle access only for the Bear Lake area, all down significantly (86% vs. 58%; 86% vs. 42%; and 86% vs. 47%, respectively). This could imply that less media was pushed out to visitors in 2013. If this is the case, this would highlight the value of an *annual* media push. Another interesting comparison is the proportion of the survey respondents at the EPVC versus that at the Fairgrounds PNR. The results would imply that a user of the Fairgrounds PNR is more informed. However, again, the variability could be related to the small sample size.

The sixth question asked survey respondents where they learned about the EPVC shuttle stop. The only significant change was with regard to respondents choosing ROMO’s website. While sample size makes it difficult to make a definitive conclusion, the results could imply that individuals who used the ROMO website subsequently found out about the Fairgrounds PNR and therefore were not represented as survey respondents at the EPVC.

The seventh question asked survey respondents why they chose to use the free shuttles. Comparing 2012 and 2013 shows few commonalities. Again, this hints that the sample sizes collected in 2012 and 2013 are not representative of the large pool of users.

The eighth question asked survey respondents if they knew about the Fairgrounds PNR. The proportion of survey respondents who knew of the Fairgrounds PNR decreased significantly (70% to 37%). While this could be a result of the variability associated with the small sample size, it could also indicate a reduction in media associated with the Fairgrounds PNR in 2013 when compared with 2012, or it could indicate that potential survey respondents at the EPVC learned of the Fairgrounds PNR.

The ninth question asked survey respondents if they had used a shuttle during a previous visit. The proportion of survey respondents indicating that they had used a shuttle during a previous visit went down from 2012 to 2013 (57% to 32%). This finding could be the result of the variability associated with the small sample size.

The tenth question asked survey respondents for their zip code or country of origin. Of the survey respondents that provided a useable zip code, 4 (22%) were from Colorado. This is a slight increase from 2012. However, the increase is probably negligible due to the small sample size.

The eleventh question asked survey respondents about their group size. The group sizes seemed to remain consistent. In 2012 one group indicated that it was traveling with a child younger than 5; two groups indicated this in 2013.

2011, 2012, AND 2013 SURVEY COMPARISONS

The following two tables summarize the survey data collected in 2011, 2012 and 2013. Table 7 identifies the time frame and therefore the total number of days during which surveys were collected. Recall that in 2011, a random sampling methodology was employed, so surveys may have been collected at a specific location for less than the number of days identified. In addition, in 2011, the surveys that are shown under “Fairgrounds PNR” were collected on board the Silver Shuttle. However, since this was the only shuttle running from the Fairgrounds PNR in 2011, the author is comparing it with data collected at the Fairgrounds PNR in 2012 and 2013. Table 8 identifies the number of surveys collected and the rate of surveys collected in surveys per day. As shown in Table 7 and Table 8, no surveys were administered at Bond Park in 2012 and 2013.

Table 7: Survey Collection Period by Location

	2011	2012	2013
Fairgrounds PNR	July 27 – August 9 (14 days)	July 21 – September 26 (68 days)	June 14 – July 19 (36 days)
EPVC	July 27 – August 9 (14 days)	July 21 – September 26 (68 days)	Late June – September 2 (approximately 64 days)
Bond Park	July 27 – August 9 (14 days)	n/a	n/a

Table 8: Number of Surveys Collected, Rate (surveys per day)

	2011	2012	2013
Fairgrounds PNR	68 (4.8)	71 (1.0)	49 (1.4)
EPVC	369 (26)	14 (0.21)	19 (0.30)
Bond Park	121 (8.6)	n/a	n/a

The PREVIOUS STUDIES (2011 & 2012) section presented a list of findings from the 2011 surveys collected on board the Silver Shuttle that would be reasonable to compare to the findings in 2012 and 2013. Here, those results are compared to the related results in 2012 and 2013. Therefore, no comparisons are made between the surveys collected at the EPVC in 2011 to those collected in 2012 and 2013. The discussion in this section assumes that the surveys collected in 2012 and 2013 are representative of the users of the Fairgrounds PNR in these years. Therefore, disclaimers will not be added hereafter regarding concerns with sample sizes. It is expected that the reader understands the aforementioned differences in surveying methods of 2011 vs. 2012 and 2013.

In 2011, thirty-four percent of survey respondents identified the duration of their stay in hours. In 2012, fifty-two percent of survey respondents identified the duration of their stay in hours. In 2013, fifty-five percent of survey respondents identified the duration of their stay in hours. It is notable that the percentage of respondents who are day visitors using the Fairgrounds PNR is relatively consistent in 2012 and 2013. These percentages are significantly larger than those found in 2011. There are two plausible explanations for the increased percentage of day visitors: day visitors may be drawn to the Fairgrounds PNR where parking is plentiful, and a larger portion of day visitors could be using the Fairgrounds PNR as a result of the construction in 2012 and 2013. No construction took place in 2011. Information about the Fairgrounds PNR was not well publicized in 2011 apart from the ITS. In contrast, in 2012, a significant marketing campaign was deployed. Furthermore, as ROMO

has seen with the use of the shuttle system, word-of-mouth marketing could lead to an increase in use.

Table 9 shows the percentage of survey respondents in the four categories of visitation duration.

Table 9: Comparison of Daily Stay Duration, 2011, 2012 and 2013

	2011	2012	2013
1-3 hours	8.7	8.6	0
4-6 hours	43.5	60	76.9
7-12 hours	47.8	31.4	19.2
> 12 hours	0	0	3.8
TOTAL	100	100	99.9

The notable finding is that it appears as if the number of visitors in the 4-6 hour category increased over time while the number in the 7-12 hour category decreased. This could be attributed to a more direct connection (Hiker Shuttle connected to Fairgrounds PNR in 2013) or it may be the result of limited options for visitors that want to access the Bear Lake Corridor (shuttle-only service during select hours).

In 2011, thirty-eight percent of respondents were first time visitors. In 2012, twenty-four percent of survey respondents were first time visitors. In 2013, twenty-nine percent of survey respondents were first time visitors. While the percentage of first time visitors went down in 2012 as compared with 2011, it stayed consistent from 2012 to 2013. One possible explanation is that users of the Fairgrounds PNR in 2011 made use of it again in 2012. However, one would expect for it to drop again in 2013.

None of the 2013 Fairgrounds PNR survey respondents identified themselves as employees. Only one of the 2012 Fairgrounds PNR survey respondents identified his or herself as an employee. Compare this with twenty-two percent of the survey respondents identified in 2011 as employees. This is likely related to the self-selectivity nature of the surveys collected in 2012 and 2013; it is expected that employees would likely choose not to complete a survey.

In 2013, only approximately ten percent of survey respondents from the Fairgrounds PNR identified themselves as locals. In 2012, approximately seven percent of survey respondents from the Fairgrounds PNR identified themselves as locals. As a whole, these percentages are relatively comparable to the thirteen percent identified in 2011. It appears that on average, about ten percent of the users may be categorized as locals.

For the 2011 Silver Route surveys, sixteen percent of the respondents were from outside the U.S. In 2012, only one respondent, which is about one percent, identified him or herself as being from outside the U.S. In 2013, only six percent of the survey respondents were from outside the U.S. The total percentage of survey respondents residing in Colorado remained fairly consistent from 2011 through 2013 at sixty, fifty-three, and fifty-eight percent, respectively.

Information about group size was requested in a similar manner. Table 10 presents the percentages of group sizes represented in the surveys collected.

Table 10: Comparison of Group Size, 2011, 2012 and 2013

	2011	2012	2013
1 person	35.3	22.4	20.5
2 people	39.7	39.7	36.3
3 – 5 people	16.2	31.0	31.8
≥ 6 people	8.8	6.9	11.4
TOTAL	100	100	100

Looking at the group size representation across the years, it appears as if the single person group is decreasing. However, this could also be related to the self-selectivity of the surveys made available in 2012 and 2013. It could be that single travelers are less likely to fill out a survey unless approached, as they would have been in 2011. It is interesting to see how consistent the representation of the 2 person group is across the years. It is also interesting how substantially the 3-5 person group changed from 2011 to the proportion shown in 2012 and 2013. The greater than 6 person group seems to represent, on average, around eight and a half percent.

CONCLUSIONS

Based on the findings of the surveys collected in 2011, 2012 and 2013, this section presents and discusses the following conclusions:

- The most effective use of DMS is on US 36,
- The DMS has a significant impact on the use of the Fairgrounds PNR,
- Static signage is an important last-link,
- Fairgrounds PNR users return in subsequent years,
- Fairgrounds PNR is capturing mostly day visitors, and
- Passive surveys are more effective at the Fairgrounds PNR than EPVC.

These conclusions are discussed below in greater detail, including implications and recommendations for future ITS deployments and use.

DMS MOST EFFECTIVE ON US 36

From the surveys, it appears as if the most effective use of DMS is on US 36. The majority of Fairgrounds PNR survey respondents saw the DMS. Furthermore, the majority of survey respondents at the EPVC arrived on US 36. Therefore, considering the cost of deploying each DMS, it would appear that deploying it, if only on US 36, would be the most cost effective use of funds.

DMS' SIGNIFICANT IMPACT ON FAIRGROUNDS PNR

Approximately seventy percent of survey respondents at the Fairgrounds PNR saw the DMS. It is unclear if the Fairgrounds PNR survey respondents would have used the facility without being made aware of it via the DMS. If future surveys are made available at the Fairgrounds PNR, it would be useful to gain an understanding of the number of new users versus the number of visitors who have used the Fairgrounds PNR in previous years.

STATIC SIGNAGE AN IMPORTANT LAST LINK

In 2013, the static signage directing users from US 36 to the Fairgrounds PNR was installed for the entire operating season. In contrast, in 2012, the static signage was installed for only about half of the season. It is clearly important to have this signage installed for the entire season, as the proportion of respondents indicating that they had difficulty finding the Fairgrounds PNR decreased in 2013 as compared with 2012.

FAIRGROUNDS PNR USERS RETURN IN SUBSEQUENT YEARS

While no question specifically asked whether visitors had previously used the Fairgrounds PNR in prior years, there are indications through several questions that this may be the case. More respondents chose “knowledge from previous visit” as the way they had learned about the Fairgrounds PNR. Furthermore, a larger percentage of Fairgrounds PNR survey respondents indicated that they had previously ridden the TOWN/ROMO shuttles. Both of these results support the aforementioned conclusion. However, any future survey should include a direct question of this nature.

FAIRGROUNDS PNR CAPTURES MOSTLY DAY VISITORS

At Fairgrounds PNR, the split between day visitors and long-term visitors is a little more than 50/50. When compared with the results of the EPVC surveys, however, the Fairgrounds PNR surveys clearly have a larger proportion of day visitors. In addition, some of the Fairgrounds PNR survey respondents indicated that they were locals. In the question about their period of visitation, they subsequently indicated the length of time that they were spending in Estes Park for the season. However, it is likely that they were just visiting the TOWN/ROMO for the day. Therefore, depending upon what information the first question is trying to collect, it may need to be rephrased to account for “locals.” A local could either view themselves as a “long-term” visitor or a day visitor.

PASSIVE SURVEYS MORE EFFECTIVE AT FAIRGROUNDS PNR THAN EPVC

The number of surveys collected at the EPVC in 2012 and 2013 was small. The time during which the surveys are available at the EPVC is short. Indications are that little effort is made to increase awareness of their existence. Considering all of these factors, if an ITS is implemented in the future and if funding is not available to have surveys proactively administered, then it is recommended that surveys not be provided at the EPVC. There is little value in the information collected.

In contrast, the number of surveys collected at the Fairgrounds PNR, while relatively small in number, is likely a pretty significant representation of the number of users of the Fairgrounds PNR. The surveys are essentially passive, like those made available at the EPVC; however, a representative from the shuttle company who has been stationed at the Fairgrounds PNR to provide information is likely contributing to the larger sample size. Therefore, if an ITS is implemented in the future and if funding is not available to have surveys proactively administered, it is recommended that surveys be provided at the Fairgrounds PNR. However, it is important to provide an indication of whether or not a shuttle representative was stationed at the Fairgrounds PNR.

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4. **Google Inc.** *Google Earth*. 2012.
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2013 Town of Estes Park Transportation Survey

The Town of Estes Park are working to improve travel conditions and provide useful information to improve your visitor experience. Please take a moment to answer the following questions. The survey should take less than five minutes to complete, and your participation is strictly voluntary. If you have any follow-up questions about the survey, please contact: Brian Wells at bwells@estes.org. **Thank you for your time!**

1. How long do you plan to spend visiting Estes Park/Rocky Mountain NP?

_____ **HOURS** (if less than 24 hours) or _____ **DAYS** (if 24 hours or more)

2. Approximately how many times have you visited Estes Park/Rocky Mountain NP in the past?

☐ This is my first ☐ 1 time ☐ 2-3 times ☐ 4-5 times ☐ 6 times or more

3. Which route did you use to get to Estes Park/Rocky Mountain NP?

- ☐ U.S. Highway 36 (from Boulder, Longmont, or Lyons areas)
☐ U.S. Highway 34 (from Fort Collins and Loveland areas)
☐ Colorado State Highway 7
☐ Other (please specify) _____

Electronic Message Sign



4. Did you see an electronic message sign(s) while traveling to Estes Park/Rocky Mountain NP?

☐ Yes ☐ No

5. Please answer the following questions about Bear Lake in Rocky Mountain NP

- 5a. Are you planning to visit Bear Lake in Rocky Mountain National Park during this trip?
 5b. Are you aware of the construction along the Bear Lake Road corridor?
 5c. Are you aware of the access restrictions to Bear Lake?
 5d. Are you aware that from 9 AM to 3 PM, it is shuttle access only to Bear Lake?

Yes No

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

6. How did you learn about the Fairgrounds Park-n-Ride (check all that apply)?

- ☐ Electronic message sign
☐ Estes Park Visitor Center
☐ Rocky Mountain NP website
☐ Rocky Mountain NP Twitter or Facebook
☐ Colorado DOT 511 Phone System
☐ Colorado DOT website
☐ Newspaper
☐ Television
☐ Friend/family
☐ Lodging or campground
☐ Knowledge from previous visit
☐ Tried to access Bear Lake area and Park staff sent you back
☐ Other (please specify) _____

Please place completed survey in drop box at Fairgrounds kiosk

Continue on other side -->

7. Why did you choose to use the Fairgrounds Park-n-Ride lot (check all that apply)?

- ☐ To access the Bear Lake area
- ☐ To access businesses (stores and restaurants) in downtown Estes Park
- ☐ Parking downtown Estes Park is limited
- ☐ Parking within Rocky Mountain NP is limited
- ☐ The Hiker Shuttle connects the Park-n-Ride lot to Rocky Mountain National Park
- ☐ Using the Fairgrounds Park-n-Ride lot and shuttle service is environmentally friendly
- ☐ The shuttles are fare-free
- ☐ To avoid dealing with traffic congestion
- ☐ To commute to/from work
- ☐ Other (please specify) _____

8. Did you experience any difficulties in finding the Fairgrounds Park-n-Ride lot? Yes ☐ No ☐

Please specify: _____

9. Have you used a shuttle to travel around Estes Park/Rocky Mountain NP on a prior visit?

☐ Yes ☐ No

10. What is your zip code or country of residence?

Zip Code _____ or Country of residence _____

11. How many people are you traveling with today, including yourself?

____ # of children (5 years or younger)

____ # of adults (18 - 64 years)

____ # of children (6 - 17 years)

____ # of adults (65 or older)

12. Please provide any comments you have related to your transportation experience (including parking and shuttle issues) in the Estes Park and Rocky Mountain NP area.

THANK YOU FOR COMPLETING THIS SURVEY!

2013 Town of Estes Park

Transportation Survey



Please take a few minutes
to complete this transportation
survey.



Your feedback will help
improve travel conditions and
visitor experience.

Estes Park Fairgrounds Park-n-Ride Survey

2013 Town of Estes Park Transportation Survey

The Town of Estes Park is working to improve travel conditions and provide useful information to improve your visitor experience. Please take a moment to answer the following questions. The survey should take less than five minutes to complete, and your participation is strictly voluntary. If you have any follow-up questions about the survey, please contact: Brian Wells at bwells@estes.org. **Thank you for your time!**

1. How long do you plan to spend visiting Estes Park/Rocky Mountain NP?

_____ **HOURS** (if less than 24 hours) or _____ **DAYS** (if 24 hours or more)

2. Approximately how many times have you visited Estes Park/Rocky Mountain NP in the past?

☐ This is my first ☐ 1 time ☐ 2-3 times ☐ 4-5 times ☐ 6 times or more

3. Which route did you use to get to Estes Park/Rocky Mountain NP?

- ☐ U.S. Highway 36 (from Boulder, Longmont, or Lyons areas)
☐ U.S. Highway 34 (from Fort Collins and Loveland areas)
☐ Colorado State Highway 7
☐ Other (please specify) _____

4. Did you see an electronic message sign(s) while traveling to Estes Park/Rocky Mountain NP?

☐ Yes ☐ No

Electronic Message Sign



5. Please answer the following questions about Bear Lake in Rocky Mountain NP

- 5a. Are you planning to visit Bear Lake in Rocky Mountain National Park during this trip?
 5b. Are you aware of the construction along the Bear Lake Road corridor?
 5c. Are you aware of the access restrictions to Bear Lake?
 5d. Are you aware Monday- Friday from 9 AM to 4 PM, it is shuttle access only to Bear Lake?

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

6. How did you learn about the visitor center shuttle stop (check all that apply)?

- ☐ Electronic message sign
☐ Estes Park Visitor Center
☐ Rocky Mountain NP website
☐ Rocky Mountain NP Twitter or Facebook
☐ Colorado DOT 511 Phone System
☐ Colorado DOT website
☐ Newspaper
☐ Television
☐ Friend/family
☐ Lodging or campground
☐ Knowledge from previous visit
☐ Tried to access Bear Lake area and Park staff sent you back
☐ Other (please specify) _____

Please place completed survey in the drop box at the EP Visitor Center or an envelope on board shuttle buses

Continue on other side -->

7. Why did you choose to use the free shuttle (check all that apply)?

- ☐ To access the Bear Lake area
- ☐ To access businesses (stores and restaurants) in downtown Estes Park
- ☐ Parking downtown Estes Park is limited
- ☐ Parking within Rocky Mountain NP is limited
- ☐ The Hiker Shuttle connects the Estes Park Visitor Center to Rocky Mountain National Park
- ☐ Using the shuttle service is environmentally friendly
- ☐ The shuttles are fare-free
- ☐ To avoid dealing with traffic congestion
- ☐ To commute to/from work
- ☐ Other (please specify) _____

Place completed survey in
drop box, OR mail to:
Brian Wells
Town of Estes Park VC
P.O. Box 1200
Estes Park, CO 80517

8. Are you aware of the Fairgrounds Park-n-Ride and shuttle service connection? ☐ Yes ☐ No

If yes, why did you not park there? _____

9. Have you used a shuttle to travel around Estes Park/Rocky Mountain NP on a prior visit?

☐ Yes ☐ No

10. What is your zip code or country of residence?

Zip Code _____ or Country of residence _____

11. How many people are you traveling with today, including yourself?

____ # of children (5 years or younger)

____ # of adults (18 - 64 years)

____ # of children (6 - 17 years)

____ # of adults (65 or older)

12. Please provide any comments you have related to your transportation experience (including parking and shuttle issues) in the Estes Park and Rocky Mountain NP area.

THANK YOU FOR COMPLETING THIS SURVEY!

2013 Town of Estes Park

Transportation Survey



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to complete this transportation
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Your feedback will help
improve travel conditions and
visitor experience.

Estes Park Visitor Center Survey

