



Inter-County and Regional

TRANSIT PLAN

TECHNICAL MEMORANDUM #2

EXISTING TRIC COMMUTER TRAVEL DATA
IN THE FIVE-COUNTY NORTHERN NEVADA REGION





TECHNICAL MEMORANDUM #2

FOR

INTER-COUNTY AND REGIONAL TRANSIT PLAN

Prepared for:



Planning Division
Nevada Department of Transportation
1263 South Stewart Street
Carson City, Nevada 89712

Prepared by:

Kimley»Horn

Kimley-Horn and Associates, Inc.
5370 Kietzke Lane
Suite 100
Reno, Nevada 89511
775-787-7552

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

© February 2019
092202043
2019-02-12 Tech Memo #2.docx



TABLE OF CONTENTS

- 1. INTRODUCTION 1**
 - 1.1. Study Area Population 1
 - 1.2. Study Area Employment 1
 - 1.3. Tahoe Reno Industrial Center (TRIC)..... 2
 - 1.4. Purpose 5
 - 1.5. Document Organization 5
- 2. DATA SOURCES 6**
 - 2.1. Washoe County Regional Travel Characteristics Study 6
 - 2.2. American Community Survey..... 6
 - 2.3. Nevada Department of Employment, Training, and Rehabilitation Data 6
 - 2.4. Longitudinal Employer-Household Dynamics 6
- 3. FINDINGS 7**
 - 3.1. Employment..... 7
 - 3.2. Origins and Destinations 8
 - 3.3. Vehicle Occupancy 10
 - 3.4. Mode Split..... 11
 - 3.5. Travel Time..... 12
- 4. 2018 TRIC EMPLOYEE SURVEY 13**
 - 4.1. Employment..... 13
 - 4.2. Employee Origins..... 16
 - 4.3. Mode Split..... 17
 - 4.4. Travel Time..... 20
 - 4.5. Transit Interest..... 21
- 5. SUMMARY AND NEXT STEPS 25**

5.1. Summary25

5.2. Next Steps25

LIST OF FIGURES

Figure 1 – Study Area with Approximate Travel Distances3

Figure 2 – Tahoe Reno Industrial Center Area Employers with More than 50 Employees4

Figure 3 – Age Distribution8

Figure 4 – Annual Income Distribution8

Figure 5 – Home Locations of TRIC Employees9

Figure 6 – Distance/Direction of 2015 TRIC Employees10

Figure 7 – Resident Commute Mode Split by County11

Figure 8 – Resident Travel Time to Work by County12

Figure 9 – Tenure of TRIC Employees13

Figure 10 – Commute Time Impact of Employer Choice14

Figure 11 – TRIC Employee Age15

Figure 12 – TRIC Employee Annual Income15

Figure 13 – Origins of TRIC Employee Survey Respondents16

Figure 14 – TRIC Employee Commute Mode17

Figure 15 – TRIC Employee Reason for Driving Alone18

Figure 16 – TRIC Employee Typical Arrival/Departure Times19

Figure 17 – TRIC Employee Reason for Not Driving Alone19

Figure 18 – TRIC Employee Likely Reason for Changing Mode20

Figure 19 – TRIC Employee Typical Travel Times20

Figure 20 – TRIC Employees that Drive Alone Interest in Transit/Carpool/Ride Share21

Figure 21 – TRIC Employee Interest in Transit by Commute Time21

Figure 22 – TRIC Employee Interest in Transit by Employee Age22

Figure 23 – TRIC Employee Interest in Transit by Employee Income22

Figure 24 – Zip Codes of Survey Respondents23

Figure 25 – Zip Codes of TRIC Employees Who Drive Alone with Interest in Transit24

LIST OF TABLES

Table 1 – Employers by Number of Employees in TRIC.....7
 Table 2 – Home Locations of TRIC Employees.....8
 Table 3 – Residential Distance from Work for TRIC Employees.....9
 Table 4 – Vehicle Occupancy for Commute Trips by County.....10

LIST OF ACRONYMS

ACS	American Community Survey
DETR	Nevada Department of Training and Employment and Rehabilitation
GPS	Global Positioning System
LEHD	Longitudinal Employer-Household Dynamics
LODES	LEHD Origin-Destination Employment Statistics
NDOT	Nevada Department of Transportation
RTC	Regional Transportation Commission
TRIC	Tahoe Reno Industrial Center

APPENDICES

Appendix A Excerpts from the Washoe County Regional Travel Characteristics Study
 Appendix B 2017 4th Quarter DETR Data for TRIC
 Appendix C LEHD Data Outputs
 Appendix D 2018 TRIC Employee Survey Instrument
 Appendix E Issues and Concerns from 2018 Survey Respondents

1. INTRODUCTION

With a growing economy, increased development activity, and employment growth in Northern Nevada, the Nevada Department of Transportation (NDOT) is developing a plan to explore solutions to address inter-county commuting needs in Northern Nevada.

The development of the Inter-County and Regional Transit Plan specifically focuses on cross-county commuter travel within the five-county region of Washoe County, Storey County, Carson City County, Lyon County, and Churchill County along the following corridors of interest:

- Interstate-80 (I-80) between Reno/Sparks and the Tahoe Reno Industrial Center (TRIC)
- USA Parkway between TRIC and Silver Springs
- US-50 between Silver Springs and Carson City
- Interstate-580 (I-580) between Carson City and Reno/Sparks

Special consideration is being given to commute trips between Reno/Sparks and TRIC, as I-80 is physically constrained, employment opportunities at TRIC are increasing, and congestion during commute hours occurs frequently. In addition to this transit plan, NDOT is currently studying traffic along I-80 at this area to identify potential capacity improvements.

1.1. Study Area Population

Based on the 2010 US Census, the five counties included within this study area have a combined population of approximately 557,500 with the following percentage of population breakdown per county:

- 76% - Washoe County (421,407 population)
- 10% - Carson City County (55,274 population)
- 9% - Lyon County (51,980 population)
- 4% - Churchill County (24,877 population)
- 1% - Storey County (4,010 population)

Based on 2015 US Census estimates, the populations of each of the counties has slightly declined with the exception of Washoe County which is estimated to have had a 10% increase from 2010 to 2015.

1.2. Study Area Employment

According to the Bureau of Labor Statistics, as of September 2017, there were approximately 281,400 jobs within the five-county study area with the following percentage of jobs per county:

- 78% - Washoe County (218,832 jobs)
- 11% - Carson City County (30,238 jobs)
- 5% - Storey County (12,574 jobs)
- 4% - Lyon County (11,823 jobs)
- 3% - Churchill County (7,949 jobs)

Storey County, where TRIC is located, has a population of 4,010 while supplying the region with more than 10,000 jobs, justifying a focus on commuter needs between the major population centers and TRIC.

1.3. Tahoe Reno Industrial Center (TRIC)

TRIC is located within Storey County, Nevada. According to the Economic Development Authority of Western Nevada (EDAWN) and the TRIC website (tahoereno.com), the industrial center has grown over the past 20 years to employ approximately 10,000 workers in manufacturing, distribution services, data storage, and warehousing. TRIC is a 107,000-acre industrial park that contains approximately 11 million square feet of industrial space housing over 125 companies. For the past two decades businesses have been relocating to TRIC and the number of employees at TRIC is anticipated to grow to 25,000 within the next ten years. Per EDAWN, with an estimated 75% of TRIC employees living north of I-80 in Reno/Sparks, growth at TRIC is expected to continue to add to the congestion along I-80 during commute hours.

Figure 1 on the following page provides an overview of the study area and approximate distances between TRIC and areas where residential housing is provided. **Figure 2** identifies employers with more than 50 employees in and around TRIC.

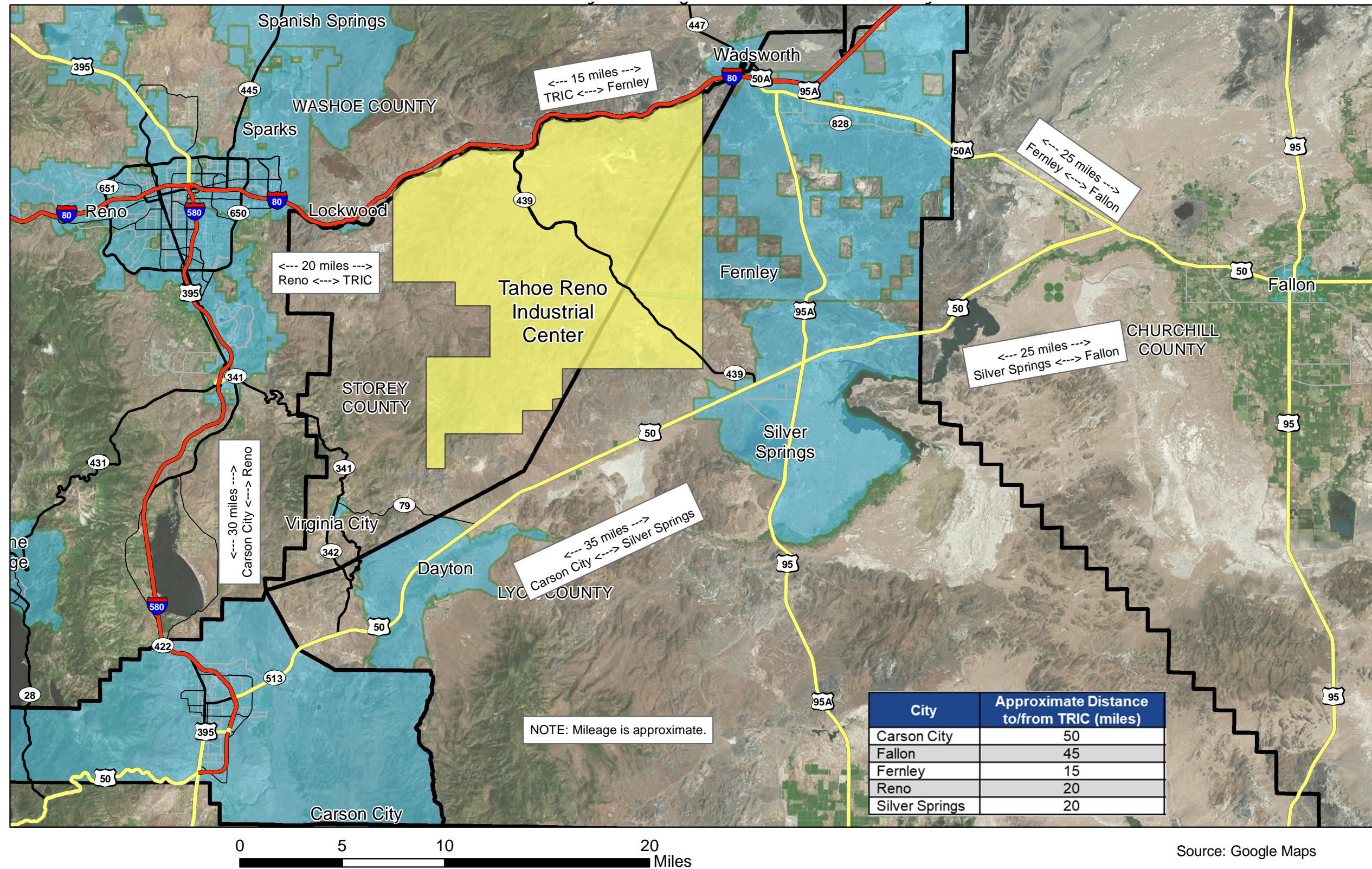
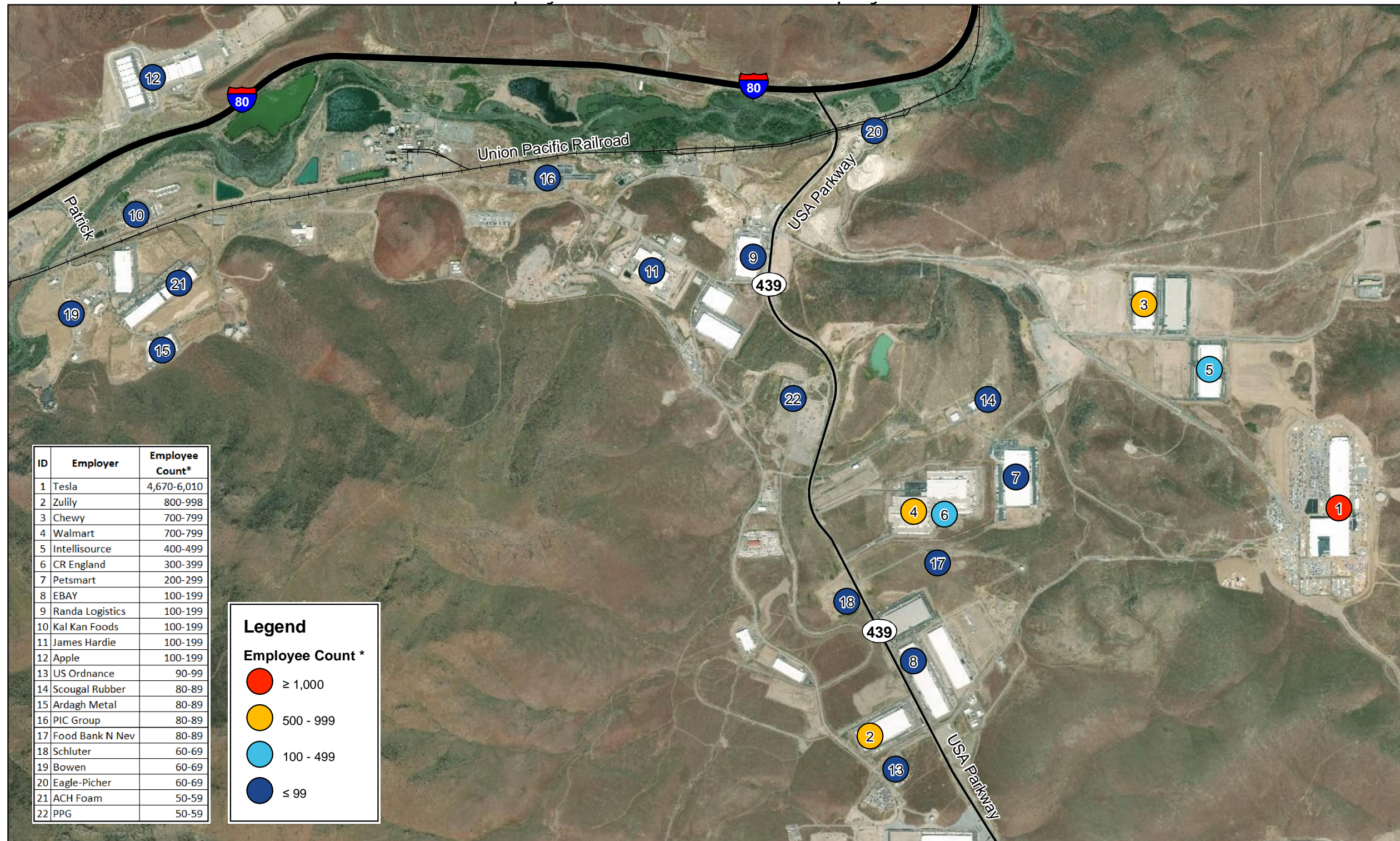


Figure 1 – Study Area with Approximate Travel Distances

Source: Google Maps



0 0.5 1 2 Miles

* Source: Nevada Department of Employment, Training and Rehabilitation, 2017 4th Quarter

Figure 2 – Tahoe Reno Industrial Center Area Employers with More than 50 Employees

1.4. Purpose

This technical memorandum has been prepared to document publicly available datasets and review them for information and trends related to commute trips between TRIC and the 5-County Region. This memorandum also includes a summary of the results of a 2018 employee survey conducted as part of the Inter-County and Regional Transit Plan.

1.5. Document Organization

Technical Memorandum #2 is organized into the following sections:

- **Section 1** presents the project background and purpose of the technical memorandum.
- **Section 2** describes the data sources reviewed and compared within this document.
- **Section 3** provides findings from a review of the data including information on employment, employee origins and destinations, vehicle occupancy, mode split, and travel time.
- **Section 4** describes and summarizes the content and findings of the 2018 TRIC employee survey and how those findings relate to the data reviewed in Section 3.
- **Appendices** include printable data as reviewed for this memorandum, issues and concerns raised by 2018 TRIC survey respondents, and the survey instrument used in the 2018 TRIC employee survey.

2. DATA SOURCES

Several publicly available data sources were included in this analysis to provide insight on the travel characteristics and commute patterns of those working at TRIC. These data sources include the following:

- Washoe County Regional Travel Characteristics Study
- American Community Survey (ACS) data
- Nevada Department of Training and Employment and Rehabilitation (DETR) data
- Longitudinal Employer-Household Dynamics (LEHD) data

2.1. Washoe County Regional Travel Characteristics Study

The Washoe County Regional Travel Characteristics Study was published in April 2018 by the Regional Transportation Commission (RTC) and documents the demographics and multimodal travel behavior of Washoe County residents. The study collected data from 2,154 households in the RTC travel demand model region through telephone interviews, online, paper diaries, and two GPS technologies. **Appendix A** includes experts from the study referenced in this technical memorandum.

2.2. American Community Survey

The ACS is conducted on an ongoing basis by the United States Census Bureau. The ACS collects information that was previously collected in the long-form version of the census and provides detailed population and housing information. ACS data is most often available in one year and five-year estimates for a variety of geographical units, such as census blocks, census block groups, or census tracts. The data reviewed in this technical memorandum was from 2013 to 2017.

2.3. Nevada Department of Employment, Training, and Rehabilitation Data

The Nevada Department of Employment, Training, and Rehabilitation provides data on topics related to businesses, employment, and wages. Data is available by a variety of geographies, dependent on the topic. For the purposes of this technical memorandum, the employment data from the fourth quarter of 2017 is used and included in **Appendix B**.

2.4. Longitudinal Employer-Household Dynamics

LEHD Origin-Destination Employment Statistics (LODES) data provides insight on the geographic patterns of employment and residential locations. The most recent LODES data is from 2002 to 2015 for the period of April to June of each year. Data is provided at the census block level and includes origin-destination information as well as area characteristic data such as age, earnings, and industry of workers. Outputs from the LEHD data are included in **Appendix C**.



3. FINDINGS

The following sections summarize the findings from the data review for employment, origins and destinations of TRIC employees, vehicle occupancy in the region, mode split within the 5-County Region, and travel time within the 5-County Region.

3.1. Employment

According to DETR data from December 2017, there were 130 employers in TRIC. These employers varied in number of employees as shown in **Table 1**. Of the employers at TRIC, 57% employ fewer than 20 workers, whereas 13% of employers employ more than 100 workers.

Table 1 – Employers by Number of Employees in TRIC

Number of Employees	Number of Employers	Percent
1 to 4 employees	33	25%
5 to 9 employees	24	18%
10 to 19 employees	18	14%
20 to 29 employees	9	7%
30 to 39 employees	8	6%
40 to 49 employees	6	5%
50 to 59 employees	2	2%
60 to 69 employees	5	4%
80 to 89 employees	6	5%
90 to 99 employees	2	2%
100 to 199 employees	9	7%
200 to 299 employees	1	1%
300 to 399 employees	1	1%
400 to 499 employees	1	1%
700 to 799 employees	3	2%
1,000 to 1,499 employees	1	1%
3,000 to 3,499 employees	1	1%
TOTAL	130	100%

Source: Nevada Department of Employment, Training and Rehabilitation, 2017 4th Quarter

Based on LEHD data, as of 2015, the majority of those working at TRIC were between the ages of 30 and 54 (**Figure 3**). Additionally, this data indicates that the majority of TRIC employees earn between \$15,000 to \$40,000 per year (**Figure 4**). Further, the LEHD data reports that most of those working at TRIC are employed in the Transportation and Warehousing industry (56.4%), and several other employees work in the Manufacturing industry (21.2%). It is important to note that employment at TRIC has grown since 2015 (the most recent year of LEHD data), so some of these characteristics may have changed since that time.

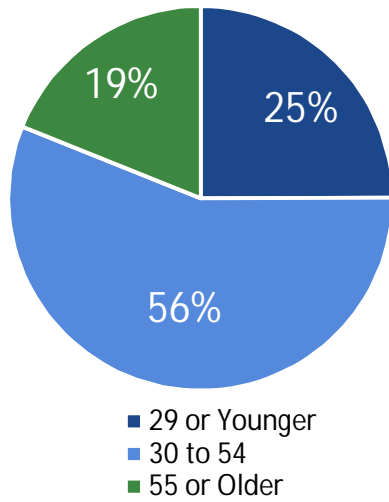


Figure 3 – Age Distribution

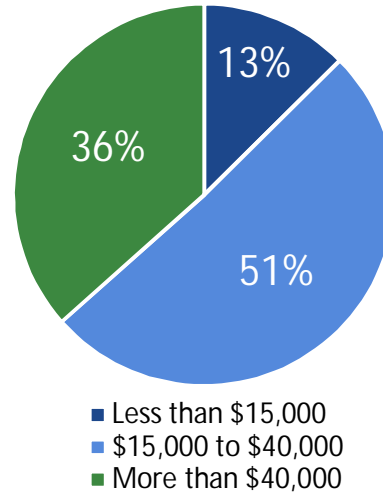


Figure 4 – Annual Income Distribution

Source: 2015 Longitudinal Employer-Household Dynamics Data

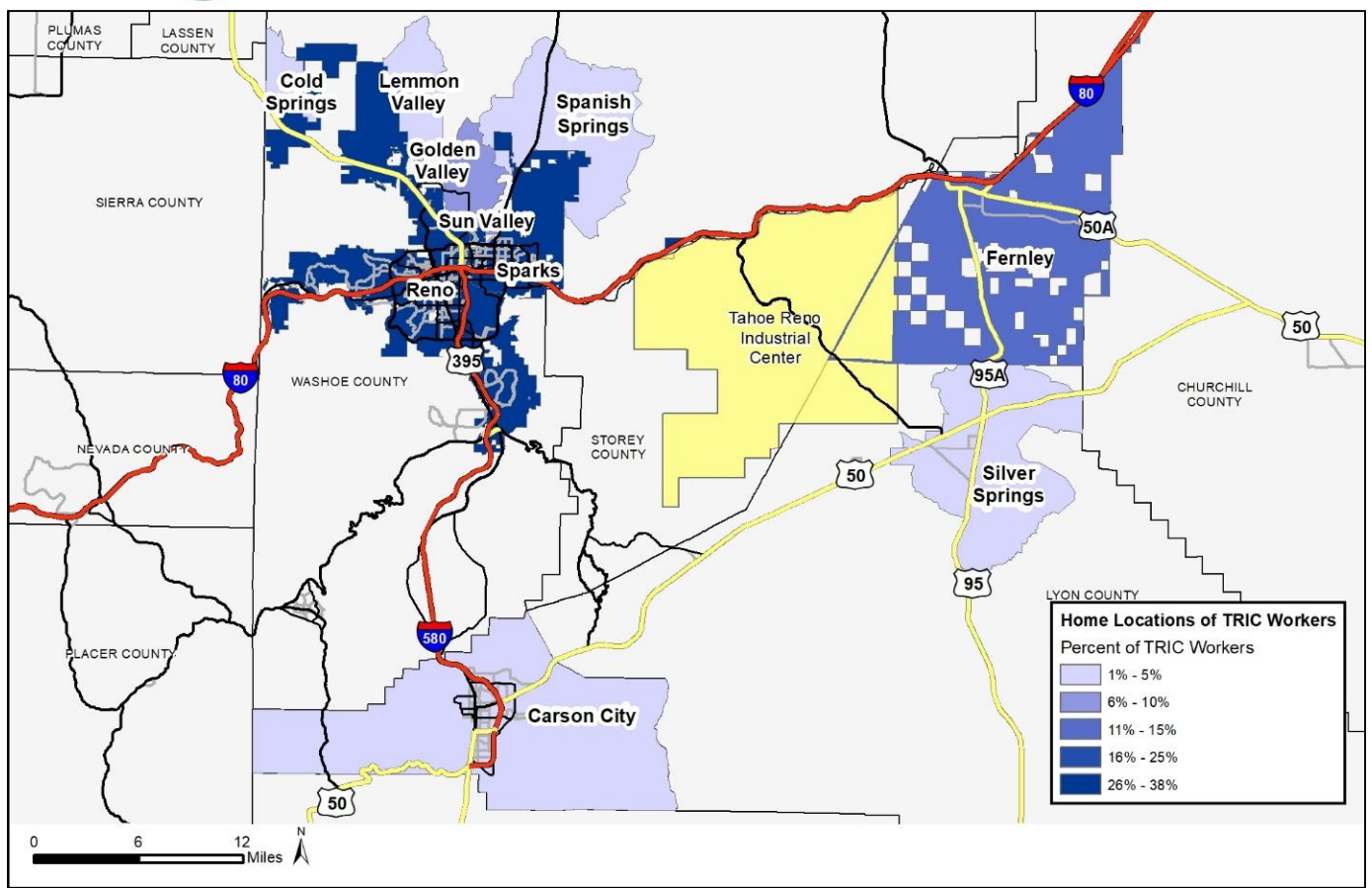
3.2. Origins and Destinations

The most recent LEHD data (2015) indicates that most of those working at TRIC are commuting from residential locations to the west and that most TRIC employees are located between 10 and 24 miles from their place of employment. The home cities of those who work at TRIC are summarized in **Table 2** and shown in **Figure 5**. As noted previously, since employment at TRIC has grown since 2015, and with the opening of USA Parkway south of TRIC, some of these patterns have likely changed between 2015 and 2019. As shown in **Table 2**, this LEHD data includes 3,306 TRIC employees, where more than 10,000 employees currently work at TRIC.

Table 2 – Home Locations of TRIC Employees

Home City	Number of TRIC Employees	Percent of TRIC Employees
Reno	1,021	30.9%
Sparks	705	21.3%
Fernley	409	12.4%
Sun Valley	169	5.1%
Carson City	112	3.4%
Spanish Springs	97	2.9%
Silver Springs	54	1.6%
Cold Springs	33	1.0%
Fallon	33	1.0%
Lemmon Valley	31	0.9%
Other Locations	642	19.5%
TOTAL	3,306	100%

Source: 2015 Longitudinal Employer-Household Dynamics Data



Source: 2015 Longitudinal Employer-Household Dynamics Data

Figure 5 – Home Locations of TRIC Employees

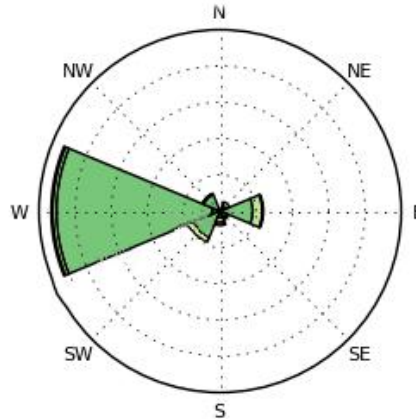
The distance in miles for TRIC employees to/from their residences is summarized in **Table 3**. As can be seen in the table, over 80% reside within 24 miles of TRIC.

Table 3 – Residential Distance from Work for TRIC Employees

Residential Distance from Work (miles)	Number of Employees	Percentage of Employees
Less than 10	126	3.8%
10 to 24	2,648	80.1%
25 to 50	350	10.6%
More than 50	182	5.5%
TOTAL	3,306	100%

Source: 2015 Longitudinal Employer-Household Dynamics Data

Figure 6 represents the general direction from which TRIC employees originate and the distance they travel. Based on the LEHD data, the clear majority of employees are traveling from the west, and the longest travel distances are traversed from the west.



Source: 2015 Longitudinal Employer-Household Dynamics Data

Figure 6 – Distance/Direction of 2015 TRIC Employees

3.3. Vehicle Occupancy

The Washoe County Regional Travel Characteristics Study identified a vehicle occupancy of 1.72. This is higher than the vehicle occupancy reported by ACS data for commute trips, which indicates a vehicle occupancy of 1.18. This suggests that those living in the 5-County Region share a vehicle with others for non-commute trips more often than for commute trips. The vehicle occupancy by county for commute trips is shown in **Table 4**.

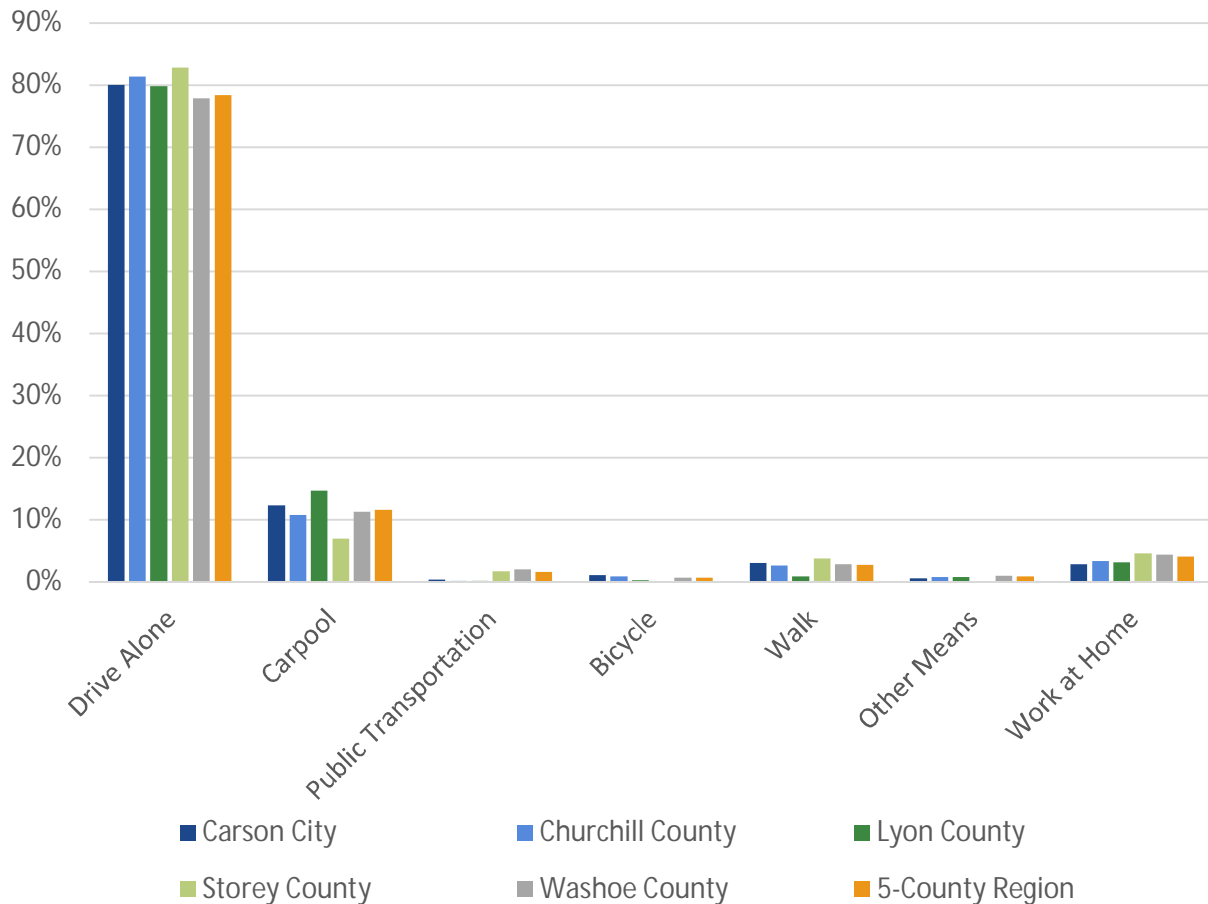
Table 4 – Vehicle Occupancy for Commute Trips by County

County	Vehicle Occupancy for Commute Trips
Carson City County	1.16
Churchill County	1.16
Lyon County	1.21
Storey County	1.08
Washoe County	1.18
5-County Region	1.18

Source: 2013-2017 American Community Survey Data

3.4. Mode Split

The ACS estimates from 2013-2017 indicate that the commute mode split is similar amongst the five counties. Approximately 80% of residents in every county currently drive to work. Since this mode split varies from the 66.8% of trips reported as drive alone in the Washoe County Regional Travel Characteristics Study, this likely indicates that people utilize other modes of transportation more often for non-commute trips. Very few people currently take public transportation to work in Carson City County, Churchill County, and Lyon County, while approximately 2% of residents in Storey County and Washoe County currently take transit to work. The commute mode split for each of the counties is depicted in **Figure 7**.



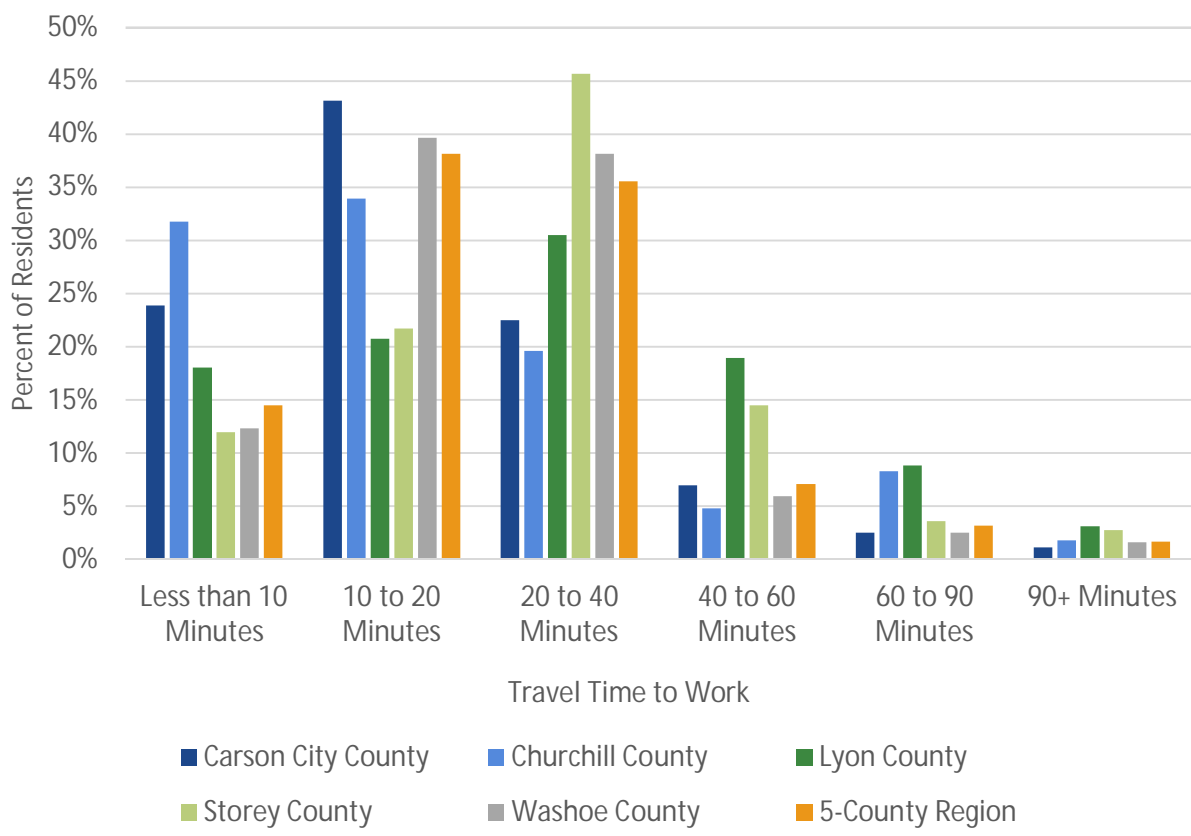
Source: 2013-2017 American Community Survey Data

Figure 7 – Resident Commute Mode Split by County



3.5. Travel Time

According to ACS estimates from 2013-2017, travel times to work for residents in the 5-County Region varies by county (**Figure 8**). Residents in Carson City and Churchill Counties have shorter commutes. Lyon County residents have some of the longest commutes in the region, with over 25% of residents having commute times between 40 to 90 minutes. Overall, most residents (nearly 75%) in the 5-County Region have a commute between 10 and 40 minutes. It should be noted again that this data does not include the roadway network option for drivers to use USA Parkway to access TRIC from US-50, which was opened in September 2017. This new network connection significantly reduces travel time to TRIC from Carson City County, Lyon County, and Churchill County.



Source: 2013-2017 American Community Survey Data

Figure 8 – Resident Travel Time to Work by County



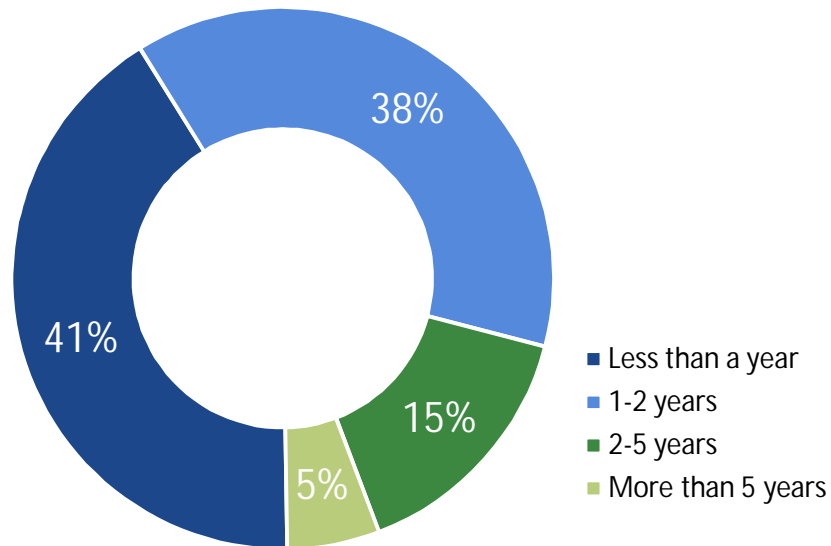
4. 2018 TRIC EMPLOYEE SURVEY

As part of the Inter-County and Regional Transit Plan, an online survey was developed to obtain information from employees of TRIC. The survey link was provided to TRIC employers to distribute to their employees, as well as publicized by the RTC, NDOT, and the City of Fernley among others. This survey resulted in responses from 1,148 TRIC employees and was available for input from October 24 to November 30, 2018. **Appendix D** includes the survey instrument that was used to collect the data. Hundreds of written responses were received regarding issues and concerns with transportation to TRIC which are included in **Appendix E**.

The following sections summarize the findings of the 2018 TRIC employer survey and provide context for how this recent data compares to the data sources reviewed in the previous chapters of this technical memorandum.

4.1. Employment

Figure 9 represents the tenure of TRIC employees at their current employer based on the 2018 TRIC employee survey. 79% of survey respondents have been employed for under two years at TRIC. As noted in **Section 2.4**, the LEHD data will not have included 79% of the current employees at TRIC as the most recent data available was from 2015.

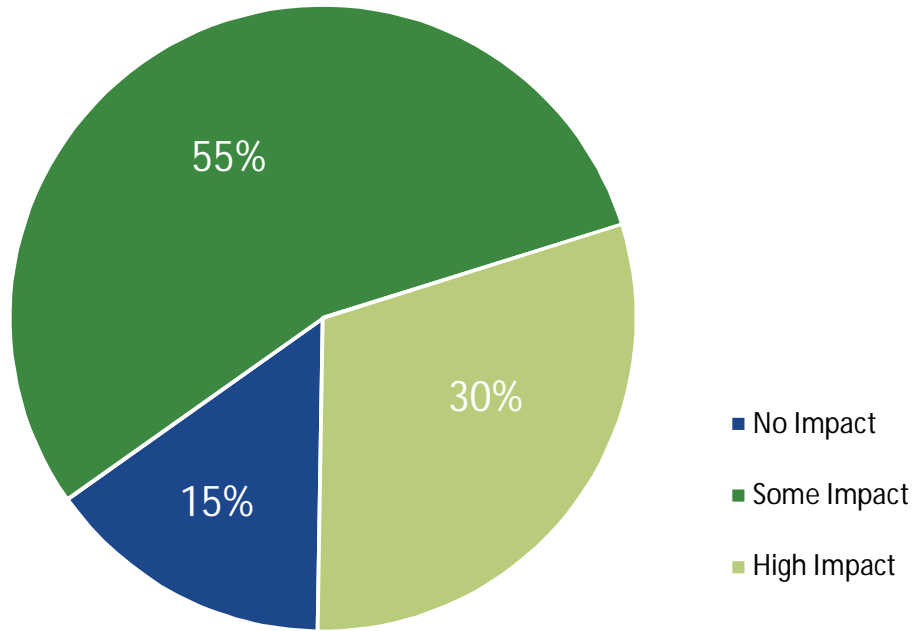


Source: 2018 TRIC Employee Survey

Figure 9 – Tenure of TRIC Employees



Potentially related to the tenure of TRIC employees, **Figure 10** displays the survey responses of how much commute time affects a decision to choose an employer. Most of the respondents indicated that the amount of time required to commute to work at least somewhat influenced their decision to choose an employer.

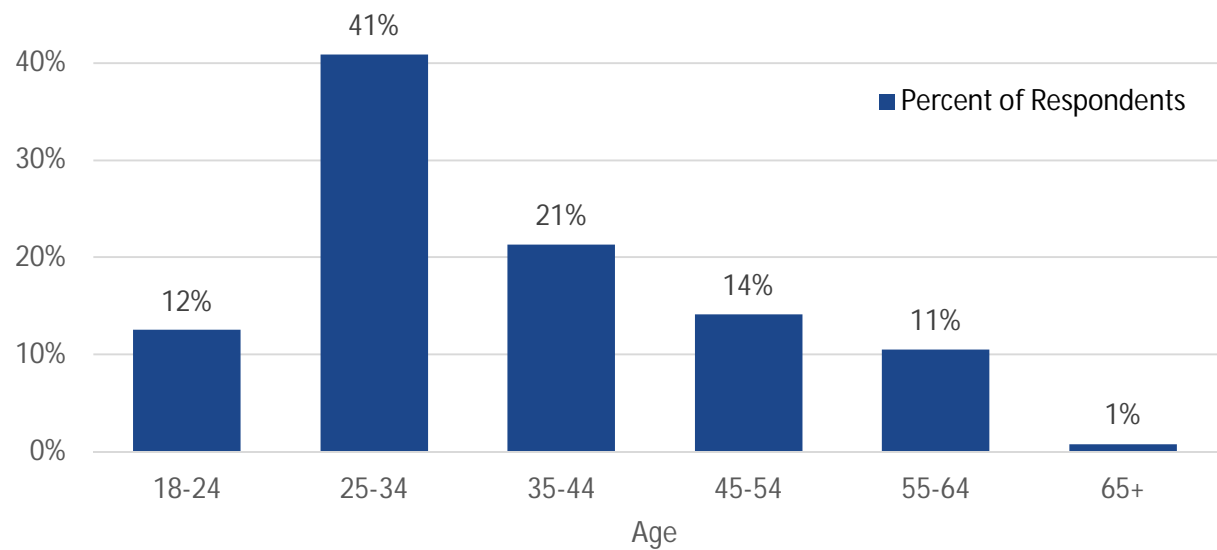


Source: 2018 TRIC Employee Survey

Figure 10 – Commute Time Impact of Employer Choice

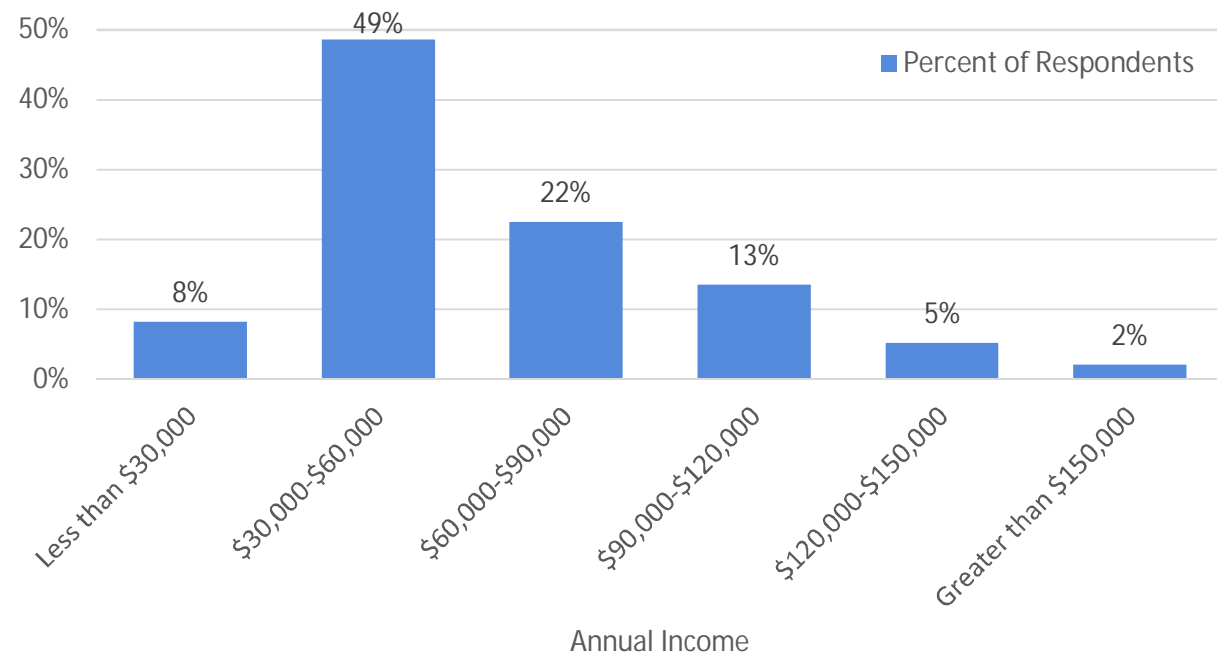


The 2018 TRIC employee survey included demographic information for those who work at TRIC. **Figure 11** shows the age of survey respondents and **Figure 12** reports the annual income level of respondents. The income levels appear to closely mirror employee age, and likely experience level. **Figure 12** shows that there is now a larger percentage of higher paying jobs available at TRIC as compared to the LEHD data from 2015 shown in **Figure 4**.



Source: 2018 TRIC Employee Survey

Figure 11 – TRIC Employee Age

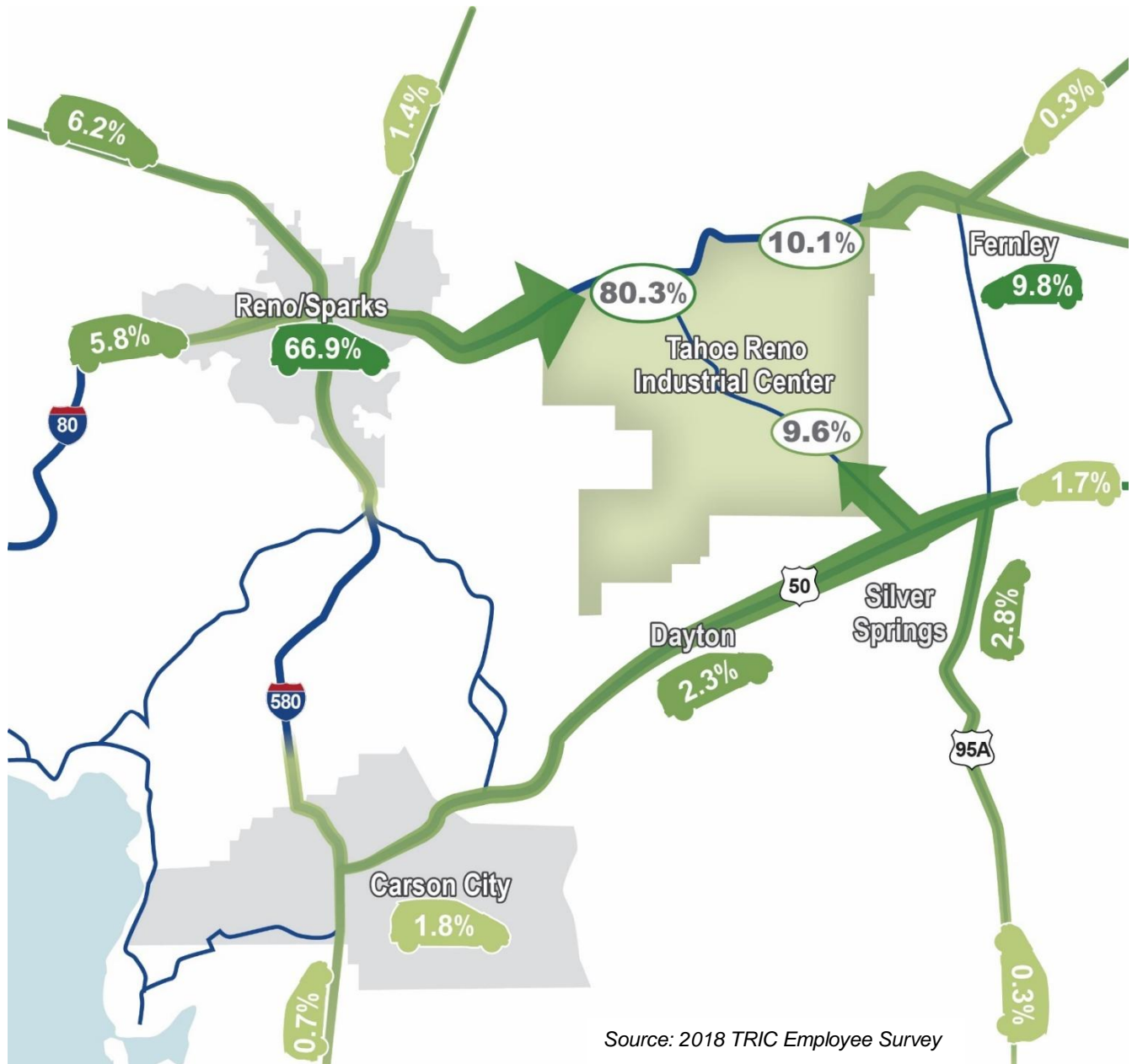


Source: 2018 TRIC Employee Survey

Figure 12 – TRIC Employee Annual Income

4.2. Employee Origins

Figure 13 generally shows where trips to TRIC originate and was created based on the results of the 2018 TRIC employee survey. The survey results show that practically every zip code in the immediate area originates trips to TRIC. The 2018 survey responses show 80.3% of TRIC employees traveling from the west along I-80. Employees that responded that they originate east of TRIC and likely use I-80 to travel to work accounted for 10.1%. Survey respondents likely using USA Parkway to access TRIC from the south were 9.6%. It should be noted that USA Parkway's connection to US-50 was completed in September 2017, thus would not have been accounted for in the other data sources.



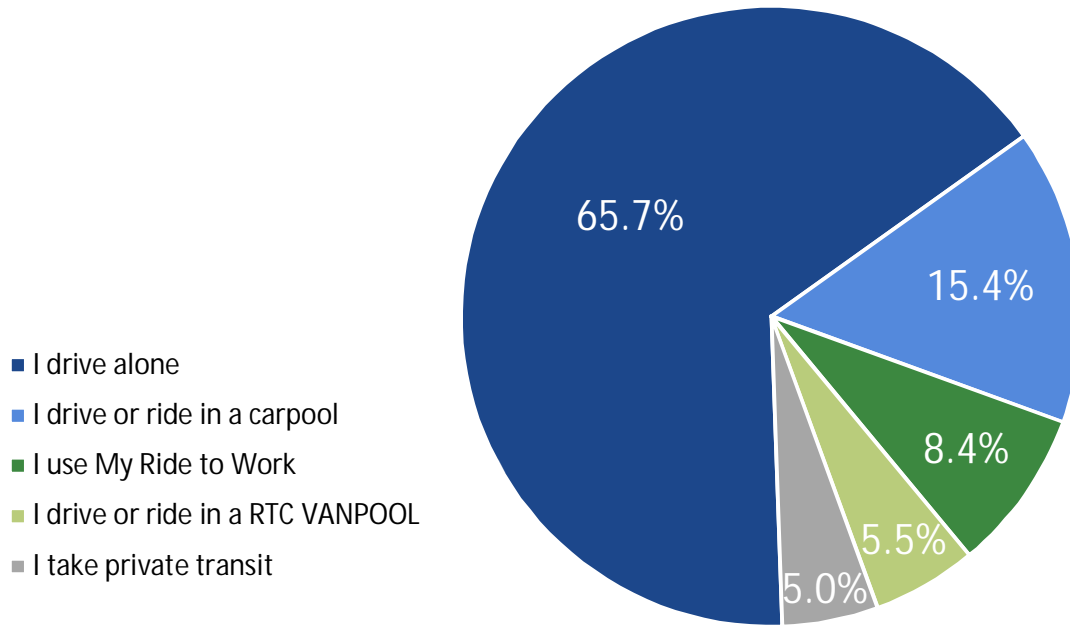
Source: 2018 TRIC Employee Survey

Figure 13 – Origins of TRIC Employee Survey Respondents



4.3. Mode Split

The 2018 TRIC employee survey provided additional insight into the current mode split specific to those who currently work at TRIC. Based on the survey, 34.3% of respondents currently use travel modes other than driving alone. **Figure 14** provides a breakdown of different modes being used by TRIC employees. It should be noted that My Ride to Work is a private shuttle service which is contracted by various employers at TRIC to transport employees to/from TRIC. The 5.0% using “private transit” is a combination of various responses that were not specific enough to be classified as RTC VANPOOL or My Ride to Work, but generally included responses such as: company shuttle, company picks me up, company bus, etc.

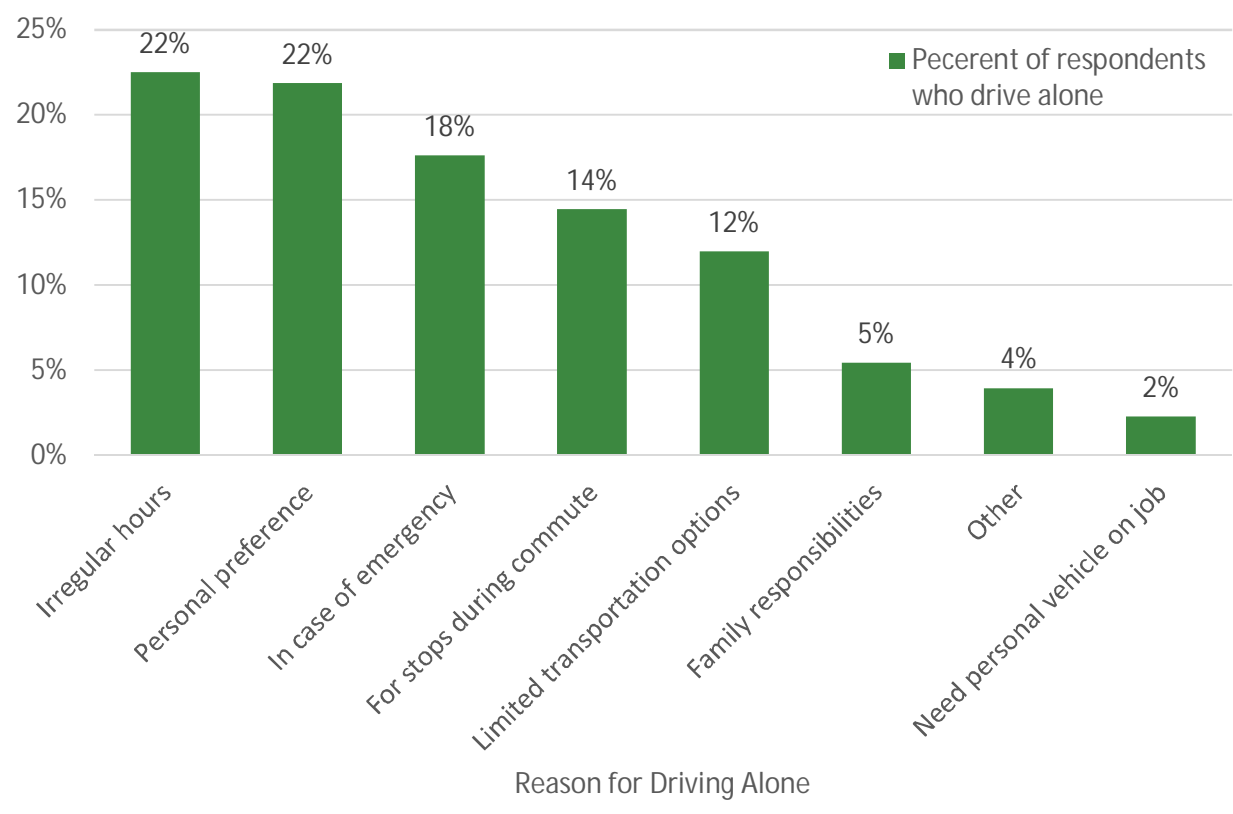


Source: 2018 TRIC Employee Survey

Figure 14 – TRIC Employee Commute Mode

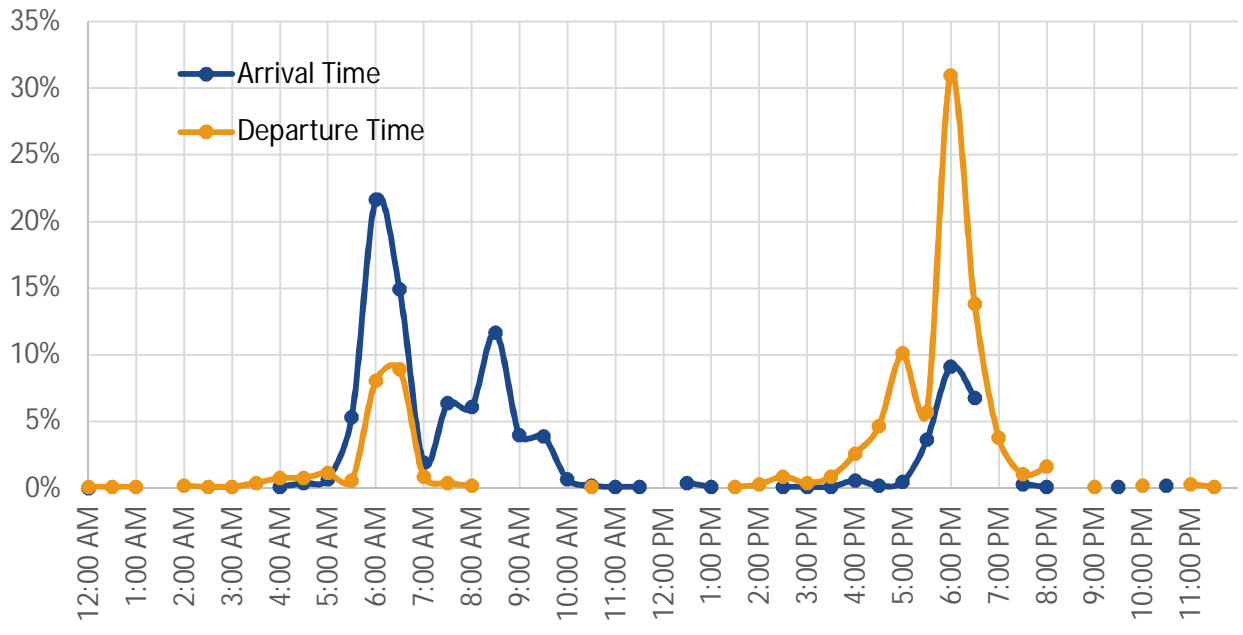


The majority of TRIC employees drive alone to/from work. **Figure 15** displays the responses as to why these individuals choose to drive alone to work. It should be noted that some employers at TRIC have company vehicles that can be used in emergency (18% of respondents noted this as a reason why they drive alone). One employer at TRIC provides free ride share trips home in case of an emergency for My Ride to Work users. The RTC provides guaranteed rides home in emergencies through a ride share or a taxi for VANPOOL users. Irregular hours were identified as an issue requiring a personal vehicle for 22% of survey respondents, while **Figure 16** shows that the majority of TRIC employees arrive and depart near the same times. **Figure 16** records the arrival and departure times at TRIC of survey respondents. Over 20% of respondents report for work at 6:00 AM and over 30% depart from work at 6:00 PM.



Source: 2018 TRIC Employee Survey

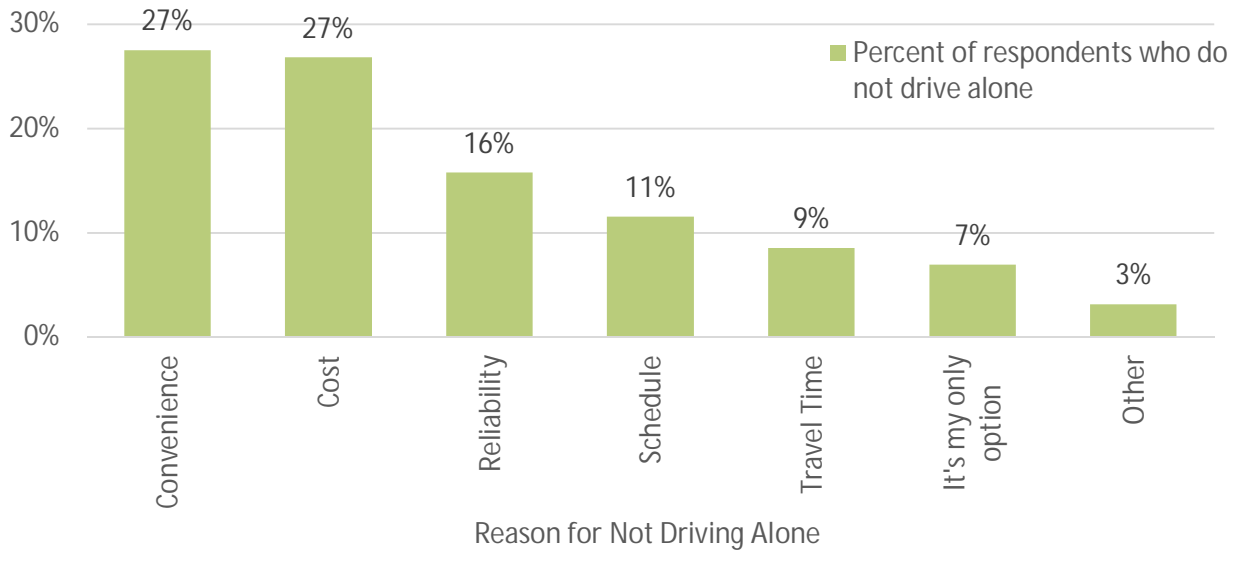
Figure 15 – TRIC Employee Reason for Driving Alone



Source: 2018 TRIC Employee Survey

Figure 16 – TRIC Employee Typical Arrival/Departure Times

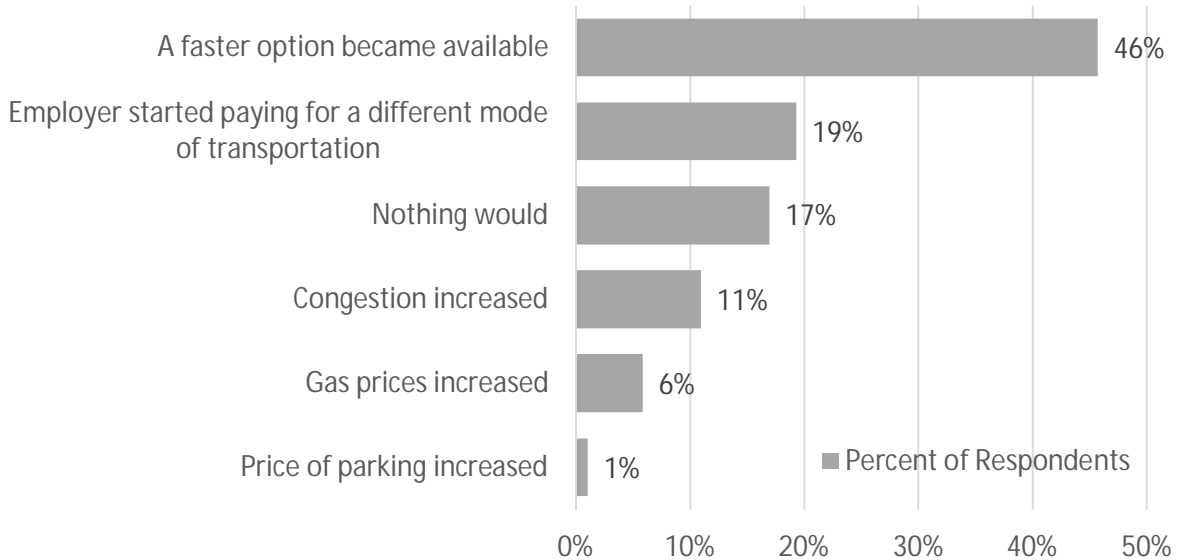
For those who currently travel by bus, shuttle, carpool, vanpool, or ride share, **Figure 17** includes the responses as to why that mode is chosen by TRIC employees. The majority of respondents choose not to drive alone due to the convenience or cost of alternate modes. It should also be noted that 7% of respondents said that an alternative to driving alone was their only option, showing that providing an alternative mode allowed these individuals to travel to/from work at TRIC.



Source: 2018 TRIC Employee Survey

Figure 17 – TRIC Employee Reason for Not Driving Alone

TRIC employees were asked what would be most likely to cause them to change how they get to work. The responses are included in **Figure 18**, and the most frequently chosen response was that a mode shift would likely be caused by a faster travel option.

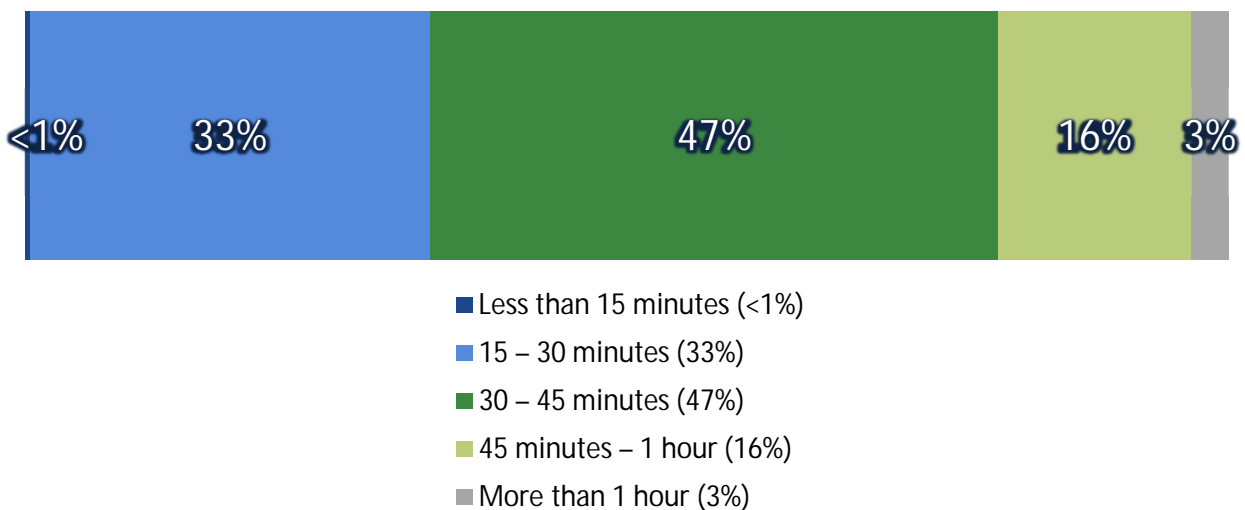


Source: 2018 TRIC Employee Survey

Figure 18 – TRIC Employee Likely Reason for Changing Mode

4.4. Travel Time

A related question was asked in the 2018 TRIC employee survey, determining how long TRIC employees travel to work. **Figure 19** shows that the majority of TRIC employees typically travel less than 45 minutes to work.

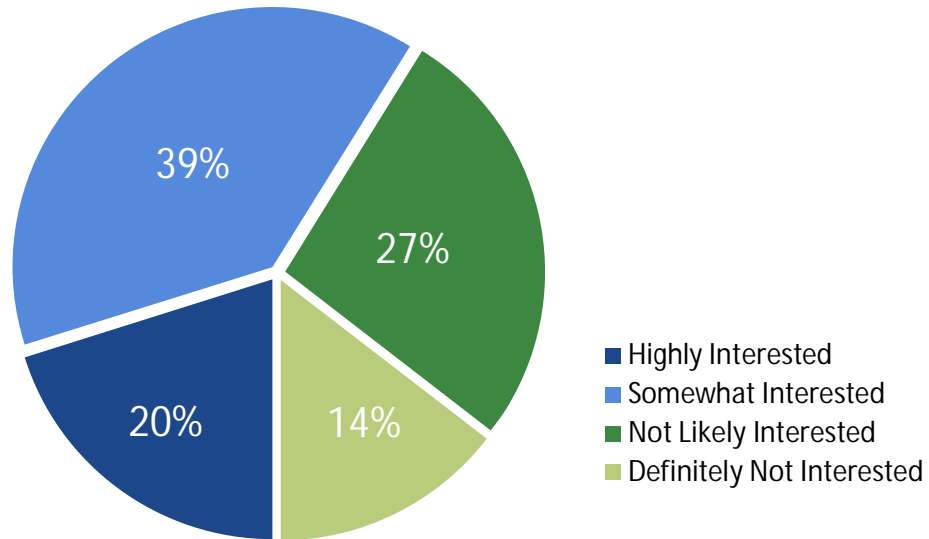


Source: 2018 TRIC Employee Survey

Figure 19 – TRIC Employee Typical Travel Times

4.5. Transit Interest

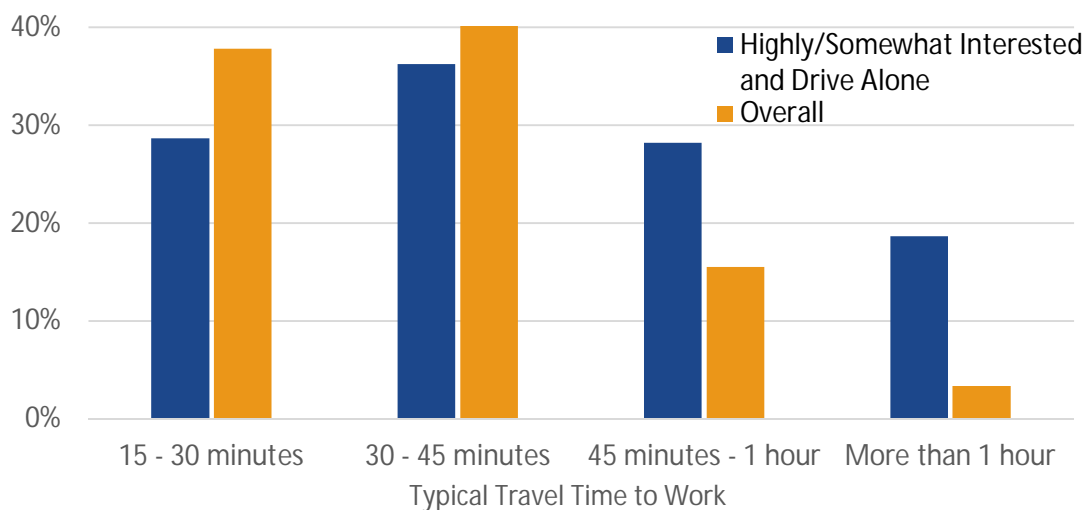
The 2018 TRIC employee survey asked, of those who drive alone, how interested those individuals are in trying a bus, carpool, or ride share. **Figure 20** shows the responses and that 59% of survey respondents are interested in other options other than driving alone.



Source: 2018 TRIC Employee Survey

Figure 20 – TRIC Employees that Drive Alone Interest in Transit/Carpool/Ride Share

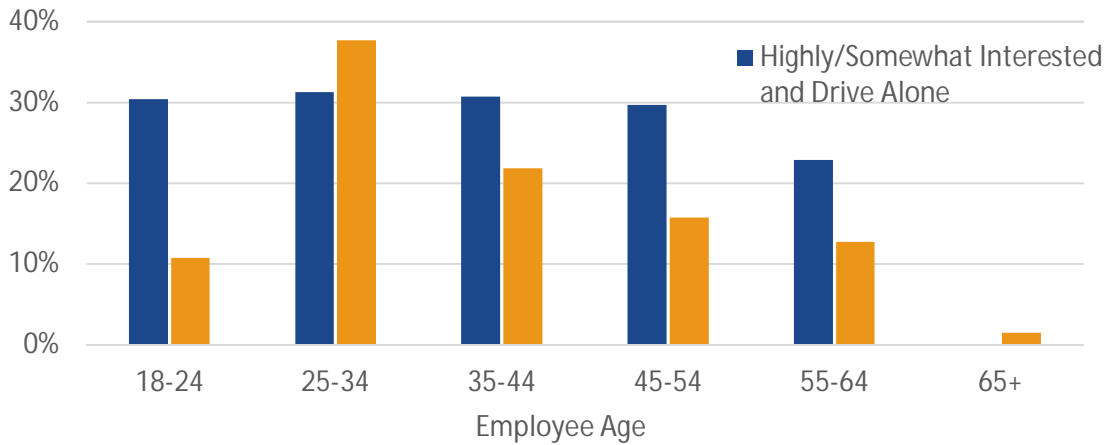
Figure 21 compares transit/carpool/ride share interest, those who expressed either that they were highly or somewhat interested in another mode than driving alone, to commute time. As seen in the figure, for those who typically travel more than 45 minutes, the interest level is higher than overall response to the question.



Source: 2018 TRIC Employee Survey

Figure 21 – TRIC Employee Interest in Transit by Commute Time

Figure 22 shows that generally age was not a factor, that 30% of those who expressed interest in transit appears in each age group, while after 55 years of age, the interest declined.



Source: 2018 TRIC Employee Survey

Figure 22 – TRIC Employee Interest in Transit by Employee Age

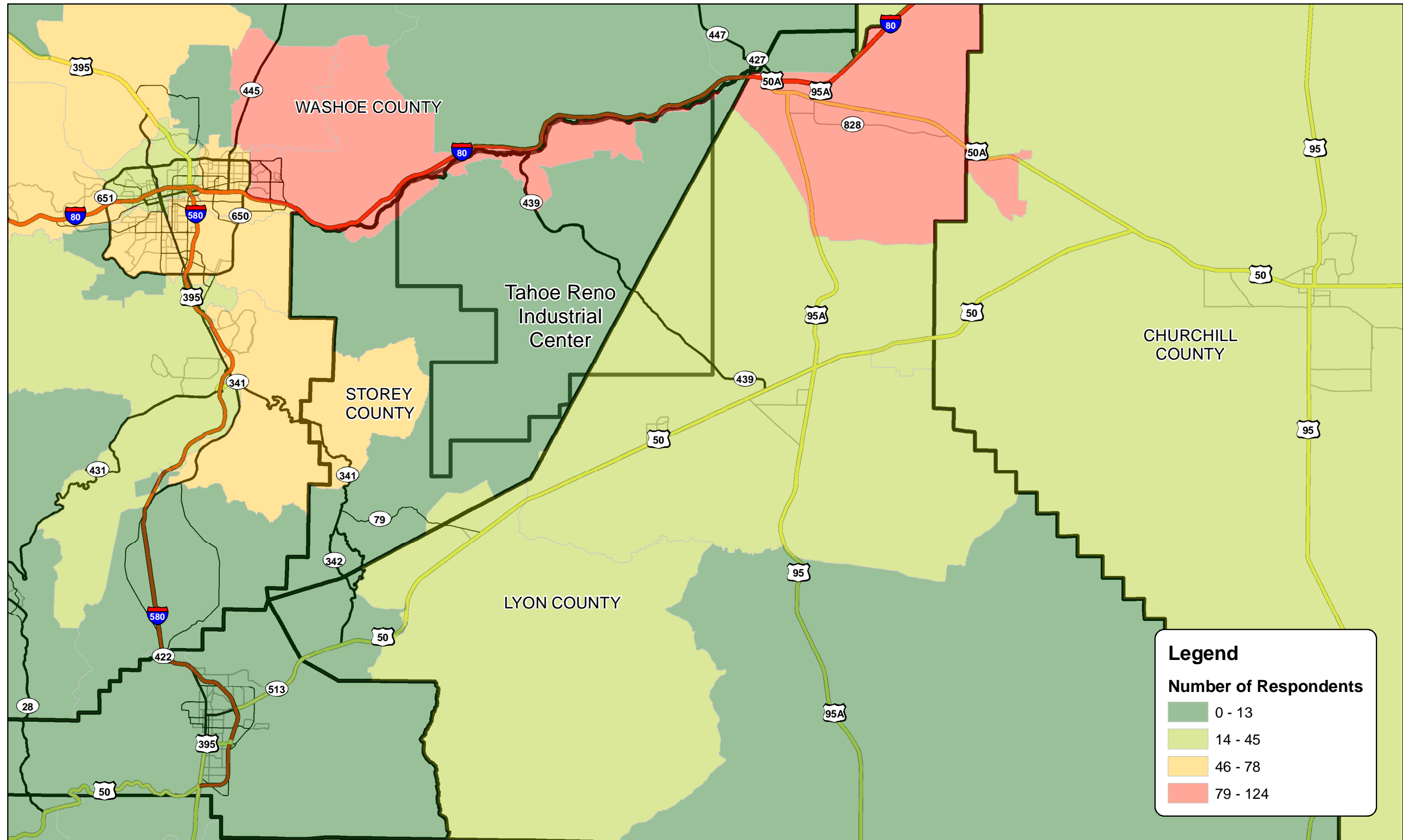
The percentage of individuals interested in transit generally increases as salary increases based on the 2018 TRIC employee survey data as shown in **Figure 23**.



Source: 2018 TRIC Employee Survey

Figure 23 – TRIC Employee Interest in Transit by Employee Income

Figure 25 shows the residential zip codes of TRIC employees who responded to the TRIC employee survey, **Figure 25** displays TRIC employees who currently drive alone to work who are highly or somewhat interested in transit, carpooling, or ride sharing.



Source: 2018 TRIC Employee Survey

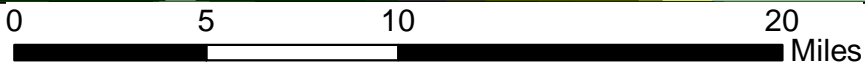
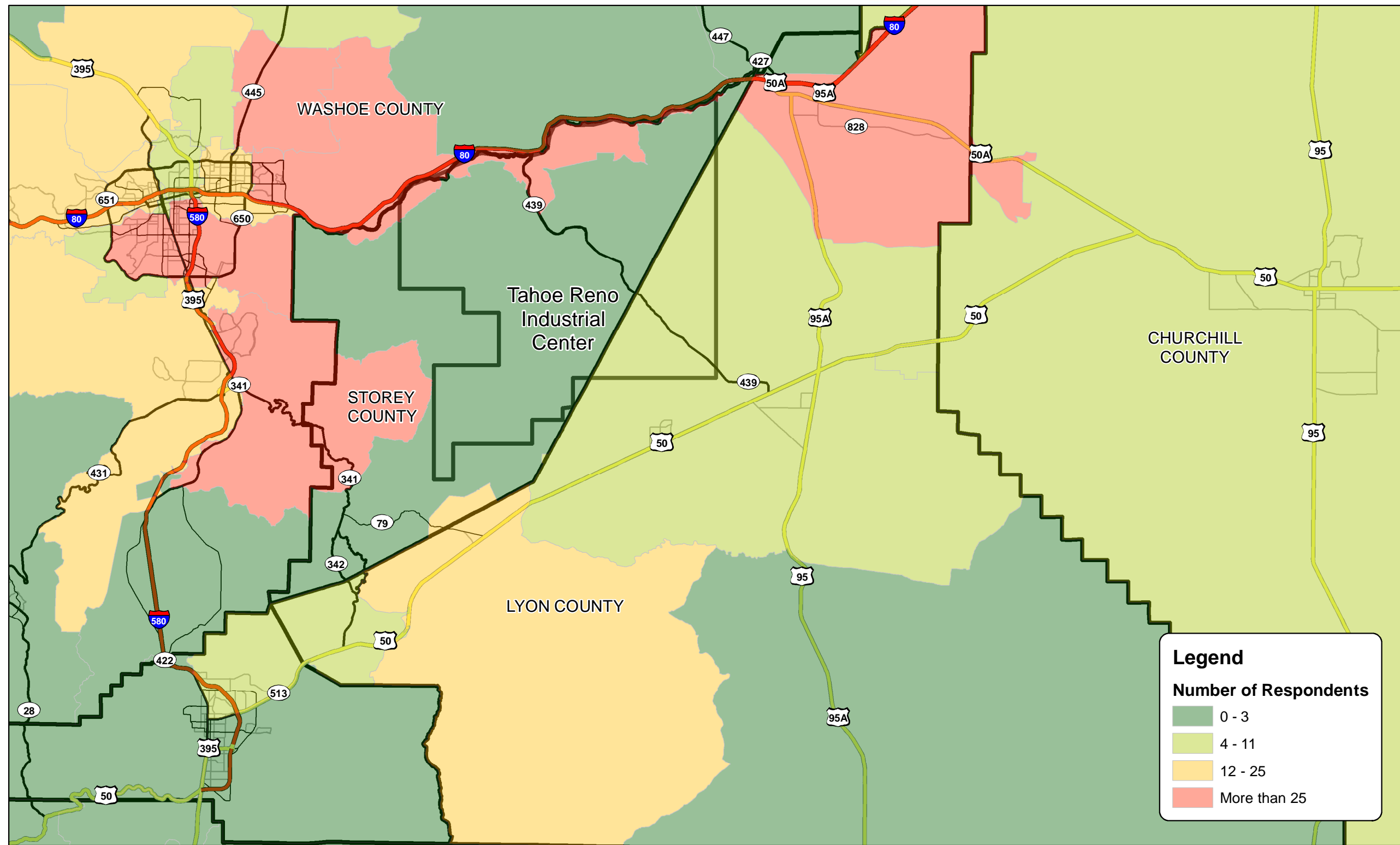


Figure 24 – Zip Codes of Survey Respondents



Source: 2018 TRIC Employee Survey

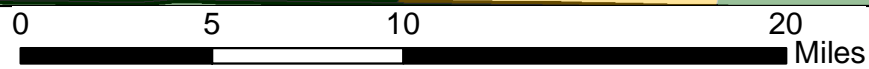


Figure 25 – Zip Codes of TRIC Employees Who Drive Alone with Interest in Transit

5. SUMMARY AND NEXT STEPS

5.1. Summary

This technical memorandum summarized publicly available data sources including the Washoe County Regional Travel Characteristics Study, ACS data, DETR data, and LEHD data for information and trends related to commute trips between TRIC and the 5-County Region. Trends regarding employment, employee origins and destinations, vehicle occupancy, mode split, and travel time were summarized. As noted, the majority of this data was compiled prior to the large employee expansion of TRIC and the construction of the USA Parkway connection to US-50 south of TRIC which has likely impacted travel patterns.

This memorandum also includes a summary of the results of a 2018 TRIC employee survey conducted as part of the Inter-County and Regional Transit Plan. The survey had 1,148 responses representing about 10% of the employees at TRIC. It was noted in this technical memorandum that the data and trends prior to 2015, and those generic to the 5-County Region differ from the results of the 2018 survey data specific to TRIC employees in mode choice, travel time, vehicle occupancy, and employee origins.

5.2. Next Steps

The information provided in this technical memorandum will be included in the final Inter-County and Regional Transit Plan report. This data will also be used to help develop scenarios for future planning exercises and alternative evaluation.

APPENDIX A

EXCERPTS FROM THE WASHOE COUNTY REGIONAL TRAVEL CHARACTERISTICS STUDY





REGIONAL TRANSPORTATION COMMISSION

Metropolitan Planning • Public Transportation & Operations • Engineering & Construction

Metropolitan Planning Organization of Washoe County, Nevada

Regional Transportation Commission

Washoe County Regional Travel Characteristics Study

04/12/2018

NUSTATS
RESEARCH SOLUTIONS

NuStats, LLC
Contact: Vivian Daigler, Project Manager
PO Box 19304
Austin, TX 78760
Phone: 512-279-4153
Fax: 512-485-2835
E-mail: vdaigler@nustats.com

In Association with:
PlanTrans, LLC
Coulter & Associates
Kimley-Horn and Associates

2.0 Executive Summary

The Regional Transportation Commission (RTC) Washoe County Regional Travel Characteristics Study was a collaborative effort designed to collect household social economics data, travel diary data, and GPS data from 2,500 households in the RTC travel demand model region.

The RTC Household Travel Survey (HHTS) was designed to collect data utilizing Computer Assisted Telephone Interviewing (CATI), on-line, paper diary mailed back to NuStats, and two Global Positioning System (GPS) technologies: data logger and smartphone technology (RouteScout). A pilot survey was conducted in early summer of 2015 in which the survey instrument and methodology were tested. The pilot survey was conducted in English only; however the full study was conducted in both English and Spanish.

For both the pilot and the main survey, travel days were assigned during the school year on Tuesdays, Wednesdays, and Thursdays throughout data collection, with the exception of holidays. The travel period for non-GPS households was one 24 hour period beginning at 12:00 a.m. on the assigned travel day, and ending at 11:59 p.m. that same day. Households that participated in the GPS study were asked to carry their GPS device or smartphone for a seven day period, with the first day of the travel period being their assigned travel day. All participating households were recruited either via CATI, or online (self-recruitment). Travel information was retrieved via CATI, online (self-retrieval), or mailed back diaries.

There were 2,154 completed households, which includes 1,929 non-GPS households and 225 GPS + diary households. Of the GPS households 155 used GPS data logger and 70 used GPS RouteScout.

The overall recruit response rate for the main survey was 13.5 percent¹, which was higher by 3.4 percent than the pilot recruit response rate of 10.1 percent. The overall retrieval rate for the main survey was 63.7 percent, which was nearly 10 percent higher than the pilot retrieval response rate of 53.9 percent.

Presented in Table 2 in the next section are the average trip rates broken down by demographic characteristic. The lowest trip rate of 1.22 trips per household per day is reported by respondents of African American ethnicity. The highest trip rate of 16.17 trips per household per day is found in respondents residing in households with four or more household members. This was followed by households having 3 or more workers with an average trip rate of 13.65 trips per day. The average trip rate per household is 7.32 trips per day. The average trip rate per person is 3.43 trips per day.

Presented in Table 3 in the next section is a summary of trip statistics. Total trips include all household trips by all modes of travel. Auto trips include driver/passenger trips using household vehicles, carpool/vanpool, motorcycle, and rental car trips. Driver trips include household vehicle driver trips. Included in transit trips are private shuttle, RTC Ride, RTC Access, RTC Intercity, Sierra Spirit, RTC Rapid, RTC Vanpool, Amtrak, school bus, and other bus.

¹ Based on the Council of American Survey Research Organization's (CASRO's) calculation of response rate, which includes all eligible and assumed eligible sampled households in the denominator

3.0 Key Statistics

Presented in Table 2 are the average trip rates broken down by demographic characteristic.

Table 2: Average Trip Rates by Demographic Characteristic (weighted and GPS factored)

Item	Trips per household/person per day
Household	7.32
Person	3.43
Household size	
1	3.05
2	5.64
3	9.14
4+	16.17
Household vehicles	
0	3.77
1	4.99
2	8.89
3+	9.56
Household workers	
0	3.40
1	7.00
2	11.02
3+	13.65
Household income	
Less than \$25,000	4.87
\$25,000 to less than \$50,000	6.50
\$50,000 to less than \$75,000	8.93
\$75,000 or less than \$100,000	7.65
\$100,000 or more	10.44
Refused to report income	4.65
Age	
<25 years old	3.11
25 – 34	3.31
35 – 44	4.58
45 – 54	3.87
55 – 64	3.62
65+	2.73
Hispanic Status	
Yes	3.45
No	3.43
Ethnicity	
White	3.53
African American	1.22
American Indian/Alaska Native	2.53
Asian	3.46
Native Hawaiian/Pacific Islander	2.12
Other	3.27
Refused to report ethnicity	3.20

Table 3 provides a summary of trip statistics.

Table 3: Key Household Travel Survey Trip Statistics (weighted and expanded)

	Total – 2015/2016
Total Household Trips	1,476,302
Total Household Auto Trips	1,281,136
Total Household Driver Trips	959,342
Total Transit Trips ²	73,045
Avg. Daily Household Trips per Household	7.32
Avg. Daily Person Trips (Per Person)	3.43
Avg. Daily Driver Trips Per Household	5.83
Avg. Daily Transit Trips per Household	0.44
Avg. Trip Length (All Trips In minutes)	14.67
Avg. Trip Length (All Trips In miles)	8.02
Avg. Trip Length (In minutes, Home to Work Trips ¹)	18.74
Avg. Trip Length (In miles, Home to Work Trips ¹)	11.85
Avg. Vehicle Occupancy (private vehicle driver, passenger, carpool trips only)	1.72

¹Home to Work Trips include unlinked trips between home and work place.

² Transit trips in 2016 survey includes RTC Ride, RTC Access (paratransit services), RTC Intercity, Sierra Spirit, RTC Rapid, RTC Vanpool, Amtrak, and Other Bus

Travel mode distribution is presented in Table 4.

Table 4: Travel Mode Distribution (weighted)

Mode	2015-2016 Mode Share
Non-Motorized Travel – walk, bike, wheelchair, other	7.9%
Private Vehicle – driver, passenger, carpool, motorcycle	86.2%
Private transit – taxi, rental, private shuttle, greyhound, airplane and other	1%
Public transit	4.5%
Total	100%

4.0 Introduction

The 2015-2016 RTC Travel Characteristics Survey was a multi-modal study of the demographic and travel behavior characteristics of residents throughout Washoe County, Nevada. Detailed travel behavior information was obtained from 2,154 households, using multiple data collection methods, including Computer Assisted Telephone Interviewing (CATI), online, mail surveys, wearable GPS devices, and a smartphone application. The survey sampling plan was designed to ensure an accurate representation of the entire RTC region.

4.1 Survey Objectives and Overall Approach

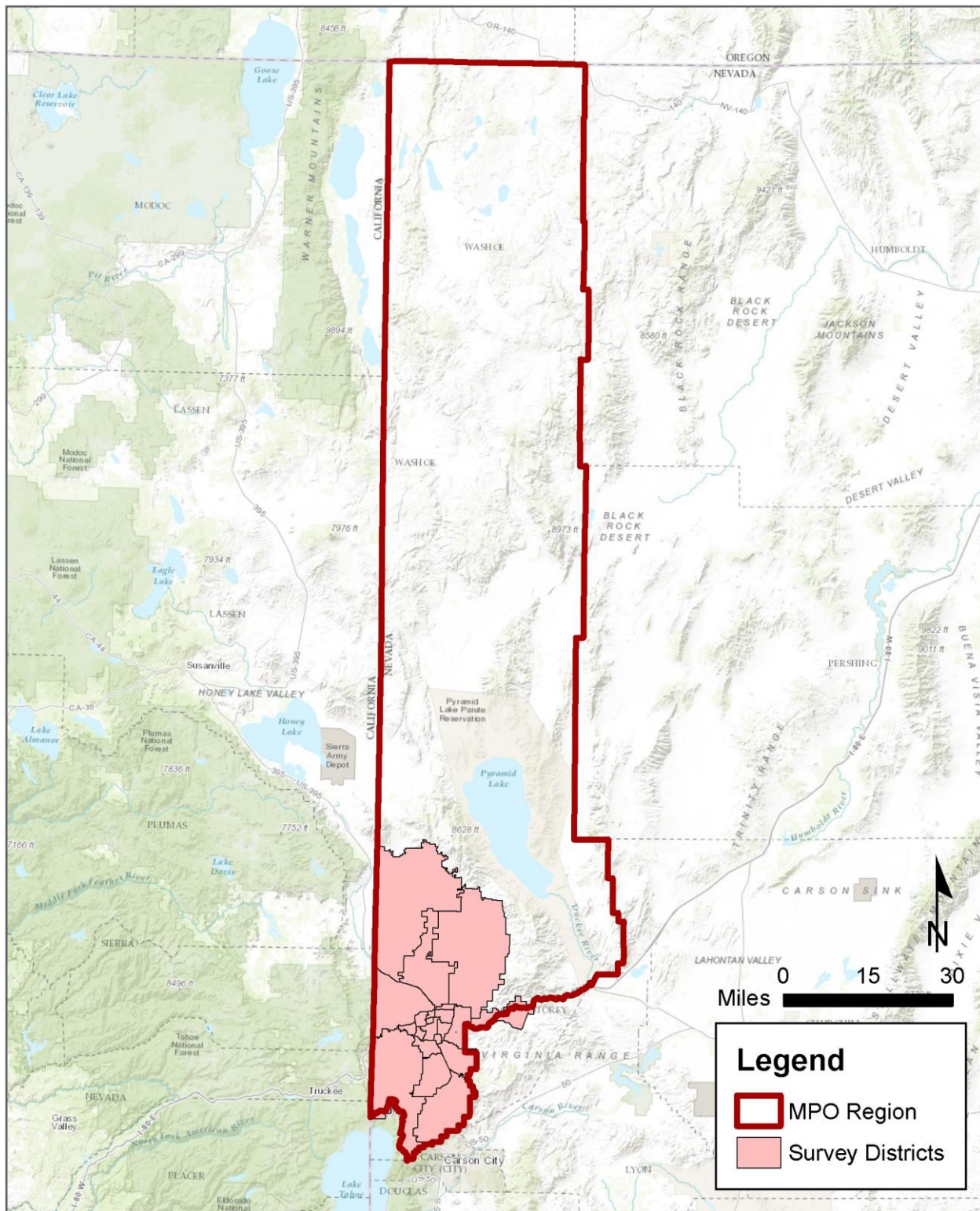
The main objective of the household travel study was to collect completed travel surveys from 2,500 households in the RTC region. The completed households are representative of the population of the 20 planning districts in Reno-Sparks. These 20 districts were disaggregated based on geographic and socioeconomic characteristics. Of particular interest to the RTC is the stratification of the resulting data into 2 two-dimensional categories: vehicles per household and number of workers per household and; household size and household income level. Ten percent of the responding households were selected to participate with GPS technology, either by wearing a GPS Data Logger (DL) or by utilizing RouteScout (NuStats' smartphone GPS tracking application). Participating households were required to complete a traditional travel diary. The GPS data serves to adjust unreported trips.

Assigned travel days were Tuesday through Thursday, except for holidays that fell on one of those days. During school breaks, data collection was suspended until school was back in session. With the approval of the RTC project manager, several travel days were added to the assigned travel day schedule in late fall 2015, and in early spring 2016.

A pilot study was conducted in early summer 2015 in order to assess respondent reaction to the survey and to confirm that the survey questions would yield the desired data. A summary of the pilot study is presented in Section 6.1. The pilot report provided recommendations for modifications that were implemented for the full study.

Figure 1 shows a map of the survey study area.

Figure 1: RTC MPO Map of the Household Travel Survey Study Area*



*Source: http://www.rtcwashoe.com/mapwarehouse/RTC_MPO_Area.pdf

10.3 Trip Characteristics

This section presents the characteristics of the trips themselves. Specific data elements collected were: main purpose of travel (activity); mode of travel; and travel times.

Respondents were asked to record the activity they participated in at each trip destination. Aside from activities at home/work/school that initiated the trips, routine shopping (8.6 percent), pick up/drop off passengers (8.1 percent), social/visit friends/relatives (4 percent), and eat meal restaurant/diner (3.8 percent) were the main other activities performed. Trip distribution by activity is shown in Table 62.

Table 62: Trip Distribution by Activity [weighted]

Activity	Trip Counts	Percent
At Home		
Personal activities (sleeping, personal care, leisure, chores, etc.)	4,401	27.9%
Preparing meals / eating	405	2.6%
Hosting visitors / entertaining guests	17	.1%
Exercise (with or without equipment) / playing sports	25	.2%
Study / schoolwork	105	.7%
Work for pay at home using telecommunications equipment	63	.4%
Using computer / telephone / cell or smartphone or other communications device for personal activities	116	.7%
All other activities at home	381	2.4%
At Work		
Work / job duties	1,927	12.2%
Training	24	.2%
Meals at work	15	.1%
Work sponsored social activities (holiday or birthday celebrations, etc.)	4	.0%
Non-work related activities (social clubs, etc.)	16	.1%
Exercise / sports	11	.1%
Volunteer work / activities	78	.5%
All other work-related activities	85	.5%
At School		
In School / classroom / laboratory	973	6.2%
Meals at school / college	3	.0%
After school or non-class-related sports / physical activity	50	.3%
All other after-school or non-class-related activities (library, band rehearsal, clubs, etc.)	77	.5%
Quick Stops / Trips		
Change of transportation / transfer	385	2.4%
Pickup / drop off passenger(s)	1,271	8.1%
Drive-through meals (snacks, coffee, etc.)	228	1.4%
Drive-through other (ATM, bank, etc.)	153	1.0%
At Other Places		
Work related (meeting, sales call, delivery)	197	1.2%
Service private vehicle (gas, oil, lube, repairs)	226	1.4%
Routine shopping (groceries, clothing, convenience store, household maintenance)	1,363	8.6%
Shopping for major purchases or specialty items (appliances, electronics, new vehicle, major	278	1.8%

Activity	Trip Counts	Percent
household repairs)		
Household errands (bank, dry cleaning, etc.)	129	.8%
Personal business (visit government office, attorney, accountant)	224	1.4%
Eat meal at restaurant / diner	596	3.8%
Health care (doctor, dentist, eye care, chiropractor, veterinarian)	437	2.8%
Civic/religious activities	169	1.1%
Outdoor exercise (sports, jogging, bicycling, walking, walking dog, etc.)	238	1.5%
Indoor exercise (gym, yoga, etc.)	246	1.6%
Entertainment (movies, watch sports, etc.)	231	1.5%
Social / visit friends / relatives	630	4.0%
Total	15,776	100.0%

10.3.1 Mode Choice

For each trip, respondents were asked to provide the mode of travel they used. The distribution of trips by mode collected from the survey is shown in Table 63. The most popular travel mode choice was Auto / Van / Truck Driver with 66.8 percent of trips made using this mode. The next most popular mode was Auto / Van / Truck Passenger with 19.5 percent of trips being made using this mode.

Table 63: Trip Distribution by Travel Mode [weighted and GPS factored]

Mode	Frequency	Percent
Walk	1,049	6.5%
Bike	178	1.1%
Wheelchair / Mobility Scooter	4	.0%
Other Non-Motorized (skateboard, etc.)	19	.1%
Auto / Van / Truck Driver	10,252	66.8%
Auto / Van / Truck Passenger	3,268	19.5%
Carpool / Vanpool (RTC Trip Match)	52	.4%
Motorcycle / Scooter / Moped	31	.2%
Taxi / Hired Car / Limo	11	.1%
Rental Car / Vehicle	88	.5%
Private Shuttle (Employer, Hotel, etc.)	22	.1%
Airplane	19	.1%
Other Private Transit	24	.1%
RTC Transit	363	2.14%
RTC Access (paratransit services)	21	.1%
RTC Vanpool	0	0.00%
Amtrak	0	0.00%
School Bus	363	2.1%
Other Bus	11	.1%
Total	15,776	100.0%

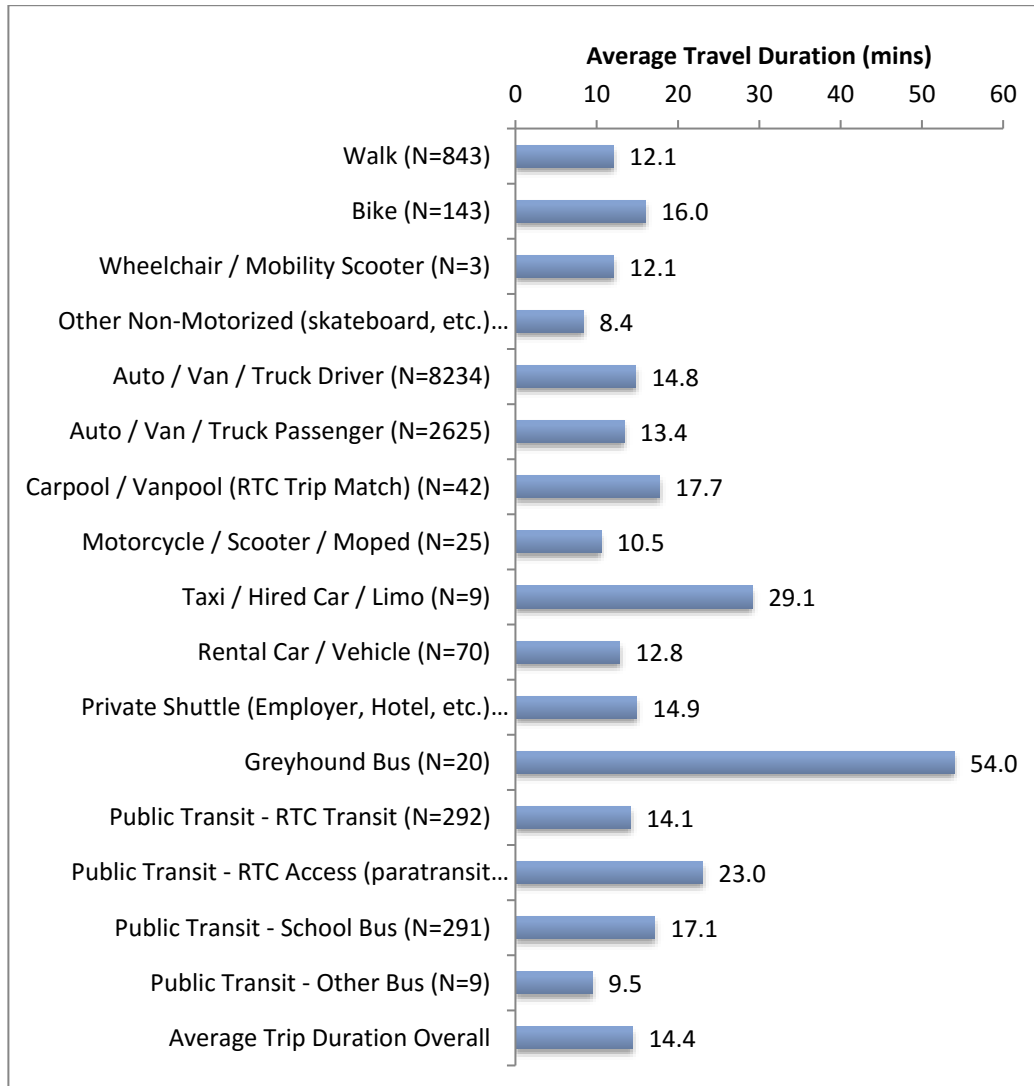
The results were distributed amongst four mode choices (Private Vehicle, Public Transit, Non-Motorized, and Other) as presented in Table 64.

Table 64: Mode Choice Comparison

Mode	2015-2016 Mode Share
Non-Motorized Travel – walk, bike, wheelchair, other	8.1%
Private Vehicle – driver, passenger, carpool, motorcycle	86.0%
Other - taxi, rental, private shuttle, greyhound, airplane	1.0 %
Public transit	4.9%
Total	100%

Trip duration varied by mode. Overall, the average trip duration was 14.4 minutes, with Other Non-Motorized trips being shortest taking 8.4 minutes on average. Greyhound Bus trips took the longest at 54 minutes. Figure 21 presents the results for average trip duration by mode and is based on the unlinked trips.

Figure 21: Average Travel Duration by Mode



APPENDIX B
2017 4TH QUARTER DETR DATA FOR TRIC

Nevada Department of Training and Employment and Rehabilitation (2017 - 4th Quarter) - Tahoe Reno Industrial Center

Area	Ownership	Industry Code	Industry	Size Class Value	Size Class	Yr. Qtr.	Trade Name	Address	City	State	Zip	Address Type
Storey County	Private	331315	Aluminum Sheet, Plate, and Foil Mfg	00	zero; no employment	201704	ALCOA SIERRA MICROMILL	1400 WALTHAM WAY	MCCARRAN	NV	89434	Physical address
Storey County	Private	493110	General Warehousing and Storage	00	zero; no employment	201704	INTELLISTAFF LLC	2195 USA PKWY	MCCARRAN	NV	89434	Physical address
Storey County	Private	561612	Security Guards and Patrol Services	00	zero; no employment	201703	WHELAN SECURITY	2777 USA PARKWAY	MCCARRAN	NV	89434	Physical address
Storey County	Private	238992	All Other Nonresidential Trade Contrs	00	zero; no employment	201704	ASSOCIATED CRANE AND OIL FIELD	235 LONDON DRIVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	236210	Industrial Building Construction	00	zero; no employment	201703	W G YATES CONSTRUCTION	420 USA PKWY STE 103	MCCARRAN	NV	89434	Physical address
Storey County	Private	238212	Nonresidential Electrical Contractors	00	zero; no employment	201704	EDWARDS ELECTRIC SERVICE LLC	2641 PORTOFINO RD	MCCARRAN	NV	89434	Physical address
Storey County	Private	238912	Nonresidential Site Preparation Contrs	00	zero; no employment	201703	F AND P-YATES	261 PORTIFINO DRIVE	MCARRAN	NV	89434	Physical address
Storey County	Private	236210	Industrial Building Construction	00	zero; no employment	201704	JESCO, INC.	ELECTRIC AVENUE	MCCARRAN	NV	89434	Physical address
Storey County	Private	541380	Testing Laboratories	00	zero; no employment	201703	INSPECTION SERVICES INC	885 DENMARK DR STE 101	MCCARRAN	NV	89434	Physical address
Storey County	Private	331410	Other Nonferrous Metal Production	00	zero; no employment	201704	MODERN MINING SOLUTIONS LLC	1280 ALEXANDRIA COURT	MCCARRAN	NV	89434	Physical address
Storey County	Private	238212	Nonresidential Electrical Contractors	00	zero; no employment	201704	CARR ELECTRICAL TECHNOLOGY INC	1 ELECTRIC AVENUE	MCCARRAN	NV	89434	Physical address
Storey County	Private	236220	Commercial Building Construction	00	zero; no employment	201704	UNIQUE BUILDING GROUP INC	ONE ELECTRIC DRIVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	238122	Nonresidential Structural Steel Contrs	00	zero; no employment	201704	W&W-AFCO STEEL, LLC	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	541350	Building Inspection Services	00	zero; no employment	201704	FST TECHNICAL SERVICES, LLC	1 ELECTRIC AVENUE	MCCARRAN	NV	89434	Physical address
Storey County	Private	238292	Other Nonresidential Equipment Contrs	00	zero; no employment	201704	D.W. NICHOLSON CORPORATION	1 ELECTRIC AVENUE	MCCARRAN	NV	89434	Physical address
Storey County	Private	484220	Other Specialized Trucking, Local	00	zero; no employment	201704	BG1	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	561320	Temporary Help Services	00	zero; no employment	201704	ADAMS & GARTH	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	238122	Nonresidential Structural Steel Contrs	00	zero; no employment	201704	CONXTECH CONSTRUCTION INC	1 ELECTRIC	MCCARRAN	NV	89434	Physical address
Storey County	Private	238292	Other Nonresidential Equipment Contrs	00	zero; no employment	201704	HMI INDUSTRIAL CONTRACTORS INC.	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	999999	Unclassified	00	zero; no employment	201704	HUMAN RESOURCES UNLTD INC	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	561320	Temporary Help Services	00	zero; no employment	201704	PREMIER ELECTRICAL STAFFING LLC	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	238212	Nonresidential Electrical Contractors	00	zero; no employment	201704	AUTOMATION LOGISTICS CORPORATION	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	484110	General Freight Trucking, Local	00	zero; no employment	201704	PROPAK TRANSPORT LLC	2777 USA PARKWAY, #107	MCCARRAN	NV	89434	Physical address
Storey County	Private	236118	Residential Remodelers	01	1 to 4 employees	201704	CB RICHARD ELLIS INC	555 MILAN DRIVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	624230	Emergency and Other Relief Services	01	1 to 4 employees	201704	AMERICAN NATIONAL RED CROSS	2555 USA PKWY 100	MCCARRAN	NV	89434	Physical address
Storey County	Private	221310	Water Supply and Irrigation Systems	01	1 to 4 employees	201704	TRI WATER & SEWER COMPANY	145 BRITAIN WAY	MCCARRAN	NV	89434	Physical address
Storey County	Private	811111	General Automotive Repair	01	1 to 4 employees	201704	SIERRA TRUCK & TRAILER	201 WILD HORSE CANYON DR	MCCARRAN	NV	89434	Physical address
Storey County	Private	321920	Wood Container and Pallet Manufacturing	01	1 to 4 employees	201704	UNIVERSAL FOREST PRODUCTIONS	3000 WALTHAM WAY	MCCARRAN	NV	89434	Physical address
Storey County	Private	493110	General Warehousing and Storage	01	1 to 4 employees	201704	ELEY CORPORATION	625 WALTHAM WAY	MCCARRAN	NV	89434	Physical address
Storey County	Private	238112	Nonresidential Poured Foundation Contrs	01	1 to 4 employees	201704	SUNTEC CONCRETE INC	1 ELECTRIC AVENUE	MCCARRAN	NV	89434	Physical address
Storey County	Private	493120	Refrigerated Warehousing and Storage	01	1 to 4 employees	201704	1-800-FLOWERS	625 WALTHAM WAY	MCCARRAN	NV	89434	Physical address
Storey County	Private	493110	General Warehousing and Storage	01	1 to 4 employees	201704	BUSH INDUSTRIES INC	2555 USA PARKWAY STE 101	MCCARRAN	NV	89434	Physical address
Storey County	Private	238912	Nonresidential Site Preparation Contrs	01	1 to 4 employees	201704	HUNT CONSTRUCTION	201 LONDON DRIVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	493110	General Warehousing and Storage	01	1 to 4 employees	201704	JACOBSON WAREHOUSE COMPANY INC	2555 USA PKWY STE 102	MCCARRAN	NV	89434	Physical address
Storey County	Private	332420	Metal Tank (Heavy Gauge) Manufacturing	01	1 to 4 employees	201704	A-Z WELDING & FABRICATION	1215 ALEXANDRIA CT	MCCARRAN	NV	89434	Physical address
Storey County	Private	423840	Industrial Supplies Merchant Wholesalers	01	1 to 4 employees	201704	HARRIS WELDING SUPPLY	236 E SYDNEY DRIVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	238172	Nonresidential Siding Contractors	01	1 to 4 employees	201704	LTI CONTRACTING	ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	238292	Other Nonresidential Equipment Contrs	01	1 to 4 employees	201704	MURATA MACHINERY USA INC	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	811219	Other Electronic and Precision Equipment Repa	01	1 to 4 employees	201704	KATAOKA-SS AMERICA CORP	ONE ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	621210	Offices of Dentists	01	1 to 4 employees	201704	DESERT VALLEY DENTAL	420 USA PKWY STE 105	MCCARRAN	NV	89434	Physical address
Storey County	Private	238121	Residential Structural Steel Contractors	01	1 to 4 employees	201704	DERR AND GRUEBEWALD CONSTRUCTION CO	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	484220	Other Specialized Trucking, Local	01	1 to 4 employees	201704	RICH DOSS INC	201 WILD HORSE CANYON DR	MCCARRAN	NV	89434	Physical address
Storey County	Private	561320	Temporary Help Services	01	1 to 4 employees	201704	NATIONAL CONSTRUCTION WORKFORCE INC	USA PARKWAY	MCCARRAN	NV	89434	Physical address
Storey County	Private	541690	Other Technical Consulting Services	01	1 to 4 employees	201704	SHORE MANAGEMENT & DEVELOPMENT NV,	222 E SYDNEY DR	MCCARRAN	NV	89434	Physical address
Storey County	Private	238212	Nonresidential Electrical Contractors	01	1 to 4 employees	201704	MJ ELECTRIC LLC	1799 WALTHAM WAY	MACCARRAN	NV	89434	Physical address
Storey County	Private	541512	Computer Systems Design Services	01	1 to 4 employees	201704	KDDI AMERICA, INC.	1 ELECTRIC AVENUE	MCCARRAN	NV	89434	Physical address
Storey County	Private	999999	Unclassified	01	1 to 4 employees	201704	SYNCREON TECHNOLOGY AMERICA INC	2555 USA PKWY STE 105	MCCARRAN	NV	89434	Physical address
Storey County	Private	325998	Other Miscellaneous Chemicals Mfg	01	1 to 4 employees	201704	ASIA UNION ELECTRONIC CHEMICALS-REN	1400 WALTHAM WAY	MCCARRAN	NV	89434	Physical address
Storey County	Private	561320	Temporary Help Services	01	1 to 4 employees	201704	PREMIER AUTOMATION CONTRACTORS	1 ELECTRIC	MCCARRAN	NV	89434	Physical address
Storey County	Private	541330	Engineering Services	01	1 to 4 employees	201704	SSOE	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	541990	All Other Professional & Technical Svc	01	1 to 4 employees	201704	STEYER ASSOCIATES, INC	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	722330	Mobile Food Services	01	1 to 4 employees	201704	BRUNCH BOX	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	722330	Mobile Food Services	01	1 to 4 employees	201704	THE BURNT ORANGE	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	999999	Unclassified	01	1 to 4 employees	201704	NEW EARTH CONCEPTS, LLC	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	488510	Freight Transportation Arrangement	01	1 to 4 employees	201704	NIPPON EXPRESS U.S.A., INC.	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	541512	Computer Systems Design Services	01	1 to 4 employees	201704	ESMO USA CORP	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	212321	Construction Sand and Gravel Mining	02	5 to 9 employees	201704	GOPHER CONSTRUCTION	655 PERU	SPARKS	NV	89401	Physical address
Storey County	Private	237990	Other Heavy Construction	02	5 to 9 employees	201704	AMES CONSTRUCTION	1075 PERU DRIVE	SPARKS	NV	89434	Physical address
Storey County	Private	488490	Other Support Activities, Road Transport	02	5 to 9 employees	201704	WAL-MART STORES, INC	2195 USA PKWY	SPARKS	NV	89434	Physical address
Storey County	Private	115114	Postharvest Crop Activity exc. Cotton Ginning	02	5 to 9 employees	201704	PIONEER NUT CO LLC	2999 WALTHAM WAY	MCCARRAN	NV	89434	Physical address
Storey County	Private	722410	Drinking Places (Alcoholic Beverages)	02	5 to 9 employees	201704	USA PKWY TAVERN	500 USA PKWY #101	SPARKS	NV	89434	Physical address
Storey County	Private	493110	General Warehousing and Storage	02	5 to 9 employees	201704	SAGINAW CONTROL & ENGINEERING	795 DENMARK DR	MCCARRAN	NV	89434	Physical address
Storey County	Private	531312	Nonresidential Property Managers	02	5 to 9 employees	201704	SACO DEFENSE SYSTEMS LLC	300 E SYDNEY DR	MCCARRAN	NV	89434	Physical address
Storey County	Private	484220	Other Specialized Trucking, Local	02	5 to 9 employees	201704	NORTHGATE EXPRESS	500 IRELAND DR	MCCARRAN	NV	89434	Physical address
Storey County	Private	488510	Freight Transportation Arrangement	02	5 to 9 employees	201704	BOWEN LOGISTICS INC	201 WILD HORSE CANYON DR	MCCARRAN	NV	89434	Physical address
Storey County	Private	484220	Other Specialized Trucking, Local	02	5 to 9 employees	201704	WESTERN PACIFIC EXPRESS LLC	500 IRELAND DR	MCCARRAN	NV	89434	Physical address
Storey County	Private	334613	Magnetic and Optical Media Manufacturing	02	5 to 9 employees	201704	KUNAKI LLC	1170 WALTHAM WAY	SPARKS	NV	89434	Physical address
Storey County	Private	493110	General Warehousing and Storage	02	5 to 9 employees	201704	DYNAREX CORPORATION	725 WALTHAM WAY	MCCARRAN	NV	89434	Physical address
Storey County	Private	238122	Nonresidential Structural Steel Contrs	02	5 to 9 employees	201704	NEHEMIAH REBAR SERVICES INC	700 USA PARKWAY	MCCARRAN	NV	89434	Physical address
Storey County	Private	488490	Other Support Activities, Road Transport	02	5 to 9 employees	201704	FHI LLC	1200 VENICE DRIVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	238992	All Other Nonresidential Trade Contrs	02	5 to 9 employees	201704	ASSOCIATED CRANE LLC	235 LONDON DR	MCCARRAN	NV	89434	Physical address
Storey County	Private	238212	Nonresidential Electrical Contractors	02	5 to 9 employees	201704	VERITAS MANAGED SOLUTIONS	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	238212	Nonresidential Electrical Contractors	02	5 to 9 employees	201704	SAI ELECTRICAL CONTRACTORS	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	237110	Water and Sewer System Construction	02	5 to 9 employees	201704	DN TANKS, INC.	1 ELECTRIC AVENUE	MCCARRAN	NV	89434	Physical address
Storey County	Private	238292	Other Nonresidential Equipment Contrs	02	5 to 9 employees	201704	SANKYU USA INCORPORATED	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	115114	Postharvest Crop Activity exc. Cotton Ginning	02	5 to 9 employees	201704	SSUSA WEST, LLC	470 E SYDNEY RD	MCCARRAN	NV	89434	Physical address
Storey County	Private	238212	Nonresidential Electrical Contractors	02	5 to 9 employees	201704	INTELLIGENT FIRE SYSTEMS AND SOLUTI	1 ELECTRIC AVENUE	MCCARRAN	NV	89434	Physical address
Storey County	Private	238212	Nonresidential Electrical Contractors	02	5 to 9 employees	201704	ELITE CABLE SYSTEMS INC	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address

Storey County	Private	236220	Commercial Building Construction	02	5 to 9 employees	201704	SOUTHERN INDUSTRIAL CONSTRUCTORS IN	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	238992	All Other Nonresidential Trade Contrs	02	5 to 9 employees	201704	OMEGA MORGAN	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	423910	Sporting Good Merchant Wholesalers	03	10 to 19 employees	201704	TACHIKARA U.S.A INC	100 IRELAND DR	MCCARRAN	NV	89434	Physical address
Storey County	Private	531210	Offices of Real Estate Agents & Brokers	03	10 to 19 employees	201704	L LANCE GILLMAN COML REAL EST	420 USA PARKWAY STE #6	MCCARRAN	NV	89434	Physical address
Storey County	Private	812990	All Other Personal Services	03	10 to 19 employees	201704	WILD HORSE SALOON LLC	1000-A WILDHORSE CANYON DR	SPARKS	NV	89434	Physical address
Storey County	Private	812990	All Other Personal Services	03	10 to 19 employees	201704	WILD HORSE RESORT & SPA	1011 WILD HORSE CANYON DR	SPARKS	NV	89434	Physical address
Storey County	Private	324110	Petroleum Refineries	03	10 to 19 employees	201704	GOLDEN GATE SET PETROLEUM PTR	500 IRELAND DR	MCCARRAN	NV	89434	Physical address
Storey County	Private	447110	Gasoline Stations w/ Convenience Stores	03	10 to 19 employees	201704	GOLDEN GATE PETROLEUM	500 USA PKWY	MCCARRAN	NV	89434	Physical address
Storey County	Private	493120	Refrigerated Warehousing and Storage	03	10 to 19 employees	201704	MOMS MEALS	775 WALTHAM WAY STE 105	MCCARRAN	NV	89434	Physical address
Storey County	Private	722513	Limited-Service Restaurants	03	10 to 19 employees	201704	PORT OF SUBS #197	500 USA PKWY #103	MCCARRAN	NV	89434	Physical address
Storey County	Private	722513	Limited-Service Restaurants	03	10 to 19 employees	201704	SUBWAY SANDWICHES	420 USA PARKWAY STE 102	MCCARRAN	NV	89434	Physical address
Storey County	Private	493110	General Warehousing and Storage	03	10 to 19 employees	201704	SCHWABE NORTH AMERICA	2777 USA PKWY STE 106	MCCARRAN	NV	89434	Physical address
Storey County	Private	332119	Metal Crown, Closure, and Other Metal Stampin	03	10 to 19 employees	201704	LAMBERTSON INC	1335 ALEXANDRIA COURT	SPARKS	NV	89434	Physical address
Storey County	Private	238212	Nonresidential Electrical Contractors	03	10 to 19 employees	201704	QUALITY PLUS SERVICES, INC	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	541990	All Other Professional & Technical Svc	03	10 to 19 employees	201704	MUNDIAL GROUP INC.	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	237120	Oil and Gas Pipeline Construction	03	10 to 19 employees	201704	UCI CONSTRUCTION INC	2500 PERU DRIVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	541330	Engineering Services	03	10 to 19 employees	201704	DPS ADVANCED TECHNOLOGY GROUP INC	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	238292	Other Nonresidential Equipment Contrs	03	10 to 19 employees	201704	MEI RIGGING & CRATING LLC	1 ELECTRIC AVENUE	MCCARRAN	NV	89434	Physical address
Storey County	Private	238292	Other Nonresidential Equipment Contrs	03	10 to 19 employees	201704	MASTHEAD INTERNATIONAL INC	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	332812	Metal Coating and Nonprecious Engraving	03	10 to 19 employees	201704	METOKOTE CORPORATION	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	332999	Miscellaneous Fabricated Metal Products	04	20 to 29 employees	201704	DURAFLEX INTERNATIONAL CORP	160 WUNOTOO RD	MCCARRAN	NV	89434	Physical address
Storey County	Private	238221	Residential Plumbing/HVAC Contractors	04	20 to 29 employees	201704	EASY ROOTER	125 LONDON DR	MCCARRAN	NV	89434	Physical address
Storey County	Private	484121	General Freight Trucking, Long-Dist TL	04	20 to 29 employees	201704	J CS XPRESS INC	630 WALTHAM WAY	MCCARRAN	NV	89434	Physical address
Storey County	Private	238122	Nonresidential Structural Steel Contrs	04	20 to 29 employees	201704	VORTEX STEEL INC	99 MEGABYTE DR	MCCARRAN	NV	89434	Physical address
Storey County	Private	493110	General Warehousing and Storage	04	20 to 29 employees	201704	PPG INDUSTRIES	201 IRELAND DR	MCCARRAN	NV	89434	Physical address
Storey County	Private	811310	Commercial and Industrial Machinery and Equip	04	20 to 29 employees	201704	PROPAK LOGISTICS INC	2777 USA PARKWAY	MCCARRAN	NV	89434	Physical address
Storey County	Private	332322	Sheet Metal Work Manufacturing	04	20 to 29 employees	201704	THYBAR CORPORATION	711 DENMARK DRIVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	811310	Commercial and Industrial Machinery and Equip	04	20 to 29 employees	201704	SSR MANUFACTURING CORP	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	238212	Nonresidential Electrical Contractors	04	20 to 29 employees	201704	NEWTRON LLC	1 ELECTRIC AVE	SPARKS	NV	89434	Physical address
Storey County	Private	493110	General Warehousing and Storage	05	30 to 39 employees	201704	TIRE RACK, THE	3300 WALTHAM WAY	MCCARRAN	NV	89434	Physical address
Storey County	Private	326299	All Other Rubber Product Manufacturing	05	30 to 39 employees	201704	DYNAMIC ISOLATION SYSTEMS INC	885 DENMARK DR STE 101	MCCARRAN	NV	89434	Physical address
Storey County	Private	484220	Other Specialized Trucking, Local	05	30 to 39 employees	201704	CHICKEN HAWK TRANSPORT LLC	235 LONDON DRIVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	238222	Nonresidential Plumbing/HVAC Contractors	05	30 to 39 employees	201704	SHAMBAUGH & SON LP	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	423450	Medical Equipment Merchant Wholesalers	05	30 to 39 employees	201704	BENCO DENTAL SUPPLY CO	625 WALTHAM WAY	MCCARRAN	NV	89434	Physical address
Storey County	Private	493110	General Warehousing and Storage	05	30 to 39 employees	201703	DUNKEL MACHINERY MOVING	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	238292	Other Nonresidential Equipment Contrs	05	30 to 39 employees	201704	AUTOMATION MOVERS INTERNATIONAL INC	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	238352	Nonresidential Finish Carpentry Contrs	05	30 to 39 employees	201704	ADVANCED TECHNOLOGY GROUP	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	221112	Fossil Fuel Electric Power Generation	06	40 to 49 employees	201704	NV ENERGY	191 WUNOTOO RD	SPARKS	NV	89434	Physical address
Storey County	Private	561440	Collection Agencies	06	40 to 49 employees	201704	FIRST NATIONAL COLLECTION BURE	610 WALTHAM WAY	MCCARRAN	NV	89434	Physical address
Storey County	Private	493110	General Warehousing and Storage	06	40 to 49 employees	201704	KUEHNE + NAGEL	2555 USA PKWY #104	MCCARRAN	NV	89434	Physical address
Storey County	Private	331491	Nonferrous, ex. Copper/Aluminum, Shaping	06	40 to 49 employees	201704	AQUA METALS INC	2500 PERU DR	MCCARRAN	NV	89434	Physical address
Storey County	Private	541350	Building Inspection Services	06	40 to 49 employees	201704	LOTUSWORKS	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	488490	Other Support Activities, Road Transport	06	40 to 49 employees	201704	CHASEN USA INC	1 ELECTRIC AVENUE	MCCARRAN	NV	89436	Physical address
Storey County	Private	325510	Paint and Coating Manufacturing	07	50 to 59 employees	201704	PPG INDUSTRIES	500 PITTSBURGH AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	326140	Polystyrene Foam Product Manufacturing	07	50 to 59 employees	201704	ACH FOAM TECHNOLOGIES INC	775 WALTHAM WAY STE 105	MCCARRAN	NV	89434	Physical address
Storey County	Private	212399	All Other Nonmetallic Mineral Mining	08	60 to 69 employees	201704	EAGLE-PICHER MINERALS, INC	640 CLARK STATION RD	MCCARRAN	NV	89434	Physical address
Storey County	Private	484110	General Freight Trucking, Local	08	60 to 69 employees	201704	BOWEN TRANSPORTATION INC	201 WILD HORSE CANYON DR	MCCARRAN	NV	89434	Physical address
Storey County	Private	423320	Masonry Material Merchant Wholesalers	08	60 to 69 employees	201704	SCHLUTER SYSTEMS LP	100 GERMANY CIRCLE	MCCARRAN	NV	89434	Physical address
Storey County	Private	336390	Other Motor Vehicle Parts Manufacturing	08	60 to 69 employees	201704	VALEO	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	561320	Temporary Help Services	08	60 to 69 employees	201704	PROSTAR STAFFING SERVICES INC	1 ELECTRIC AVENUE	MCCARRAN	NV	89434	Physical address
Storey County	Private	624210	Community Food Services	10	80 to 89 employees	201704	FOOD BANK OF NORTHERN NEVADA I	550 ITALY DRIVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	221112	Fossil Fuel Electric Power Generation	10	80 to 89 employees	201704	PIC GROUP INC	2555 WALTHAM WAY	MCCARRAN	NV	89434	Physical address
Storey County	Private	332431	Metal Can Manufacturing	10	80 to 89 employees	201704	ARDAGH METAL PACKAGING USA INC	900 WALTHAM WAY	MCCARRAN	NV	89434	Physical address
Storey County	Private	326291	Mechanical Rubber Product Manufacturing	10	80 to 89 employees	201704	SCOUGAL RUBBER CORPORATION	885 DENMARK DR STE	MCCARRAN	NV	89434	Physical address
Storey County	Private	238222	Nonresidential Plumbing/HVAC Contractors	10	80 to 89 employees	201704	HARRIS & HART INC	GIGAFACTORY ELECTRIC AVENUE	MCCARRAN	NV	89434	Physical address
Storey County	Private	238222	Nonresidential Plumbing/HVAC Contractors	10	80 to 89 employees	201704	JB HENDERSON CONSTRUCTION	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	332994	Small Arms Manufacturing	11	90 to 99 employees	201704	U S ORDNANCE	300 E SYDNEY DR	SPARKS	NV	89434	Physical address
Storey County	Private	332119	Metal Crown, Closure, and Other Metal Stampin	11	90 to 99 employees	201704	H & T NEVADA LLC	1 ELECTRIC AVENUE	MCCARRAN	NV	89434	Physical address
Storey County	Private	518210	Data Processing and Related Services	12	100 to 199 employees	201704	APPLE, INC.	21505 RENO TECHNOLOGY PKWY WEST	MCCARRAN	NV	89434	Physical address
Storey County	Private	327390	Other Concrete Product Manufacturing	12	100 to 199 employees	201704	JAMES HARDIE BLDG PRODUCTS INC	3000 WALTHAM WAY	MCCARRAN	NV	89434	Physical address
Storey County	Private	311111	Dog and Cat Food Manufacturing	12	100 to 199 employees	201704	KAL KAN FOODS, INC	500 WALTHAM	MCCARRAN	NV	89434	Physical address
Storey County	Private	238222	Nonresidential Plumbing/HVAC Contractors	12	100 to 199 employees	201704	HARDER MECHANICAL CONTRACTORS	1 ELECTRIC AVENUE	MCCARRAN	NV	89434	Physical address
Storey County	Private	493110	General Warehousing and Storage	12	100 to 199 employees	201704	RANDA ACCESSORIES LOGISTICS	201 IRELAND DR	MCCARRAN	NV	89434	Physical address
Storey County	Private	493110	General Warehousing and Storage	12	100 to 199 employees	201704	EBAY ENTERPRISE INC	2777 USA PKWY STE 101	MCCARRAN	NV	89434	Physical address
Storey County	Private	493110	General Warehousing and Storage	12	100 to 199 employees	201704	SMX-STAFF MANAGEMENT LLC	3200 USA PKWY	MCCARRAN	NV	89434	Physical address
Storey County	Private	238312	Nonresidential Drywall Contractors	12	100 to 199 employees	201704	BRYCON CORPORATION	1 ELECTRIC AVENUE	MCCARRAN	NV	89434	Physical address
Storey County	Private	238222	Nonresidential Plumbing/HVAC Contractors	12	100 to 199 employees	201704	APOLLO MECHANICAL CONTRACTORS	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address
Storey County	Private	493110	General Warehousing and Storage	13	200 to 299 employees	201704	PETSMART DISTRIBUTION INC	1200 VENICE WAY	MCCARRAN	NV	89434	Physical address
Storey County	Private	484230	Other Specialized Trucking, Long-Dist	14	300 to 399 employees	201704	C R ENGLAND INC	2155 USA PARKWAY	MCCARRAN	NV	89434	Physical address
Storey County	Private	493110	General Warehousing and Storage	15	400 to 499 employees	201704	INTELLISOURCE LLC	700 MILAN DRIVE STE 104	MCCARRAN	NV	89434	Physical address
Storey County	Private	493110	General Warehousing and Storage	18	700 to 799 employees	201704	WAL-MART STORES, INC.	2195 USA PKWY	SPARKS	NV	89434	Physical address
Storey County	Private	493110	General Warehousing and Storage	18	700 to 799 employees	201704	ZULILY	3200 USA PKWY	MCCARRAN	NV	89434	Physical address
Storey County	Private	493110	General Warehousing and Storage	18	700 to 799 employees	201704	CHEWY INC	700 MILAN DR	MCCARRAN	NV	89434	Physical address
Storey County	Private	335911	Storage Battery Manufacturing	21	1000 to 1499 employees	201704	PANASONIC CORP OF N AMERICA	1 ELECTRIC AVENUE	MCCARRAN	NV	89434	Physical address
Storey County	Private	335911	Storage Battery Manufacturing	25	3000 to 3499 employees	201704	TESLA INC	1 ELECTRIC AVE	MCCARRAN	NV	89434	Physical address

APPENDIX C
LEHD DATA OUTPUTS



Work Area Profile Report

Total All Jobs

	2015	
	Count	Share
Total All Jobs	3,306	100.0%

Jobs by Worker Age

	2015	
	Count	Share
Age 29 or younger	824	24.9%
Age 30 to 54	1,856	56.1%
Age 55 or older	626	18.9%

Jobs by Earnings

	2015	
	Count	Share
\$1,250 per month or less	415	12.6%
\$1,251 to \$3,333 per month	1,682	50.9%
More than \$3,333 per month	1,209	36.6%

Jobs by NAICS Industry Sector

	2015	
	Count	Share
Agriculture, Forestry, Fishing and Hunting	10	0.3%
Mining, Quarrying, and Oil and Gas Extraction	82	2.5%
Utilities	117	3.5%
Construction	130	3.9%
Manufacturing	702	21.2%
Wholesale Trade	89	2.7%
Retail Trade	13	0.4%

Jobs by NAICS Industry Sector

2015

	Count	Share
Transportation and Warehousing	1,864	56.4%
Information	0	0.0%
Finance and Insurance	0	0.0%
Real Estate and Rental and Leasing	18	0.5%
Professional, Scientific, and Technical Services	1	0.0%
Management of Companies and Enterprises	0	0.0%
Administration & Support, Waste Management and Remediation	125	3.8%
Educational Services	0	0.0%
Health Care and Social Assistance	89	2.7%
Arts, Entertainment, and Recreation	0	0.0%
Accommodation and Food Services	15	0.5%
Other Services (excluding Public Administration)	51	1.5%
Public Administration	0	0.0%

Jobs by Worker Race

2015

	Count	Share
White Alone	2,799	84.7%
Black or African American Alone	119	3.6%

Jobs by Worker Race

2015

	Count	Share
American Indian or Alaska Native Alone	125	3.8%
Asian Alone	145	4.4%
Native Hawaiian or Other Pacific Islander Alone	21	0.6%
Two or More Race Groups	97	2.9%

Jobs by Worker Ethnicity

2015

	Count	Share
Not Hispanic or Latino	2,487	75.2%
Hispanic or Latino	819	24.8%

Jobs by Worker Educational Attainment

2015

	Count	Share
Less than high school	496	15.0%
High school or equivalent, no college	702	21.2%
Some college or Associate degree	841	25.4%
Bachelor's degree or advanced degree	443	13.4%
Educational attainment not available (workers aged 29 or younger)	824	24.9%

Jobs by Worker Sex

2015

	Count	Share
Male	2,103	63.6%

Jobs by Worker Sex

2015

	Count	Share
Female	1,203	36.4%

Report Settings

Analysis Type	Area Profile
Selection area as	Work
Year(s)	2015
Job Type	All Jobs
Labor Market Segment	All Workers
Selection Area	Selection Area Shape from C:\fakepath\TRIC.SHP
Selected Census Blocks	300
Analysis Generation Date	12/11/2018 14:09 - OnTheMap 6.5
Code Revision	d6ec994dcb416ba9b4b1b8cb2b4d690f01609fc9
LODES Data Version	20160219

Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2002-2015).

Notes:

1. Race, Ethnicity, Educational Attainment, and Sex statistics are beta release results and are not available before 2009.
2. Educational Attainment is only produced for workers aged 30 and over.
3. Firm Age and Firm Size statistics are beta release results for All Private jobs and are not available before 2011.

Home Destination Report - Where Workers Live Who are Employed in the Selection Area - by Places (Cities, CDPs, etc.)

Total All Jobs

	2015	
	Count	Share
Total All Jobs	3,306	100.0%

Jobs Counts by Places (Cities, CDPs, etc.) Where Workers Live - All Jobs

	2015	
	Count	Share
Reno city, NV	1,021	30.9%
Sparks city, NV	705	21.3%
Fernley city, NV	409	12.4%
Sun Valley CDP, NV	169	5.1%
Carson City, NV	112	3.4%
Spanish Springs CDP, NV	97	2.9%
Silver Springs CDP, NV	54	1.6%
Cold Springs CDP, NV	33	1.0%
Fallon city, NV	33	1.0%
Lemmon Valley CDP, NV	31	0.9%
All Other Locations	642	19.4%

Report Settings

Analysis Type	Destination
Destination Type	Places (Cities, CDPs, etc.)
Selection area as	Work
Year(s)	2015
Job Type	All Jobs
Selection Area	Selection Area Shape from C:\fakepath\TRIC.SHP
Selected Census Blocks	300
Analysis Generation Date	12/11/2018 14:16 - OnTheMap 6.5
Code Revision	d6ec994dcb416ba9b4b1b8cb2b4d690f01609fc9
LODES Data Version	20160219

Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2002-2015).

Notes:

1. Race, Ethnicity, Educational Attainment, and Sex statistics are beta release results and are not available before 2009.
2. Educational Attainment is only produced for workers aged 30 and over.
3. Firm Age and Firm Size statistics are beta release results for All Private jobs and are not available before 2011.

Distance/Direction Report - Work Census Block to Home Census Block

Job Counts in Home Blocks by Distance Only

	2015	
	Count	Share
Total All Jobs	3,306	100.0%
Less than 10 miles	126	3.8%
10 to 24 miles	2,648	80.1%
25 to 50 miles	350	10.6%
Greater than 50 miles	182	5.5%

📍 Job Counts in Home Blocks to the North of Work Blocks by Distance

	2015	
	Count	Share
Total All Jobs	17	100.0%
Less than 10 miles	-	-
10 to 24 miles	8	47.1%
25 to 50 miles	3	17.6%
Greater than 50 miles	6	35.3%

📍 Job Counts in Home Blocks to the Northeast of Work Blocks by Distance

	2015	
	Count	Share
Total All Jobs	110	100.0%
Less than 10 miles	2	1.8%
10 to 24 miles	66	60.0%
25 to 50 miles	-	-
Greater than 50 miles	42	38.2%

Job Counts in Home Blocks to the East of Work Blocks by Distance

	2015	
	Count	Share
Total All Jobs	478	100.0%
Less than 10 miles	-	-
10 to 24 miles	361	75.5%
25 to 50 miles	105	22.0%
Greater than 50 miles	12	2.5%

Job Counts in Home Blocks to the Southeast of Work Blocks by Distance

	2015	
	Count	Share
Total All Jobs	101	100.0%
Less than 10 miles	-	-
10 to 24 miles	71	70.3%
25 to 50 miles	11	10.9%
Greater than 50 miles	19	18.8%

Job Counts in Home Blocks to the South of Work Blocks by Distance

	2015	
	Count	Share
Total All Jobs	158	100.0%
Less than 10 miles	-	-
10 to 24 miles	71	44.9%
25 to 50 miles	56	35.4%
Greater than 50 miles	31	19.6%

Job Counts in Home Blocks to the Southwest of Work Blocks by Distance

2015

	Count	Share
Total All Jobs	366	100.0%
Less than 10 miles	12	3.3%
10 to 24 miles	178	48.6%
25 to 50 miles	125	34.2%
Greater than 50 miles	51	13.9%

Job Counts in Home Blocks to the West of Work Blocks by Distance

2015

	Count	Share
Total All Jobs	1,866	100.0%
Less than 10 miles	89	4.8%
10 to 24 miles	1,719	92.1%
25 to 50 miles	41	2.2%
Greater than 50 miles	17	0.9%

Job Counts in Home Blocks to the Northwest of Work Blocks by Distance

2015

	Count	Share
Total All Jobs	210	100.0%
Less than 10 miles	23	11.0%
10 to 24 miles	174	82.9%
25 to 50 miles	9	4.3%
Greater than 50 miles	4	1.9%

Report Settings

Analysis Type	Distance/Direction
Selection area as	Work
Year(s)	2015
Job Type	All Jobs
Selection Area	Selection Area Shape from C:\fakepath\TRIC.SHP
Selected Census Blocks	300
Analysis Generation Date	12/11/2018 14:15 - OnTheMap 6.5
Code Revision	d6ec994dcb416ba9b4b1b8cb2b4d690f01609fc9
LODES Data Version	20160219

Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2002-2015).

Notes:

1. Race, Ethnicity, Educational Attainment, and Sex statistics are beta release results and are not available before 2009.
2. Educational Attainment is only produced for workers aged 30 and over.
3. Firm Age and Firm Size statistics are beta release results for All Private jobs and are not available before 2011.

APPENDIX D

2018 TRIC EMPLOYEE SURVEY INSTRUMENT



Tahoe Reno Industrial Center Transportation Survey



As Northern Nevada grows with the expansion of the Tahoe Reno Industrial Center (TRIC), the region must plan to encourage the use of sustainable transportation modes by providing adequate service levels and connectivity. The Nevada Department of Transportation (NDOT), in cooperation with the Economic Development Authority of Western Nevada (EDAWN) and Storey County, is planning for additional transportation options to serve TRIC through the Inter-County and Regional Transit Plan.

Your comments, concerns, and recommendations will help inform this plan.

Please take 5 minutes to provide your input.

Thank you for your feedback and for your interest in transportation connections to TRIC!

1. Do you work in the Tahoe Reno Industrial Center?

- Yes
- No

2. What is your employment status?

- Full Time
- Part Time
- Temporary
- Other (please specify)
- Contractor
- Intern

3. How long have you worked at your current place of employment?

- Less than a year
- 1-2 years
- 2-5 years
- More than 5 years

4. How do you currently travel to work most often?

- I drive alone
- I drive or ride in a carpool
- I drive or ride in a RTC VANPOOL
- I bike
- Other (please specify)
- I walk
- I take transit
- I use My Ride to Work

Tahoe Reno Industrial Center Transportation Survey



5. Why do you currently drive alone?

- Irregular hours
- Personal preference
- Ability to make other stops during commute
- Ability to get home in case of emergency
- Need to use personal vehicle on job
- Family responsibilities
- Limited transportation options
- Other (please specify)

6. What type of vehicle do you drive?

- Gasoline
- Hybrid - Non Plug In
- Hybrid - Plug In
- Electric Plug In

7. How interested are you in trying a bus, carpool, or ride share?

- Highly interested
- Somewhat interested
- Not likely interested
- Definitely not interested

Tahoe Reno Industrial Center Transportation Survey



8. Why do you currently travel to work via this mode of transportation?

- Convenience
- Reliability
- Cost
- Schedule
- Travel Time
- It's my only option for transportation
- Other (please specify)

9. How long does it currently take you to get to work?

- Less than 15 minutes
- 15 - 30 minutes
- 30 - 45 minutes
- 45 minutes - 1 hour
- More than 1 hour

10. How much does commute time affect your decision when choosing an employer?

- Very much
- Somewhat
- Not at all

11. Does your employer currently pay for any part of your transportation?

- Yes
- No

12. What would be most likely to cause you to change how you get to work?

- A faster option became available
- Your employer started paying for a different mode of transportation
- Congestion increased
- Gas prices increased
- Price of parking increased
- Nothing would cause you to change how you get to work

13. What is your home zipcode?

14. What is your work zipcode

15. What time do you typically arrive at work?

Time

 -

16. What time do you typically leave work?

Time

 -

17. Do you regularly have access to a vehicle?

- Yes
- No

18. What is your age?

- Under 18
- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65+

19. What is your annual income?

- Less than \$30,000
- \$30,000-\$60,000
- \$60,000-\$90,000
- \$90,000-\$120,000
- \$120,000-\$150,000
- Greater than \$150,000
- Prefer Not to Answer

20. Do you work in management at your place of employment?

- Yes
- No

Tahoe Reno Industrial Center Transportation Survey



21. How many many employees work at your workplace location?

Full Time Employees	<input type="text"/>
Part Time Employees	<input type="text"/>
Temporary Employees (at peak)	<input type="text"/>
Contractors	<input type="text"/>
Interns	<input type="text"/>

22. What is your peak season?

- Spring
- Summer
- Other (please specify)
- Fall
- Winter

23. What are the overall hours of operation at your workplace?

24. What are the shift times at your workplace? Please list the approximate number of workers per shift time.

25. Please share any other questions or comments that you have about transportation connecting to the Tahoe Reno Industrial Center.

APPENDIX E

ISSUES AND CONCERNS FROM 2018 SURVEY RESPONDENTS



Please share any other questions or comments that you have about transportation connecting to the Tahoe Reno Industrial Center.
I80 is the only connection to Reno that is feasible in the winter and there is no contingency for issues.
The amount of accidents on the highway between Reno Tahoe industrial center have become increasingly disturbing. Two lane Highway for all that traffic is causing horrible gridlock to say the least. Not to mention on a daily basis I see unsafe driving there are not enough police patrolling that area to keep people from driving on safely. Also when you exit exit the highway from the Patrick exit and proceeded to USA Parkway quite frequently there are drivers that will pass or drive down the turning lane because other drivers are actually following the speed limit and again there are no police officers to stop these people. The highway needs to be widened and better patrolled I'm tired of seeing my coworkers and myself in danger on the way to my job. I speak for myself here I drive safely and I have a family that wants me to come home to them but just because I Drive Safely doesn't mean that the people around me are doing the same this needs to be addressed quickly.
I-80 needs to be widened with access on side of road for accidents to be able to pull off. Better egress at I-80 & USA Parkway.
Freeway should be 3 travel lanes both directions from Sparks/Reno. Buses should run from a central location in Reno and/or Sparks directly to Industrial Area - no stops except at businesses in Industrial Park. Most employees living outside central Reno or central Sparks have no option, except to drive alone to work. Carpooling does not work, since employees are so wide-spread from each other.
Please address the I 80 westbound on ramp accessibility issue. Get a light rail or Monorail
Have we explored the idea of a light rail?
Does this survey consider housing options?
Will be quitting soon because of hazardous traffic conditions
at time when there are accidents on the interstate traffic can become gridlocked for hours. although it does not happen very regularly the issue is when people are stuck on a bus for a few hours they need access to a bathroom. which the shuttles do not have. it would be nice if the shuttles had a bathroom for when there are situations like that. other than that i love the shuttle system
We need more lanes on I-80. How about double deck I-80 between Vista Blvd. and USA Pkwy. That would be 4 lanes each way. That would leave no congestion.
It would be nice and appropriate if carpool transportation had it's own lane to bypass the greedy drivers that prevent access to move forward.
Not sure if this is the place to put this but the lines in the road going from the building to USA parkway badly need restriping! Gonna have an accident when things get wet! Also, it's too dark coming around the curve leading out of the facility going down the hill
Would electric rail be an efficient way to improve?
Getting on I80 West when the shifts at Tesla and other local businesses are out is a big problem, and with the future expansion of Tesla and the industrial area a much wider access will be needed
A more regular shuttle service would be great. Tesla & Panasonic provide shuttles, but they are tuned to the hourly workers' shift schedules (early in the morning). I would consider taking a shuttle that is more in line with my arrival time. I would also like to have a covered bike locker at the shuttle stop available for rent to solve the first-mile/last-mile problem. Seattle has these at their park & ride and transit hubs.
Something needs to be done to address the congestion in the area.
Any consideration for a train system to bypass the high ways altogether? Weather causes issues while travelling on the highway.
Would be great to have an option for biking to work
We need a separate bus from Fernley, by the time it arrives from Fallon it is full and we have people stranded.
My Ride to Work is great, except when 1 of 3 drivers is continually late to pick up and makes up the time by speeding! That and that co-workers that show up after you cut the line to get on the shuttle!
Fernley and Fallon each need their own designated shuttles. Some days there have not been enough room and had to turn away riders.
More lanes on the highways and better on/off ramps for our drivers who don't seem to know what they are doing
Depending on what time you leave for work USA Parkway is really backed up. The on ramp from USA Highway to i80 Westbound could be redone. The on ramp has a traffic signal, and you have to cross over exiting traffic from the freeway.

Shuttles from Reno with bike racks on the shuttles or secure bike parking at shuttle stops would be awesome! There's a ton of traffic on Electric and USA parkway, this would help a lot. Departure time between 8 and 9 AM would be ideal. Thanks!
I find that a majority of the issues for transportation and road rage in this city is due to severe congestion and limited road travel options. The town is too big for the small highways and roads connecting the suburbs to downtown. Las Vegas and Phoenix are enormous cities, but if you take a look at their road design and major expanded arteries to get to the opposite side of town, you will find that it takes 30 minutes to get anywhere in Vegas. To drive from Spanish Springs to South Reno, it takes 45 minutes, when this should typically take 20. Way too much time spent on trying to get a large workforce and travelers through a 2 - 3 lane freeway. There are also waaaaaaaaaaay too many merge lanes. If a driver doesn't know one is coming, this can create a domino affect of panic.
A bike route from Sparks to USA parkway would be great. From what I can tell, there is a route most of the way, less a 2 or so mile stretch between sparks and Lockwood.
Is there or will there be available any sort of discounted room rate from the hotels that the shuttles pick up from to go out to many of the businesses in the industrial center during inclement weather?
It is great to have the option to take the shuttle, thankful!
More buses
would help to have a alternative
It's gotten better since I started to work out here, but the commute is influenced by the sheer number of people attempting to arrive or leave work at any given time.
Widen interstate 80 before it gets worse. If you look at it, it's not that hard to do.
I wish there was a regular bus service to and from the area to local Reno destinations or specific park and ride points
It would be great to have a shuttle service for south Reno area.
Make more access to I80
If there were more shuttles that left Reno, they take freeway and it's right as people in Reno are going home, so very congested if they would leave earlier maybe traffic won't be as bad.
1. There should be a shuttle pick-up/drop-off point in South Reno (I currently reside in S. Reno and drive to the Sparks stop). Most of the stops are central to the 80 corridor. The opening of the southeast connector would be beneficial to others that live in the south meadows/south Reno area. 2. Rules of common courtesy should be practiced on all shuttles i.e. use of headphones, no eating/drinking on any of the shuttles, keep the tone of conversations to minimum, no crosstalk between aisles, prohibit FaceTime conversation and use of speakerphones, etc. Practice common courtesy and respect consistently as in GF1.
less traffic and more snow plows as wells as better maintained roads
Wish that a more accessible to and from Hwy to Tesla. Large congestion on arrival and leaving all the way to Hwy
Would really like more service in east Sparks. I currently work gor Tesla and the only Sparks bus option is centennial plaza. I can't park there and the Vistas community where I live does not have any public transportation. Of a viable option was out there I would ride the bus for sure.
It would be nice to have a shuttle out of stagecoach or silver springs.
We need a hyper loop!
The traffic lights/signals on USA Parkway have improved traffic flow and my work commute tremendously. Will there be snow plowers clearing USA Parkway once there is snowfall? Thank you.
Light at the on ramp to I-80 West causes lots of accidents and causes traffic to back up. Recommend a stop/go light to help with issue.
Need better access off of the interstate 80
Another bus for the Fallon/Fernley shuttle to Tesla.
Do you take a company recommend shuttle service?
Would love to see some sort of public transit or shuttle option from Stagecoach/Dayton/Silver Springs area.
I think it could help out if companies staggered their start and stop times. This way it could break up the traffic flow to acomodate all all the traffic coming in and out of the area. It can be a simple change such as changing the start and stop times by 30 min just to stagger the follow of traffic.

I80 is not wide enough to handle the volume of traffic at shift change times, in the interests of safety I80 should be 4 lanes each way between Fernley and Sparks. I don't see traffic decreasing to TRIC in the future and truck traffic on I80 has increased as the economy has increased.
Split start times at Tesla, an additional exit only lane one mile out from Exit 32 off I-80, coordination between companies on USA Parkway
The commute is deplorable, not only do drivers not adhere to speed limits, they also do not care about traffic laws and/or rules. Additionally, the planning for traffic in the Tahoe Reno Industrial Center is an absolute failure now, and will be more so with each additional month that passes and more people travel to and from work. Also, there are no provisions for the Wild Horses that have lived in this area for longer than anything has been built/planned-why not??? Does anyone care about anything anymore or is money so much more important??? It appears to be.....
USA Parkway will not be able to support any increase in vehicle traffic. The 12 hour shifts mixed with heavy traffic make for a very dangerous commute. There seems to be an accident 2 times a week. I am afraid for my life.
It would be nice if the busses left sooner after my shift ended. When 6 PM comes around, I'm ready to GO, and so is everyone else. No one wants to wait 20 minutes for the bus to leave.
Having a pick up location in Dayton NV would be great, the bus to and from Carson City passes right by my town. If the bus would stop at the Smiths in Dayton on its way peopme, myself included, would certainly use it.
Employer Tesla shifts are from 6 to 6. Huge crews arriving and leaving at same time periods. With no staggering there is bad congestion mostly at shift end when entire crew departs at same time. Staggering shifts for parts of the crew would be a big help.
The traffic inside the Gigafactory gatr ih s the worst
Complex needs a second way in from I80 east. Or a long 2 lane dedicated turn on I80 E. Increased speed limit on Watham way. No penalty for using a gravel road. Yield instead of stops on remote intersections (so cops stop harassing us for rolling stops).
The bus drivers we have is a concern about the road conditions during the snow. Most of them are never driven in snow or ice and this is not a good thing to share with the riders on the bus.
It's good
takes too long to get from electric avenue through the gate. Shuttle is stressful since almost never made it to work by 5:15
Expansion is required not a possibility. This industrial center needs more than one way in and out from the Reno/Sparks area. This road has tripled in traffic and is only going to grow as new business's come in and existing ones expand. One accident coming eastbound that shuts the freeway down to a single lane or none at all ends up causing lost hours of production and loss of revenue. Not to mention the increased possibility of fatal crashes due to increased traffic.
Could we have more law enforcement officers to enforce the speed limits on the highway and the streets of TRIC?
Need south Reno shuttle please.
There us a huge need for transportation shuttles in the north vallys area as there is currently no options north of downtown Reno. There is a perfect location for pick up and drop off at the Walmart on Vista Knolls 89506. This would help 100s of people a dayqith transportation. Thank you
I am concerned about the winter weather and how it will effect my ride to work shuttles
As far as I know, there's no public transportation between Fernley and TRIC. There should be some public transportation option.
Wider lanes on freeways, more signs for safety. Brighter lights.
Light Rail would allow all of us to travel back and forth from a parking area and reduce I80 traffic
We should built another route to connect Tahoe Reno Industrial to Reno/Sparks beside I 80.
Traffic is very bad and to many wrecks on I-80 because of this.
Shuttle options, to Carson, for those leaving work at 4:30 p.m. would be ideal
It's been getting more and more dangerous each week it seems to drive out here. Just yesterday driving home someone almost ran into me twice. There are far too many drivers on that section of 80 for it to only be two lane on each side. Everytime I drive to work or home from work I stress out and wonder if it will be my last time. Honestly people drive way to fucking fast on the stretch from sparks to USA pkwy. I'll be in the slow lane going 75 and there are always a multitude of drivers screaming past me, its ridiculous. There needs to be more highway patrol officers.

Maybe a parking garage closer to the TRIC entrance at I80 could help with congestion exiting the highway and at Tesla gate. Employees of companies located at TRIC could use this parking garage and then take smaller shuttles to their place of employment. Who knows maybe sometime in the future hyperloops could be built from this parking garage to each factory/warehouse.
As more businesses expand to USA Parkway, so does the traffic. A straight shot toll highway to the parkway separate from the interstate would not only pay for itself through the tolls but also provide a safer option to work. Two lanes at 80 mph through the Reno canyon is dangerous at the hours we drive to work, a separate highway seems the best option in my opinion aside from making all workers ride shuttles or buses.
Please get ride of the traffic light or make the transition change faster. The light is located at the end of the off ramp when getting on to 80 west from USA parkway. 80 needs to have a third lane now with all the congestion. Speed limit needs to be 80 too.. and police need to be more of an enforcement to drivers that drive slow in the fast lane, tailgate, and drive with there high beams on. There also needs to be a faster response and clean up time on the highways when there are accidents.. the cops are taking to long when dealing with accidents because it creates a MASSIVE build up of traffic which is even more unsafe. I was in traffic for an hour and a half because of a simple fender bender, and because 80 is a two lane highway and it was EXTREMELY congested.. officers couldn't respond to the accident in time which made us wait
Not enough options
A significant investment in a commuter rail service between Reno/Sparks and TRIC would go a long way in reducing highway congestion, traffic accidents, and productivity disruptions due to wild fires or weather conditions.
The roads get really slow soonest there is a small accident. Maybe try to increase the road size where it gets more congested with traffic also.
Route 80 is a very dangerous drive (In between Reno and USA parkway) People are exceeding the posted speed limit. Many drive above 80 MPH, zig zagging around normal traffic. And also very rude behavior, getting cut off and flipped the middle finger are common place.
Many bottlenecks, and ridiculously dangerous drivers.
I want a shuttle or bus from cold springs Nevada to the gigafactory
I WAS TOLD THERE WILL BE A ROUTE FOR A SHUTTLE BUS THROUGH DAYTON, HOPE THAT STILL HAPPENS ESPECIALLY WITH WINTER COMING.
people drive very fast and dangerously. We need a larger NHP presence
Needs more access routes in and out of area built.
The question about what would change my commuting habits is a bit over-constrained. I'm not so much interested in a faster option, so much as a more flexible option. My hours fluctuate day-to-day, so fixed commuting options that only depart at set times, or regular ride-shares that require a regular schedule don't work for me. The question doesn't allow me to provide a true answer.
Alternative routes for whenever there is an accident
Need another on/off ramp to the industrial park and maybe convince the state to make I-80 a six lane highway from Fernley to Reno to relieve some congestion that the increase of trucks and commuters have put on the highway. We need to be looking to the future so maybe increasing to an eight lane hwy would be more advisable as more companies come into industrial center the congestion grow exponentially.
I would have been more likely to have tried the shuttle bus if I didn't have to download an app to find out when and where they leave as I don't have any more room on
At traffic light by the Gas Station on USA Parkway. When turning onto USA Parkway from Electric Ave, the solid line goes way too far, which makes people who obey the law passed the line of cars already waiting to get on the freeway, most people will not let you in... It causes people to try and jump in, causing them to plow into the back of the car they are trying to get behind. I only notice this situation on the peek in and out times. If the line was shortened (broken sooner) them maybe people would not feel as if they can't let anyone in... I'm one of those people who leaves plenty of room between me, and the next car to allow others to get in safely. But am scared that I will be the next one hit, daily. Hope this makes sense... not sure of how else you could handle it. :) Wish I could just tell everyone, be kind to one another.... smile
expand the general area (high ways, roads etc..)
Transportation between the TRIC area and Reno is only going to get worse. Road rage is common and that makes the commute dangerous. This is a golden opportunity to be a pioneer in transportation by investing in Loop and HyperLoop. I view expanding other options instead of investing in one that is revolutionary as acceptance that people will die in preventable road crashes. Please consider this option seriously.
Your almost going to need a 4 lane route into industrial complex other than I80 in 5 or 6 years. Because of increased development.

highway staff should control car moving around accidents. they sit at the incident and cause the back up. they do not assist during accidents.
more ways to exit with less congestion
I feel safer in the bus provided by Tesla, My company has record that I made every attempt to get to work, I save Money and get a little down time on the bus.
I believe that to reduce congestion on USA Parkway overpass, there needs to be 3 lanes going northbound - 1 lane to I-80 eastbound and 2 to I-80 westbound. Having only a merge lane is causing constant back-ups.
shuttle parking closer to pick-up and a later time..more road to get into the job site to congested when everyone is trying to get to work at the same time.
I am very grateful for Tesla provided shuttles. Because our work shift is so long, however, having an extra hour each way on commute makes having a family very difficult. Being away 14 hours a day is too much. Please allow for housing options in the TRIC, light rail, and for Tesla to be able to install its own dedicated highway exit like at DisneyWorld. The traffic problems all revolve around out of date county roads, some of which are not even 2 lanes at times. To handle current volume at least 4 lanes are needed in all bottleneck roads/turns--AND we're only at 30% hiring capacity. Please take drastic measures about traffic here; commute time is the worst part of this already difficult job schedule. If it gets worse my family and I may have to relocate elsewhere. A lot of my coworkers feel the same. THANK YOU for your efforts like this survey to change the very outdated roads between Reno and the gigafactory! Another helpful option would be to double the shuttle options and stagger them, so half the workforce arrives at 5:30 am± and the other half arrives at 6:30am&pm. I understand this issue is much bigger than Tesla, and that there are multiple high ranking employers setting up in TRIC. But as the most established and highest volume traffic producer, there really needs to be creative and drastic solutions, like a dedicated highway exit straight to the Tesla gates/parking, with added lanes on all access roads, and added lanes on I-80. Thanks again
traffic and congestion is so backed up during the times of shift changes, accidents are a regular occurrence, to get out the exit traffic is usually backed up all the way to the intersection. there needs to be a better flow of exiting traffic off of USA pkwy at specific times of the day like from 5:45-6:30 am/pm. the amount of time just waiting for the light to change at the exit ramp and people to start moving takes at least an extra 15 minutes to my commute home. and god forbid there is an accident, you'll be there for at least 30 mins before u can get on the 80W.
They need a transit/train that can avoid traffic. Its BAD.
I want scoop or something similar to start offering night shift routes that way I could carpool with others.
there are bus routes to my job but not close to me
We need to get to work earlier. Too many late shuttles
need shift offsets to help congestion
One of the biggest time limiters for the commute to Tesla Gigafactory is the Security Gate congestion. It would be highly efficient for Tesla to add a third lane at the Security Gate to help reduce the congestion. There is nothing short term that we can do about the one way road to the Gigafactory (I 80), especially when there are accidents. Upsetting, but unavoidable.
The roads get very congested due to everyone arriving and leaving work at the same time. If there were staggered shifts it would help some of the flow in and out.
Do something about all the traffic now and think ahead. Traffic will only get worse with companies growing.
Not enough presence from Highway Patrol to stop people from speeding that cause accidents by riding everyone's rear ends and causing pile ups or accidents trying to pass and dangerously merge.
The transportation connecting me to the Tahoe Reno Industrial Center is the most deadly and dangerous transit I have ever had to endure on my way to and from work. It is very frightening, at the least.
The roadway and exits between sparks and the USA parkway exit should be made a priority. Any accident snarls these areas. Even worse- there are sections with no guardrail in the middle of I-80. Two lanes eastbound and westbound need to be expanded to at least three lanes. Another improvement needs to be made on highway 50 where cars left turn onto Ramsey Week's cutoff. There is no left turn lane and cars stop westbound traffic dangerously. Lastly any and all horse abatement fencing should be added immediately along Highway 50.
USA parkway seems to have the highest amount of congestion both coming into shift and leaving
as the commute continues to get worse, it will directly effect my decision to stay in northern nevada
Penalties for bad drivers need to be increased. Encounter extremely bad drivers. Expansion of freeway better flow to traffic

A personal rapid transit (PRT) would be wonderful on elevated rail like the one for Microsoft campus
Can there be more than one access to I-80 than just USA Parkway?
The east bound offramp from I-80 to USA park way needs two exit lanes, one dedicated, and one optional, as we have at McCarran Blvd. More care needs to be given to snow and ice removal on I-80 between the Truckee Meadows TRIC and on USA Pkwy. The high influx of out-of-state workers, unfamiliar with winter driving, coupled with their aggressive and poor driving skills creates a traffic nightmare under poor driving conditions. A better alternative is needed for eastbound I-80 traffic entering USA Pkwy. The traffic light, and corresponding traffic back-ups it creates during peak times encourages those poorly skilled and aggressive drivers to attempt to cut in front of those waiting in traffic. This causes numerous accidents and increases the congestion.
The roads suck! Seemingly infinite un-repaired potholes and faded lines make driving at night or dusk incredibly unsafe.
Build an on ramp to 80 at the back of Tesla for east bound only. Relieving congestion on Electric ave and usa parkway
Would be nice to have a little compensation
I wish that the schedule would be a little more predictable and if the bus is full, we could omit the next stop and just head to work. There are empty buses behind us and we cant hold anymore anyway. Also, for new people from orientation without badges, there should be a better way to verify their employment at security without making all riders late for work, just to tell them the same thing each time.
Why is there only one exit to get in and out of tric?
There should be more than one exit to leave Tahoe Reno Industrial Center that goes to Reno
I take the shuttle because the drive there is very risky due to road conditions speed and other drivers in Nevada. The shuttle also helps me rest from work before I need to drive. I feel like its very unsafe crowded with parking and expensive to drive up there on a regular basis.
I wish there were more shuttles throughout the area. Like one in south reno because I still need to travel a bit to get to a shuttle stop.
Get Elon to build a tunnel from Reno/Sparks to USA Pkwy!
Of there was another possible shuttle stop for south reno, it would be highly appreciated
Will there be additional transportation support during the winter/snow season
I live in Dayton and there is a company commuter bus that goes right through our city from Carson City area. I would have to drive 20 minutes the wrong direction to catch that bus and it would ultimately make my commute closer to 2 hours each way. If there was a way to have that bus/shuttle stop in Dayton (maybe near Smiths market) then I would be more than happy to take the bus to work each day
The infrastructure needs a lot of work....
Fernley and Fallon need separate shuttles. People get left behind.
Would love to see a train or hyper loop to a central station in TRIC connecting to a central station in Reno.
Some type of bus from Dayton, NV to the Gigafactory
I thought of van pool but heard there is a 6 mo waiting list shortening that time would help
Always on time, great job!
Gas is too high along with rent prices which keeps me on a treadmill which stops me from getting a different vehicle with better mileage.
Great improvement with the light on USA Parkway and Electric Avenue. Please think of the future of the road conditions and layout over the coming years. Tesla alone will double their workforce. More congestion is to come if actions are not taken sooner than later.
I think more street lights along US Parkway all the way along the over pass down to at least the recharge cafe or whatever would be helpful, along with more Electric Ave. The other thing would be to have a bypass for those leaving or arriving to Tesla from Sparks to have a direct route without stop lights to and from I80, this I know would be extremely expensive however it would allow for a steady flow of nonstop traffic.
A rail line to from USA Parkway for commuting hours would be great
Can we have a metro-rail?
Need REAL on/off ramps this eliminates the need for traffic lights while merging onto 80 FWY, wide lanes for the trucks, enforce speed limits.
need to work on alternatives for when i80 is closed

With the increase in traffic, there should be incentives for more people to ride the bus. I would recommend a bus lane for a faster commute and to avoid heavy traffic!
If I chose your transportation can I drink in the ride home?
Currently I get to work almost an hour early to avoid traffic (5pm) and I rarely get out right at 6am, more like 6:20am. The thought of a shuttle is nice however the time limits just don't work for me at this time
Offer more shuttle service from Cold Spring, NV
I would ride the shuttle but there are so many people that want to ride and not enough space. Fernley riders are turned away most of the time and there is no guarantee I can get a ride home if I'm late trying to get on shuttle. We should have a Fallon shuttle and Fernley shuttle so everyone gets a chance for a spot. Would be nice with the coming season of bad weather coming up.
I live in Sparks and I would take the bus if it were not for the mile walk from designated parking to the bus stop
Bridge that cross Carson River After Dayton bridge will be considered?
The stoplight when going from 439 to W bound 80 backs traffic up, need to improve flow there.
Revolving bullet trains would be incredibly helpful and well work the investment being as how many company's and people are moving to the area.
A train option would be preferred.
A second route between Reno/Sparks to TRIC would be highly useful in major traffic situations (accident, fire, snow, etc.). The delays from traffic have a major impact on the businesses in TRIC and the employees/families of employees of TRIC companies.
Need a public transportation facility that gets you there.
With the new traffic lights installed and turn only lane off Electric Ave., the traffic is better.
Why is my 27 min drive take 40+ min on my commute home? No stops.
I80 in both directions is terrible. The average speeds of most drivers are over 80+ mph and people with be less than one car length behind you. Something needs to be done asap by either widening the freeway, or possibly something like BART in California. Tesla could also add additional shifts instead of the most common 6am-6pm or the evening shift same hours. Suggestion would be to ask for volunteers to work as example, (4am-4pm) which would eliminate some traffic.
My current employer has shuttle service but its from certain places and only certain times. If there was a regular bus service (similar to public transportation system) with set routes that came to my workplace, I'd prefer taking that as a bus service at regular intervals helps me manage irregular hours and its cheaper to travel in a bus (hopefully) than gas requirement and it helps the environment too as I travel alone right now.
They should really come up with a officiant way To make the traffic less hectic in the mornings and afternoon
The traffic getting out of work every day is atrocious
High speed rail to the Gigafactory would be awesome. I would stop driving alone if that could happen.
Would be nice if the shuttle arrived at work a little earlier. Something needs to be done about the traffic when the shuttles are leaving the factory.
The main issue comes from traffic lights regularly taking up to 2 minutes to change even without traffic in the intersecting lanes. On Pyramid by Sinclair there's typically very heavy traffic cashed by this issue. Once on I-80 semis can be found passing on the left going 5 under the speed limit. This causes massive heavy breaking in the left lane dropping average speeds of 80 to, at times, 65 MPH. There's a lack of consequence for slow traffic to use the left lane. Until parkway there should be no passing by semis starting at the sparks exit. Also the sparks offcoming traffic regularly blocks the intersection. This is due to the lights not being sequenced together to allow traffic to flow. Oncoming traffic trying to get to I-80 typically is then stuck through multiple light changes.
will there be added routes in the future?
Either expand the highway or make it into a two tiered road or get some form of mass transit going. It's rediculous now and it's only going to get worse.
It would be great if there was more signage telling slower traffic to keep right. There are a lot of cars and trucks that go BELOW the speed limit, and they drive in both lanes, which causes tons of unnecessary congestion.

remove light at i-80 and usa parkway intersection for i-80 west onramp, or create a jug-handle so offramp commuters can merge with traffic rather than involve a light. or i-80 off-ramp for access to usa parkway could just be a stop sign. 99% of time no one uses the light, and it backs up traffic during shift changes leaving the complex around 6:10. or at least make the light heavily favored for traffic exiting usa parkway onto i-80, so if someone happens to be taking i-80 off ramp onto usa parkway, they should sit for a while after 6:00 to favor the thousands of employees leaving at that time. making usa parkway 2 lanes for i-80 westbound onramp would help traffic as well, which currently backs up well onto electric avenue at shift change.
Need to reevaluate speed limit on USA parkway from McCarran to silver springs
There needs to be more than 2 lanes between Sparks and the TRIC
I feel that the van rides need to be re-assessed as many ride them by them selves a majority of the time. If the shuttles are used maybe the v-rides need to be eliminated. The shuttles have a badging system to make sure who is or isn't riding them. The v-rides should have this as well if they are to be continued to be used. Otherwise without the money spent on these the company could afford to get shuttles to other areas that are in high demand.
The traffic is not a problem yet but it will be when Tesla finishes the building.....perhaps now is the time to start looking into estimated time of completion and who or what other companies are coming to the Tahoe Industrial Center in the near future.
Traffic into the factory is already bad, sometimes have too wait for 40 minutes. This is not good specially when arriving too work late when all preparation too arrive early was in-vain.
I think a light rail system with park n ride options would be amazing for TRIC.
Having a shuttle bus with frequent pick up times would work best because I usually do not know exactly what time I will leave work. This is why I drive myself - to provide flexibility on when I can leave.
The traffic in the parking lot of the Tesla Giggafactory 1 is beyond horrible. I think if there was another entrance/exit that went to I80 it would make traffic so much
Please build a bike path connecting Sparks to the TRIC.
Ultimately, a rail-based transport system would be best and would be the most likely form of public transport that I would use. A line that runs from Reno/Sparks to Fernley would be great to see and would reduce strain on the I-80 corridor.
We have much traffic during shift change time.
When are you going to build a monorail system? Could the Sparks bus stop be at Scheels or somewhere with closer parking?
The intersection and on ramp from US parkway to 80 west bound needs to change to handle the traffic volume.
Hate working here.
More lanes in the exit towards u.s.a parkway
I would prefer public transportation if 1) had more central/secure parking locations, 2) modes were more environmentally friendly, and 3) modes were quicker and more efficient than car travel. Solutions: 1. More frequent bus transportation throughout the day/night from ride-share/public transportation secure parking lots in Reno/Sparks. This would allow me to drive from my home to the pick up location. 2. Environmentally conscious modes of transportation. Examples: Electric buses and rail transport from the Industrial park to Reno/Sparks. 3. Rail transport is more efficient than automotive travel and can scale easier than interstate traffic flow. I think there is value in have a rail transport system as it would relieve traffic/accidents along I-80 and create job growing infrastructure that can expand with the Northern
We need additional routes to get to and from work. Also, driving lessons for all Reno natives. At least a sign that tells them to get out of the fast lane or to not do 15 under the speed limit.
I only wish there was another option to getting to work then USA pkwy. There are too many vehicles merging into on street
Make trucks use the right lane exclusively, they cause way too much backup.
I-80 Extension
The speed limit from Sydney drive to Silver Springs on the USA parkway is at least 20 MPH too slow. 55 MPH on a 2 lane highway is silly, especially when it is the best road in Nevada.
Parking within my work needs shuttles to relive the incoming and outgoing traffic, its a bottleneck.
I need to drop off/pick up my daughter at daycare. I also need to be able to drive home immediately in the event of an emergency.

An alternative route would be a great help, in case of an accident or road closure, it takes an additional 2 hours at least, to reach the destination.
concerned with winter weather over USA Parkway
Would consider riding a bus if one picked-up and dropped off at Summit Mall, South Virginia, Meadow Wood Mall or South Park Meadows.
I sometimes take the shuttle from downtown sparks but they move the location farther from the parking spot so now I park and have to at least a half a mile to the shuttle I just wish there was somewhere closer to park.
Electric ave needs 3 lanes going into the plant so security has 3 lanes for entry
Any delays or interruptions to normal traffic flow make I-80 almost unusable at times. This needs to be addressed as soon as possible to make the TRIC more reliably
More conveniently located shuttles for the north mccarren area would be nice.
Too much traffic. Takes too long to get into work.
I would love to switch from Vanpool to a Shuttle or a Bus, if there was one available off Vista Blvd. Right now, the closest one is McCarran so I would be driving backwards to take a shuttle, which doesn't make sense.
More public transit infrastructure and/or lanes please
More stops would always be a benefit.
I would like more information on the transportation options available to me. I keep getting the run around.
Will there be dedicated lines that come out to the Tahoe Reno Industrial Center - example in Colorado was the Frequent Flyers that were morning buses located on the bus lines and function only during busy commuter hours 6am -9am and then 5pm - 8pm.
We have a perfectly viable way to add a train that can do Fernley-TR Industrial Center-Sparks-Reno. Why are we not taking advantage of the existing railroads and adding a commuter train? This train could run every 15 min during rush hours. It would not only save gas, but would also help during winter season and snow hazards and over all diminish driving accidents (which happen EVERY DAY). Is it economically viable? Can it be electrified? As more and more companies are coming to TRIC, this idea (at least to me) becomes more interesting. I know many people who would bike to the train and use it as the main commuting medium. Hope somebody takes a look at this survey and may be I can get a response on whether this is even being considered at rav.vidal@gmail.com Thanks.
Traffic on I80 can be terrible, I intentionally leave work late at night to avoid traffic, especially if there is an accident on the highway. I also ride a motorcycle most of the time to help battle traffic, Nevada defiantly needs to allow lane splitting, my motorcycle and car often overheat in the traffic. my car overheated and ruined the engine in the stop and go traffic on I-80 so 99% of the time I ride my motorcycle.
If employer would stagger start times instead of 6-6 things would be less congested
Make it like Texas highways. Big with 4 lanes each direction there are more companies moving into the industrial section and its gonna bring more workers which means more drivers on the road. With more space and bigger roads its gonna be safer and fast for everyone
TRAFFIC!!!!
Need service road or alternate roads that roughly parallel I-80 between Patrick & Vista Blvd, accidents impact every mode of transportation in this section multiple times a month and when there is winter weather. Another major improvement would be to introduce light rail service between Reno/Sparks & TRIC.
RAIL ACCESS WOULD BE AMAZING omg commuter rail bulk chemical rail outbound products rail like wow we are right on a railroad why don't we have rail access????
Please also push the government to expand I-80, 2 lanes each way is not going to be enough in 5-10 years!!
I'd like to see a shuttle to Tesla in Dayton, NV 89403. Panasonic has one that picks people up at Smiths so it would be nice if we could get one for Tesla employees
The only detours to Sparks/Reno from USA PKWY are through Carson, Virginia, and Pyramid Lake. If we could get an actual detour from Waltham, Mustang, and Lockwood that doesn't get blocked by the people who own the private property that road goes through and was accessible to non-off road vehicles would be extremely helpful when everyone gets off work at the same time a fire starts or there is a car accident on the 80. I would be more open to taking the shuttles in the morning if there was an emergency transportation system to get back to my car if something happened at home that I needed to attend to immediately. Better public transportation in general would be nice in the Reno/Sparks area to assist in getting to shuttle locations in case of POV issues.
Widen the freeway and increase the infrastructure. If you want to build a world class industrial center, you have to have the infrastructure for it.
Many systems have been put in place but none for people who work graveyard which is incredibly frustrating.

I think a great addition to transportation would be a bullet train! There's already tracks laid, and Tesla is all about sustainable energy, but most of its employees drive a gas powered car to and from work every day. That seems hypocritical to me. Having a bullet train with stops in different parts of California and Nevada would allow more people to work at Tesla, and it would significantly reduce the amount of gas vehicles going to and from Tesla.
If there is a way I could get to Milan facility from GF1 and viceversa, I would leave my car at home.
An electric train to the industrial center would be nice.
Increase shuttle frequency from / to Sparks / Reno to fulfill not just 6 am and 6 pm shift time but also normal office hours of 8 am to 6 pm.
I used to take the bus to work. I had to start driving, because my work schedule is irregular. I would commute to work if there were more time options for people that
Need fast, convenient, cost effective options.
The biggest issue is that there is only 1 road between Reno and TRIC. If there is a bad accident on interstate 80, there are no good options to avoid the congestion. It would be great if there was another major road connecting Reno to the area
It is a very big challenge to get thru the front gate at Tesla ontime unless you leave 30 minutes earlier. It is terrible trying to get out of our parking lot to get to USA Parkway. We really need another road to get out to the freeway.
Another Shuttle option 1/2 before reg pick up and 1/2 later to go home. For HR/PAYROLL ETC... access
More Lanes please. The Gigafactory is not going to get smaller. The shortest leg of my commute takes the longest to complete. An alternate direct route from Fernly/Fallon that doesn't involve USA parkway would be even better.
I would recommend a shuttle service to Los Altos Parkway because 75% of the people who live in High rock 5300 and Canyon Vista apartments are the employees in
Options for what would change my driving preference doesn't list my option and the answer is wrong. Should add a box for other or none of the above apply
Widen I-80 or possible alternate corridor between Reno/Sparks and the Industrial Center
Road issues need to be addressed.. -unsafe conditions
There should be public transportation available between TRIC and Sparks/Reno. The shuttles the employers provide are not enough.
Add a lane blocked by a barrier or solid white line on the USA parkway so people stop cutting off others and causing accidents and ruining innocent people's lives.
Are there plans to have extensions/off ramps from I80 in to the TRIC so we can more directly route traffic while avoiding the hazards at intersections?
Can we utilize the railways that run parallel to the 80? It seems like a good fit for the needs here.
Need to have more north 395 connections there are currently No other options ther than driving my self
Would be great if we had an alternate route to sparks that doesn't involve I-80
Improving, Still backup to West bound 80 at night goes from Electric Av to 80. I go East bound yet people wait till last second to get in lane to Reno.
Congestion is my main concern. It has been getting worse it recently. If the trend continues, I will really consider the idea of using mass transportation instead.
I would like more shuttle times in the later morning to the Tesla
Would like to have a shuttle pick up drop off in yerington
Car Pool lane would be awesome!
Add a flyover from I-80 directly to Electric Avenue in the short term. Long term - build a multi-level parking garage at Legends Outlet and GET HYPERLOOP from there to TRIC with an employee payroll deduction for cost.
People drive to fast on 80 and there are more accidents where I work
I would like to see the option for a Tesla bus route from South Reno to Gigafactory
One highway is toxic. When there is an accident, I either take a 2hr detour, or wait in traffic for 3hrs. Ramp to I80W from USAA Parkway is too small. The cars gets lined up all the past electric ave. Overall, the worst part about working here is definitely the traffic and transportation, almost makes me consider leaving this area.
Improvements have been made, but traffic flow in and out of the Tahoe Reno Industrial center needs to be improved as there are more and more employees driving here for work. Additionally the on/off ramps driving through Reno are ridiculous and need to be improved to help overall traffic (i.e. interstate speed traffic needs to merge with a short on-ramp traffic within a few hundred feet in multiple locations is ridiculous)
need additional methods beside I-80 to reach TRIC, light rail, bike path, hyperloop.

There has been a ton of accidents out east of sparks. People die just trying to get to and from work. I think public transportation would be a huge help getting people to and from work and also free up the interstate for semi trucks and travelers from everywhere.
Is there a plan to have a regularly scheduled bus route?
I would be very interested in travelling by bus if there were more options. Ideally, there would be a bus getting to Gigafactory every hour from 7am to 10am and a bus leaving Gigafactory every hour from 5pm to 8pm
It would be good if buses traveling to the Gigafactory could pick up from multiple bus stop locations based on employees addresses and Interest in riding buses
How about a Trolley down the center of I-80 or Subway or a Tunnel from the Tahoe Reno Industria Center to Sparks Outlet Mall and other various locations that have ample parking in Reno. I have seen alot of accidents and traffic on I-80 between Sparks and the Industrial Center in the last year and a half. Or 2 right hand turn lanes into the Industrial center from a mile back from the turn. Thank you,
Parking lot is hard to exit
Transit with WIFI
If there were buses that 1) made stops where there was ample parking 2) arrived at work at 5:30am, not 5:40-5:50am.
Widening the freeway would be a huge help, or creating an alternate route when the freeway is shut down. Public transportation out here (train) would be a great idea to help solve for traffic.
It is a deathrace to work and to leave. It is getting worse
Work start times need to be staggered. The commute currently is literally killing people
Need to assess getting to USA parkway. Currently the only way to/from TRIC is I-80. If there is an accident or event (fire) this route becomes impassable. Should look at where people are living/moving and adjust transportation from those areas (i.e. road from Spanish springs / vista blvd to USA parkway or a road from south Reno to USA
Build hyperloop
need an alternate route than I-80
Coming and going to Fernley has much less traffic, but congestion within and around USA Parkway affects everyone.
Would love light rail commuter option that had more time options for morning and evening commutes. Or a shuttle service that serviced south reno along veterans
I think everyone would benefit from more access roads to get to the Tahoe Reno Industrial Center, or more lanes on the highway.
Safety is a huge concern. I think we need more police to ensure that people are motivated to drive safer.
on and off ramps to I80 should be fly overs not stop lights.
I have cumulatively spent days of my life gridlocked on I-80 commuting to and from work in the last year and a half. I would love to see a viable alternative route between Reno/Sparks and the TRIC that could be used whenever the frequent severe accidents temporarily shut down I-80
The busses are filling up fast and people are regularly being turned away. More busses are needed. And maybe a second stop at gigafactory 1. I have almost missed the bus trying to walk across the plant to reach the bus area.
I would be interested in rides when the weather is bad and my car may be unable to make the drive. My concern there is still transportation to the pickup location and the time difference of taking public transit
More police activity to reduce speeders
Please provide Public transportation during Winter times especially around High rock, vista , Los altos parkway because there are lot of people who works for Tesla
1. There should be more traffic light at the intersections in the Tahoe industrial center. 2. There must be more Id check station. So that we do not have to waist 20
Electric Avenue must be expanded to more than its current capacity. Speed limits need to be increased on Electric avenue as well as USA Parkway. 35mph is ridiculous, and seems to primarily function as a speed trap. There needs to be more than one road leaving the business park In general, I-80 needs to be expanded to accomodate accidents. it's taken more than 3hrs to get to Reno in the last 6 months because of a car accident or fire. there needs to be more exits, more ways to get in to Reno in case something happens on I-80.
I don't know many others that commute from Carson City to Sparks. If there were many others that I knew of, I would network and consider carpooling.
If there was a bus/ride share that would arrive before 0515 I would use the service. Primary hours for myself and others are 0515 to 1815.

Alternative routes when there is a wreck would have a huge impact. Most daycares don't open until 6:30am and close by 6pm in our area. If there is a wreck on my way home and there isn't an alternative route (once on 80W) then I am late picking up my daughter and charged for every minute late. If I know about the wreck before leaving then I will head towards Pyramid Lake and head into Sparks the back way which can take over an hour. Having a quicker route in and out of Sparks would be extremely helpful. My overall commute is 70+ miles which has not only devalued my vehicle because of all the extra miles I've put on it in 3 years, but it takes out a huge chunk of my day that could be used with family, gym time, errands, etc.
Need some more traffic control on USA parkway during high volume times (typically at 5:30-6:30pm). HIGH incidence of collisions or near-misses due to stop & go conditions and short merge window for those getting to 80 west. Unsafe due to aggressive drivers and visibility/conditions.
More options/stops for Ride share and Lyft would be great. Perhaps vouchers would help. This way, rides are guaranteed and not left up to a matching system.
Getting on the interstate needs improvement, that now seems to be the biggest congestion point.
There is no transportation from Silver Springs to Tesla or the Industrial Center.
Light Rail Options to GF1 would be awesome. Or a Direct Bus from Spark(with Safe Parking) to GF1.
Need more transit in and out of Fallon!
It takes a very long time getting from tesla to USA parkway. Need more of an organizational traffic flow to try to make better times getting home. Takes about an hour to get from tesla parking lot to Fernley after work. Having just shuttles to and from work is very inconvenient. Like having my own vehicle in case of emergency or take pto.
Open the rest of the Tahoe-Pyramid Bikeway. Several of us have tried to bike to work, but traveling through private property makes that a bummer for everyone.
If there were a more direct route from Sparks/Spanish Springs to the I80 that would be very ideal
What is plan when Tesla is complete
I think having a passenger train option from the Reno/Sparks area to TRIC and buses to the various buildings would be an excellent way of reducing congestion and traffic on the freeway and on USA Parkway.
I think NDOT should be proactive about installing alternate route for traffic between Reno/Sparks and TRIC to prevent severe and unavoidable congestion when I-80 is
I would love to have a shuttle for travel to and from the Fernley area.
The intersection between 80 and 439 needs to be modified. At the moment, in order to access i80 west from 439, we have a stoplight to turn left. Is there a possibility a road could be built to turn right and loop into i80 heading west? Looks like there might be enough space to do the loop.
When will 80 be improved past two lanes? It definitely needs it at least to USA Pkwy.
need to improve access to WB-80 from SB-USA parkway
Can we work on getting showers at Giga and a method to bypass the highway on bicycle between Sparks and Lockwood? Totally ridable the rest of the way, and I'd do it everyday if I could.
I find this particular stretch highway of I- 80 from Reno to USA Parkway highly dangerous and difficult to drive. My daily commute to and from work gives me anxiety, fearing an accident that is highly likely given the road and high traffic conditions.
If transportation was a similar commute time and offered more frequent departures I would certainly change commute options - my biggest complaint with my current method of transportation is the EXTREMELY limited departure times.
More carpooling would cut down on the traffic allowing for a safer/faster commute.
Another way out of the parking lot of the Gigafactory other than through the roundabout.
High Speed Bus Service From South Reno to Tesla
Need more connecting roads thru to I 80.
I would like more options for getting from the Tesla parking lot to Electric Ave. (or to USA). Exiting our parking lot is the most time-consuming part of my evening
More bus schedules
I would love more shuttle options.
I would love a shuttle in Dayton as would every person I know that lives in Dayton and works at Gigafactory 1.
If a shuttle was available I would ride it rather than drive

I would like more bus options. Currently I could take the bus, but due to there being busses at prime traffic time, it can sometimes double my commute making me not want to take it.
Would love to take public transit / workplace shuttle if offered at times that better meet my schedule.
I attempted to do a vanpool in the past, however living in Lyon county. It would have been more expensive due to lack of subsidies.
There is too much congestion due to insufficient means of exiting onto the highway (bottleneck)
Not enough on / off ramps from I-80. Shuttles would be improved by better parking where the shuttles pick up an drop off in the Reno metro area.
Need a secondary route for when 80 has issues. Police should have less speed traps writing tickets to people trying to get to work.
Time the traffic light to let people onto I-80 westbound for greater periods of time. It's stupid right now how long we wait for non existent cars to get off the freeway.
The traffic needs to improve, it takes employees roughly 1-2 hrs (or longer) to get to and from work with no compensation. And it's getting worse by the week.
Need a bypass route or multi lane expansion of I80
would love to see a rail line
Please create another route from TRIC to the reno/sparks area. e.g. connect USA parkway to La Posada Dr.
It is very dangerous to have traffic back up on the interstate due to surface street congestion
Reduce traffic time at the Gigafactory after work!!!
I need to drive to the pickup location for the shuttle my work provides. I'm uncomfortable leaving my car outside in a public area for the entire day. It would be idea if the pickup location was closer to my home so I can walk instead of drive.
I suggest a wider road space or add an additional lane in Electric Avenue. This causes congestion in bound and outbound ways going to work.
The traffic signals are a joke - specifically the temporary one when trying to get onto the freeway. It turns red when no one is waiting to get off the freeway which backlogs traffic. It's almost impossible to get off Electirc and onto I-80 westbound because the traffic backs up past Electric ave/motel 6. You have to wedge in to get to the freeway. There NEEDS to be 2 lanes to get on I80 Westbound.
We need more routes from the larger urban areas (Reno/Sparks, Fernley) that lead to I-80. Ex: a direct route from Spanish Springs/Hidden Valley/Virginia City to I-80. If other routes are not available, perhaps widening I-80 to three lanes each direction. The combination of truck traffic along with TRIC expansion causes the freeway to become clogged with traffic. It is especially terrible when an accident occurs.
I think the existing rideshare services are great. I just prefer to have the flexibility to leave whenever I need to and be able to make stops on the way home.
Need to have a stop in Dayton
my employer has a STRICT attendance policy and doesn't seem to care that it takes me and everyone else a minimum of 15 minutes from the time we pull on USA Parkway to the time we are able to park. Most of the time is 25 minutes, this results in me having to leave an hour early for what should be a 20 minute commute MAX. There have been soooooo many accidents in the last year, some have even been fatal. No job is worth a life, we have to do something. The bus is first come first serve and if you have an emergency your out of luck. I gave a guy a ride home a few weeks ago who had been stuck at work for over an hour after being sent home early, he to a shuttle in and had to wait on it. Luckily I came along and offered him a ride, otherwise he would have been stuck for another 2 hours! If you are encouraging "sustainable transportation" we need to know we have options in case of emergency, along with enough buses to accommodate the employees, 5000 plus employees and a handful of buses does not work! Feel free to call me with any questions or a follow up 417-254-3513
Staggered shifts for employees would reduce congestion and not make me feel like I take my life in risk every time I drive to work
The irregular hours I work is the main impediment to using a different method of travel. Additionally, I live in the Spanish Springs area because of the quality of education available for my children. Unfortunately there are no public transit stops in the area. If there were a park and ride option and light rail or a bus line I would prefer to commute by public transport.
When we leave work, there is so much traffic and hard to get out of the parking lot and the general area. We need a schedule change or another route to clear up the congested traffic flow
If I-80 has a car accident, it usually takes 1-2 hour to get home and there is no alternative way. Otherwise, it's all good.
Concern would be salting and plowing for the winter

Tesla shuttles do save on cost of gas.
A commuter train option would be amazing and free up a lot of congestion and traffic.
We need more lanes. There is not enough lanes for the amount of people driving out there. Traffic is bumper to bumper the entire way there, there are accidents and deaths every single day. There needs to be more lanes or a second route to stop this. Thousands of people with 2 lanes does not work. And I would like a shuttle from south Reno to Tesla, as it takes me 2 hours to get to work because I have to drive all the way downtown to get to the shuttle. I leave my house an hour before the shuttle gets there, and then it is another hour to get to work because of traffic. It is insane. More lanes and more routes! A side road would be great so people can opt to stay off of the freeway and avoid the accidents that always happen. I would much rather drive to work on a side road than risk dying by going on the freeway, especially in winter. Last year there was a 30 car pile up on 2 freeways out there at the same exact time. There were people in ditches every single time it snowed. There were not enough lanes for people to pass others, which resulted in people sliding into each other. I work graveyard and the snow plow did not show up after I got off work at 6am, which resulted in having to drive home in inches of snow. There was no plow on the freeway or on USA Parkway. There is no excuse.
The freeway needs to be widened and the spaghetti bowl needs fly overs. USA pkwy needs overpasses build for continuous flow of traffic. 15-30 minutes to get to the freeway is ridiculous.
Need more lanes. possibly look into a train, train track come right by here
The fact that there is suck a limited way to leave the complex makes the drive home take a hour or more due to the lack of exits.
I would use a ride share program if I could find a ride anytime. I start work anywhere from 7-9am and finish anywhere from 5-8pm. Current ride share makes me schedule to far ahead of time and I don't have that flexibility.
I-80 has no alternate surface streets - so a single crash between the industrial center and Reno blocks everything. Having a backup plan (even a dirt road) would be a
Please invest more in the driver education programs in Nevada. I am embarassed to have to put a Nevada license plate on my car.
Shuttle in the Spanish springs/ sunvalley area
The issue is leaving TESLA parking lot. They require thousands of people to clock out and leave at the exact same time. Causes way too much traffic, sometimes can take 20-30 minutes just to leave the parking lot. It's unsafe, people run to their cars and speed because we all want to get home after already being here for 12 hours, being stuck in the parking lot for 30 extra minutes is not fair and not safe to have that many people leave at the same time
High speed rail or tell Elon to give me a model X with autopilot.
Question number 9 missed a very important point. Only "Faster" transportation was mentioned. More frequent transportation would really be the only way I would take transit to work. Running lines at greater frequency would allow for flexibility. Right now, shuttles run once an hour. That is not nearly frequent enough to cause most people to change their commuting habits.
I have significant concerns about the proposed Blockchains LLC development and its impact on traffic on I80. The traffic situation has continually worsened as the Tesla Gigafactory expands and it takes just a single accident on the highway to bring traffic to a halt. I'm seriously concerned about the impact on the roads with the additional freight traffic coming from Tesla heading toward California in terms of traffic flow and road conditions.
Have Tesla shuttle at Stead area.
Widen the road way on electric to 3 or 4 lanes per. The N. Gate would follow suite. Traffic backing and gridlocking the site is imperative to production.
I used to live in South Reno and there was no easy option for getting to work other than driving alone. I now live downtown and can walk ~1 mile to a work shuttle. There needs to be something that I can either walk, bike, or drive a very short distance and park for free that will leave a home location ~30min from 5:30AM-9:00AM and location of employment every ~30 minutes between 4 and 8 PM.
It's a hot mess. Several accidents
Interstate 80 needs three lanes each direction between Sparks and USA Parkway
It's ridiculous that there is no reliable, high frequency transit from town to TRIC.
Driving out to USA Parkway is very dangerous during traffic hours. Accidents are very common. Also, driving out there and back everyday is so costly transportation wise considering the amount of miles put on your car, the amount of gas used, weather conditions while driving and the constant wear and tear on the tires. Not to mention the fact that it is free range for the horses so avoiding hitting them is a constant challenge when entering and leaving work during dark hours.

My biggest concern is the speed limit not being enforced on I-80.
Every company should have shuttles to help minimize traffic
Carpooling needs to be not only recommended but enforced as it helps everyone out. I sincerely would like to see this being pushed harder.
Somewhat educated guess on number of employees. No diversion options when accidents occur. Would like some other option, but don't see how that would work with irregular hours.
It can be frightening and frustrating with the traffic
Put in a commuter train!
More control at exit 32
The commute to tesla gigafactory is terrible. We need more roads. If we had more roads maybe there would be less accidents.
Add more bus routes include my zipcode 89502
I use USA parkway from Silver Springs and I LOVE it!!!
Traffic from Tesla and erratic drivers on I 80
A light rail that went to a central location within the Center would be a good idea, as people could then be distributed by the companies
We really need a light rail system to go from Sparks to USA Parkway! The infrastructure should have been thought of before USA Parkway became so congested. For some reason EDawn wants to continue to add more companies in an area when there are too many problems with the infrastructure to accommodate the growth. EDawn is on a mission to make this the biggest biggest city and is destroying the way of life so many of us have enjoyed for a long time. If you want to be a big city, it's time to start acting like it. Learn from Sacramento, San Jose, Las Vegas, etc., and put a light rail system in.
Nothing really with the transportation. The condition of the road once passed the gas station going up toward the Silver Springs needs to be worked on. Also it is a very dark drive, street lights along the way would be better to see wild life.
a train stop-tric Commuter Rail
Any plans for alternate routes?
The bottle neck coming in from the valleys is an absolute hazard during the winter due to the amount of traffic and accidents
I'd love a bus that went to and from TRIC every half hour. I could make that work. I don't have a set schedule, so it's difficult to use the commuter buses that are already set up. I'd recommend working with the city planning agencies to encourage higher density housing options that can help sustain mass transit. Abolish single family zoning. Encourage developments that allow people to walk to school, groceries and other non-commute destinations.
we need a bus route out here and more ways to get out there. more lanes on i80 too
A bus service would be great. Stopping at central office locations.
Waltham Way becomes treacherous during icing and there are very few ice trucks working it.
Build new apartments near USA pkwy. This is a housing problem, not a traffic problem.
just started with V ride should be changing my mode of transportation in the next week
Create a public rail system that leaves Reno & Sparks and stops near the industrial center and then has buses that deliver you from a train station to businesses in the Tahoe Reno Industrial Center.
I am very blessed to have the vanpool as a option! It helps me and others a lot. To be able to help others get to work is awesome! Thank you!
You guys are already doing a job to help employees to get to our job faster,easier and cheaper by providing a vehicle that our employer pays for it and with the vanpool subsidy that provides by your organization thanks keep up the good job
Wider roads and alternate routes since the Tahoe Reno Industrial Center is growing and getting a lot of employee

<p>If transportation to and from TRIC is to improve, NDOT and other agencies must take the lead because by this point, I think virtually everyone has realized that the top brass at Tesla could not care less about this issue and many others that relate to employee safety and wellness. In the two years that I have been at GF1, Tesla has NEVER shown any real interest in providing adequate facilities for their workers, whether it is toilets, break rooms, or parking, and that includes back in the old days when there were 400-500 total employees at GF1. There weren't enough toilets or parking spaces back then and there still aren't now. A significant portion of the demoralization that characterizes so many Tesla workers is a result of standing in line for bathrooms at work and being stuck in a ridiculous parking lot for 30+ minutes after every twelve-hour shift. Asinine, ridiculous, preposterous upper management.</p>
<p>Tesla traffic is awful. Exiting the parking lot just to get on Electric Avenue can take up to an hour . More exit routs could help traffic congestion .</p>
<p>I-80 really needs to be more lanes if possible, also the on and off ramps need to be a longer for ease of getting on the interstate. I also think the speed limit on I-80 needs to be 70 MPH.</p>
<p>When will we get a reliable regional train system that goes from Reno to the Tahoe-Reno industrial center? The public transportation in this region is mediocre at best. We need a wider overpass for USA parkway and better onramps. I'm all for sustainable transportation but not at the expensive of punishing those who drive. People on shuttles or vanpools suffer too as they sit in traffic. Tesla should be required to pay for some of this construction as they are the biggest contributor to the traffic. Tesla should also be required to stagger shifts. Having thousands of people all leave at 6:00 is ridiculous.</p>
<p>Possibly make it 3 lanes instead of 2 for slower vehicles/semitrucks</p>
<p>Build a bike path. I'll ride my bike to work year round</p>
<p>No comment on the transportation topic, but there is TOO much congestion for such a small road way. Need better solution to traffic that consists thousands of employees in one area.</p>
<p>looking for something that is much more flexible than currently. More similar to an uber pool driving system that can be quickly called or signed up for last minute. No</p>
<p>A regular bus or train would be nice</p>
<p>it would be a smoother commute if there were more police presence on I 80. People constantly drive 80 mph or more, cut others off, and are going to hurt someone</p>
<p>Would like to see a bus route end at a park and ride in TRIC. Distribution by carpool from inside TRIC would decrease freeway congestion. Any options on the table such</p>
<p>More incentives to carpool such as the ride share app scoop. Would be helpful in reducing congestion</p>
<p>Why not using the Rail Road to commute people from Reno and Sparks to Reno Industrial Center.</p>
<p>TOO MUCH TRAFFIC</p>
<p>I come early because traffic is awful in the morning. When I try to go home at night I am just sitting in traffic. This is unacceptable for this area and something needs to be done to alleviate the issues especially because it is only going to get worse. We either need to expand the highway, make the highway a two-tiered sort of road where one direction is on top and the other direction is underneath or we need mass transit like a train or subway. It is upsetting to work in an area that you can drive to in 20 minutes but end up getting stuck in traffic for an additional 25+.</p>
<p>I'd rather like to see some kind of public transportation or some kind to assist people with the commute on top of the bad weather approaches my commute typically changes from 1 hour to 2+ hours each way on top of a 12 hour work day. Which really makes for a long stressful day for everyone involved. Either there needs to be a meeting set up with employers to have them alternate possible start and stop times or maybe more public transportation allowing people to have a different option for commuting to and from work. The business park was a great idea however the though wasn't thought through very well with how much traffic and congestion it will bring to the area. With more and more people coming into the area it will only get worse. Possibly teaming up with major companies and offering them a deal of discounted rides for their employees via charter buses might be a better idea. I currently live in the Stead/ Lemmon Valley/ North Valleys area and there is NO FORM of commuter bus/ shuttle that leaves from that AREA! This is NEEDED as there are a lot of employees that live out that way even as far as Boarder town. I hear from many people that if there was a commuter bus going to and from that area they would use the commuter bus. A simple expansion of commuter buses could really help out. It only takes a simple Poll to employees such as this that can give answers for all the craziness that people are feeling and going through on a daily basis. As a regular employee I propose this 1 question.... How would you feel if you had 15 hour work days and a family at home to take care of? I am a dedicated employee to Tesla and I wont leave my job due to commuting however I think that there definately needs to be some kind of solution to this matter and it needs to happen now rather than</p>

Reno is growing and the roads were outdated 15 years ago. The speed limits are lower than most cities of similar size e.g. Salt Lake 70 - 80 mph. The roads and freeways need to be upgraded and light rail should be used.
A train or high speed gondola from high density parking in Sparks would be super convenient
People speeding in and out of traffic, swerving, getting too close to accidents.
Additional lanes are needed in time of an accident the freeway is completely blocked. 30 min drive turns into 3 hours.
Make semi trucks stay in only the right lanes on I-80 between USA Parkway and Reno. It would prevent the majority of accidents and help traffic flow!!!!
Option: Boring company in Reno and hyperloop to USA Parkway!
Accidents almost every week on the way to and from work. Absolutely dangerous to drive to work
A 24 hrs bus line every 2 hours?
prioritize commuter train options to the industrial park, extend the 6 lane I-80 from Sparks to USA Parkway
I have lived in northern Nevada since 1985. The spaghetti bowl has been redesigned at least 4 times during that time frame. I have absolutely zero confidence that anybody will be able to alleviate the current transportation problems on Interstate 80 within the next century. Bad designs to begin with compounded by good money chasing the next bad solution. Try to pull out of Pittsburgh Ave on USA Parkway some time. Limited visibility in both directions yet someone approved this design? Twenty years ago the NHP had planes in the air just about every day to control the speed. There was hardly any traffic then. Now that there is non-stop traffic there is not a sheriff or state trooper anywhere in sight. Until the government agencies can figure out how to take advantage of their current resources there is no hope for the future. Thirty years from now someone else will be taking another survey asking for input as they continue to try to repair the damage that isn't being fixed now.
The traffic on I-80 is surprisingly minimal compared to what I heard from people. Even at exactly 6 pm the freeway still moves at least at the speed limit.
I am not sure how this pathetic survey is going to help get me public transportation from Reno to the Center.
Why isn't there more HP officers on I80? There are some crazy drivers and truckers out there tailgating and cutting people off everyday. Also I am sure everyone knows, one way in and one way out is terrible when there are problems on highway.
Where I live is starting to get terrible driving to work. In time it will be bad like Reno.
Lower speed limit on I 80 to 65mph and increase enforcement. The speed differential is the greatest cause of congestion. Semi going 60 versus cars going 85.
widen Interstate 80 now!!! 4 lanes each way minimum.
The ride share is interesting to my organization.
Pittsburgh ave. Still does not go through. We have one way in and one way out and now we can only make a rt turn.(away from I-80)and still can not see safely down USA Parkway to enter the street so it is very unsafe. Now with snow coming we will have to drive on solid ice again on the freeway because they are not getting worked
I drive in the am from Virginia City Highlands outside Virginia City to work via Hwy 341 to 580/395 to I-80 to USA Parkway. To come home, I drive USA Parkway to Hwy 50 to Six Mile Canyon to Hwy 341 to VC Highlands. The route home in the afternoon usually takes me about 5 extra minutes than I would spend driving I-80, but there is less congestion, fewer bad drivers, and less chance of an accident--or something--causing a traffic slowdown or stop. In other words, I drive a "loop" of sorts for my daily commute and take the longer route on the way home to avoid "drama".
Alternative routes into Tahoe Reno Industrial Center
Need more lanes at choke points. Is better than a year ago so good progress.
I would use public transportation if it was easy to use and reliable. A commuter train would be nice. Since the majority of traffic appears to be going to/from the Tesla facility, it could be the first station. Or, Elon Musk could work with his Boring Co to bring his employees to the Gigafactory after it's successfully implemented in LA.
As a manager, my times vary greatly for start and end times. It was impossible to do any of the shared driving that was set up because of the varied time.

<p>Build a public parking lot at Larkin or behind Woodspring Hotel so that we can take the bus to work at TRI. The best alternative is to build 6 lanes freeway. OR at least for the meantime build 6 lanes in certain areas (easily accessible) so that we all can pass the trucks or slow moving vehicles. The best is to build a 4 lanes from Mustang all the way to Prater which is near Northern Nevada Hospital (this is very feasible in 2 reasons - A: easy access for ambulance from TRI and Fernley to go to the hospital B: it provide the alternative routes should the freeway closed between Mustang and Vista Blvd - it happened many times since I worked here only few months. The 3rd reason is this is going to take many cars off the I-80 from Mustang to Vista Blvd. Another thing is it will not affect the flow of traffic now during the construction since it is a brand new road. When that is done then we can start widening 6 lanes from Vista to Mustang. By looking at Google Maps (we will cross the KVRX-FM Sparks tower). This 4 lanes is needed in the future to access the Copper Canyon project too which is coming to the Loop Rd and the Jeep Trail or Copper Canyon Parkway or Salomon Cir for now. I don't mind putting my email address on here jonnylau88@gmail.com</p>
<p>Any alternative transportation would need to have flexible schedules at numerous locations (IE: BART). Also, we need something that would go door to door. Walking in the winter here any distance is dangerous.</p>
<p>I-80 needs to be 3 lanes each direction but until NHP starts issuing tickets for cars traveling slowly in the left lane. Three lanes or 12 won't matter! Or build planned route from I-80 to La Posada in Spanish Springs.</p>
<p>It is getting to be a very dangerous trip. It had taken as long as 2 hours to travel 20 miles. We have had to go around Pyramid to get home.</p>
<p>Something needs to be done to prevent accidents. More police officers out there to prevent speeding, careless driving and people just being unsafe.</p>
<p>More control over the "crazy young and some older drivers."</p>
<p>My employer provides bus transportation but it is for the production staff so the hours do not match up to my work schedule.</p>
<p>I've worked at PetSmart DC for 7 years and am considering quitting due to traffic, due to both congestion and danger.</p>
<p>Weekdays it is like Death Race. A LOT of people going 80 MPH+, including big rigs. Crazy dangerous!!! Help, NHP!</p>
<p>There should be an alternate route from Sparks to the industrial complex that doesn't include going to Virginia City.</p>
<p>More lanes!</p>
<p>You need a Bi-pass that connects Fallon to I-80 without going through Fernley. There is too much congestion there, trying to get on the Freeway.</p>
<p>Fixed route would not work for me. A shuttle going from a park and ride to place of employment would be better. Vanpool would work well too.</p>
<p>Although I have been with my employer in excess of 5 years, my answer needs to be caveated. We only just started construction in the TRIC and I've only been commuting here for less than a month. I'd be very interested to know how long it will be until add a second on-ramp to I-80 West bound from USA Parkway. This is the most congestion for me. Minimizing commute time is very important to me, as is stewarding the environment. I have a diesel Jetta TDI so I get about 38 mpg and I choose to live in location that minimizes distance to my employer's job-site. I'd be interested in transit/ carpool options, but only if they don't significantly increase my overall door-to-door commute time. Thanks for your efforts on this issue!</p>