# Northwest Utah County Transit Study

# **Final Report**

January 7, 2022













# Northwest Utah County Transit Study

# **Final Report**

Prepared for:

Mountainland Association of Governments
586 East 800 North
Orem, UT 84097

Prepared by:

LSC Transportation Consultants, Inc. 2504 East Pikes Peak Avenue, Suite 304 Colorado Springs, CO 80909

Fehr & Peers 2180 South 1300 East, Suite 220 Salt Lake City, UT 84106

LSC #204600

January 7, 2022

#### **TABLE OF CONTENTS**

Chapter I: Introduction	l-1
Introduction	l-1
Study Issues	l-1
Report Contents	I-2
Chapter II: Review of Previous Plans and Studies	II-1
Introduction	II-1
Review of Previous Plans and Studies	II-1
Eagle Mountain General Plan	II-1
Eagle Mountain Bike & Pedestrian Master Plan	II-2
MAG TransPlan50 (2019-2050 Regional Transportation Plan)	II-3
North Utah County Transit Study	II-4
Saratoga Springs Bicycle & Pedestrian Master Plan	II-5
Saratoga Springs City Center District Area Plan	II-5
Saratoga Springs General Plan	II-6
Saratoga Springs Transportation Master Plan	II-7
Thanksgiving Point Transit Potential Evaluation	II-8
Utah County East-West Study	II-8
UTA Microtransit Planning Project	II-9
Transit-Oriented Development (TOD) Design Guidelines	II-10
Point of the Mountain Transit Study	II-10
Central Corridor Transit Study	II-11
UTA Five-Year Service Plan 2021-2025	II-11
North Lakeshore Area Study	II-11
Chapter III: Existing and Historic Transit Service	-1
Introduction	III-1
UTA Route 806	III-1
Historically (Pre-FrontRunner Service)	III-2
Current Service	III-3
Chapter IV: Community Conditions	IV-1
Introduction	IV-1
Demographic Characteristics	IV-2
Demographics	IV-2
Transit-Dependent Population Characteristics	IV-3
Community Economic Characteristics	IV-7
Employment Sectors	IV-7
Travel Patterns	IV-8
Work Transportation Mode	IV-8

Chapter V: Community Survey	V-1
Survey Methodology	V-1
Survey Analysis	V-1
Residence Location	V-1
Existing Transportation Modes Used	V-1
Potential Public Transit Use to Reach Areas Within Eagle Mountain/Saratoga Springs	V-2
Potential Public Transit Use to Reach Areas Outside Eagle Mountain/Saratoga Springs	V-3
Demographic Questions	V-5
Additional Comments	V-8
Previous Survey Efforts	V-9
Eagle Mountain Public Transportation Survey	V-9
Saratoga Springs Driver and Public Transportation Survey	V-9
Chapter VI: Transit Needs Assessment	VI-1
Introduction	
Household and Employment Density	VI-1
Saratoga Springs Platted Developments	VI-4
Commuter Travel Patterns	VI-5
Regional Travel Demand Model	VI-8
Potential Transit Demand	VI-12
Commuter Transit Demand Model	VI-12
Transit Mode Split	VI-12
Summary	VI-12
Chapter VII: Transit Service Scenarios	
Introduction	VII-1
Short-Term Actions	VII-1
Redwood Road/Pioneer Crossing Park-and-Ride Facility	VII-1
North Spring Run Road Park-and-Ride	VII-2
Fixed-Route Service to American Fork FrontRunner Station	VII-2
UTA Vanpool Program	VII-3
Microtransit Service	VII-4
Corridor Preservation	VII-5
Intermediate Actions	VII-5
Express Bus Service to Utah Valley University	VII-5
Bus Priority in Pioneer Crossing Corridor	VII-6
Long-Term Scenarios	VII-6
Summary	VII-7

Appendix A: Community Conditions Tables

Appendix B: Community Survey Questionnaire

Appendix C: Community Survey Comments



#### **LIST OF FIGURES**

Figure III-1: UTA Routes 806 & 809 Long-Term Trend Daily Ridership Trends	III-1
Figure III-2: Annual Ridership on UTA Routes 806 & 809	III-2
Figure III-3: Map of UTA Route 806, Apr. 2009-Nov. 2012	III-2
Figure III-4: UTA Rt. 806 Total Riders per Trip, AM Peak	
Figure III-5: UTA Rt. 806 Total Riders per Trip, PM Peak	III-3
Figure III-6: Current UTA Route 806 Map	111-4
Figure III-7: 2019 Average Daily Boardings for Route 806	III-5
Figure IV-1: Study Area	IV-1
Figure IV-2: Population Density	IV-2
Figure IV-3: Population Characteristics	IV-3
Figure IV-4: Density of Older Adults	IV-4
Figure IV-5: Density of Ambulatory Disabled Persons	IV-4
Figure IV-6: Density of Low-Income Persons	IV-5
Figure IV-7: Density of Zero-Vehicle Households	IV-6
Figure IV-8: Density of Youth	
Figure IV-9: Employment by Industry	IV-7
Figure IV-10: Means of Transportation to Work	IV-8
Figure IV-11: Travel Time to Work	IV-8
Figure IV-12: Time leaving Home to go to Work	IV-9
Figure V-1: Residence Location	V-1
Figure V-2: Existing Transportation Modes	V-1
Figure V-3: Figure V-3: Potential Transit Use Within Eagle Mountain/Saratoga Springs	
Figure V-4: Trip Purpose	V-2
Figure V-5: Number of Potential Transit Riders	V-2
Figure V-6: Potential Number of Days Riding Transit:	V-3
Figure V-7: Price Willing to Pay Per Trip	V-3
Figure V-8: Potential Transit Use Outside Eagle Mountain/Saratoga Springs	V-3
Figure V-9: Trip Purpose	V-4
Figure V-10: Number of Potential Transit Riders	V-4
Figure V-11: Potential Number of Days Riding Transit	V-4
Figure V-12: Price Willing to Pay Per Trip	V-5
Figure V-13: Would you Use a Park-n-Ride Lot?	V-5
Figure V-14: Age of Respondents	V-5
Figure V-15: Employment Status	V-6
Figure V-16: Transportation Mode to Work	V-6
Figure V-17: Annual Household Income	V-6
Figure V-18: Household Size	V-7
Figure V-19: Vehicle Availability	V-7
Figure V-20: Licensed Drivers:	V-7
Figure V-21: Medical Issue Making Travel Difficult	V-8
Figure V-22: Unable to Access Medical Care Due to Lack of Transportation	V-8

Figure V-23: Lost a Job, Trouble Finding a Job, Dropped Out of School Due to Lack  Transportation	
Figure V-24: Support for Increased Local Sales Tax for Enhance Public Transit	
Figure VI-1: 2015 Household Density	
Figure VI-2: 2015 Employment Density	
Figure VI-3: 2050 Household Density	
Figure VI-4: 2050 Employment Density	
Figure VI-5: Saratoga Springs Platted Properties	
Figure VI-6: Saratoga Springs Commuter Patterns	
Figure VI-7: Eagle Mountain Commuter Patterns	
Figure VI-8: 2015 Eagle Mountain Transportation Demand	
Figure VI-9: 2050 Eagle Mountain Transportation Demand	VI-9
Figure VI-10: 2015 Saratoga Springs Transportation Demand	VI-10
Figure VI-11: 2050 Saratoga Springs Transportation Demand	VI-11
Figure VII-1: BRT/LRT Alignment	VII-2
Figure VII-2: Frequent Bus Service on Route 806	VII-3
Figure VII-3: Express Service with Microtransit Zone	VII-4
Figure VII-4: Bus on Shoulder Alignment	VII-5
LIST OF TABLES	
Table IV-1: Employment Statistics in the Study Area	IV-7
Table V-1: Top Ten Employment Locations	V-6
Table VI-1: Employment Location of Eagle Mountain Residents	VI-5
Table VI-2: Employment Location of Saratoga Springs Residents	VI-5
Table VII-1: Transit-Supportive Development Densities	VII-7



## **Chapter I: Introduction**

#### INTRODUCTION

The Mountainland Association of Governments (MAG) contracted with the team of LSC Transportation Consultants and Fehr & Peers to complete an analysis of service options



for public transportation in the communities of Eagle Mountain and Saratoga Springs. Both communities are experiencing rapid growth with many residents commuting to other locations in Utah and Salt Lake Counties. Current transit service provided by UTA consists of a single route connecting the two communities to the Lehi FrontRunner station during peak commute hours.

This study provides an assessment of current and future transportation needs and the potential feasibility of transit service options in the two communities. Existing and future potential demand are estimated and compared with several transit service scenarios for both short- and long-term implementation.

LSC prepared an Interim Report which provided information on existing community conditions and the existing transit service with an assessment of potential transportation needs. Transit service scenarios were presented for review by the community. Following review of the transit-service scenarios, selected scenarios were refined and evaluated in greater detail to present recommendations for implementation. The recommendations are presented in this Draft Final Report.

#### **STUDY ISSUES**

A number of issues were identified by the communities prior to issuing the Request for Proposals. Additional issues were discussed during a meeting of key participants on October 20, 2020. The key study issues are summarized here.



Loss of direct bus service to downtown Salt Lake City and increased travel times because of transfers



Loss of ridership following service change



Revenue collected for UTA does not correspond with level of service provided





Infrequent service provided only during commute times



Lack of local transit circulation in the communities



Existing low density development is not supportive of frequent transit service



Long Range Transit Plan identifies potential alignment for either Bus Rapid Transit or Light Rail Transit. What interim service could be provided?



What service may be feasible in the long term and the short term?



New job opportunities in the communities will change travel patterns and volumes

#### REPORT CONTENTS

This Draft Final Report contains seven chapters:

- → Chapter II reviews relevant plans and studies relating to transit and transportation issues in the study area.
- → Chapter III provides an overview of historic and current transit service serving northwest Utah County. Direct service had been provided to downtown Salt Lake City until the FrontRunner service was implemented. The route was then changed to connect with FrontRunner at Lehi Station and to serve the Utah Valley University (UVU) with a connection to the UVX Bus Rapid Transit service.
- → Chapter IV presents the community conditions including demographics and economic characteristics of the study area, as well as current and future travel patterns.
- → Chapter V contains the analysis of the online community transportation survey. The survey was conducted among residents of the two communities.
- → Chapter VI presents the transit needs assessment. The needs assessment includes potential commuter demand and demand for local circulation.

→ Chapter VII describes proposed transit service scenarios for the short-range, mid-range, and long-range horizon. Implementation of the short-range recommendations may begin immediately.





## **Chapter II: Review of Previous Plans and Studies**

#### INTRODUCTION

This chapter provides a literature review of relevant plans and studies relating to transit and transportation issues in the study area.

#### **REVIEW OF PREVIOUS PLANS AND STUDIES**

#### **Eagle Mountain General Plan**

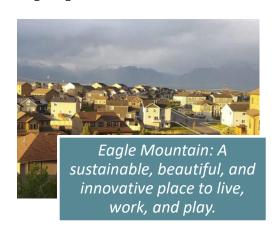
<u>Prepared for:</u> Eagle Mountain City, UT Date: 2018

Since its incorporation in 1996, Eagle Mountain has grown in population from 250 people to over 30,000. Located 30 miles northwest of Provo, at the base of the Lake Mountains, the City is geographically the third largest city in the state. The Mountainland Association of Governments currently projects a population increase of nearly 200 percent from the year 2010 to 2030 with an anticipated population of approximately 57,000.

The Eagle Mountain General Plan articulates the vision and values of the community in order to provide guidance in terms of how the City will look, feel, and function, and how it will provide services and manage resources. The ideas in this General Plan provide a means to improve the community character and quality of life for residents, increase prosperity and business development opportunities, and address City goals within the context of the growing region and regional impacts outlined in the plan document. While the focus of the plan is long-range in nature, it also includes short to mid-term planning, which is essential in laying the groundwork for the long-range vision.

Eagle Mountain City has established an overall vision statement and five guiding principles that represent key values and priorities to consider as it plans for growth and change. The vision statement captures the City's expectations for the future. These expectations are further reflected in the guiding principles.

The community vision stated in the plan is illustrated to the right, and the five guiding principles include:



- → Principle #1: Resiliency
- → Principle #2: Healthy & Vibrant Community
- → Principle #3: Stewardship & Civic Beauty
- → Principle #4: Collaboration
- → Principle #5: Diversity & Choices

Chapter 6 discusses transportation and mobility and lays out the overall transportation goal: *Create an efficient multi-modal system that builds upon the existing transportation system to effectively meet transportation needs within the City and integrates with the regional transportation plan for Utah County and the surrounding area.* Specific objectives listed for transportation and mobility include:



- → Objective #1: Provide safe and efficient movement of traffic on City streets while maintaining the integrity of neighborhoods and alternative modes of transportation.
- → Objective #2: Create an integrated and connected street network that considers the linkages of multiple modes of transportation.
- → Objective #3: Provide opportunities for the use of non-automobile transportation modes, including pedestrian and bike travel, for various trip purposes (work/school commuting, shopping, recreation, and leisure) so that people of all ages and abilities can travel safely in Eagle Mountain.
- → Objective #4: Enhance connectivity between neighborhoods, open spaces, and City destinations.

#### Eagle Mountain Bike & Pedestrian Master Plan

<u>Prepared for:</u> Eagle Mountain City, UT <u>Date:</u> July 2015

The Eagle Mountain Bicycle & Pedestrian Master Plan formalizes a vision for a safe, efficient, and connected network of sidewalks, bikeways, paths, and trails that will grow with the City and improve quality of life for all residents.

Eagle Mountain is a fast-growing city with an estimated 2014 population of over 25,000, a 1,000 percent increase since 2000 when the population was 2,157. The city has abundant developable land, convenient access to parks, and a family-friendly environment, all of which have made it one of the fastest-growing communities in the state. Due to the city's tremendous potential for growth and its desire to grow in a way that maximizes quality of life and preserves its unique character, the City has chosen to develop the *Eagle Mountain Bicycle & Pedestrian Master Plan*, which will guide the development of Eagle Mountain's bicycling and walking infrastructure, programs, and culture in coming years. Goals of the plan include:

#### **Network and Facility Planning**

- Develop a diverse network of pedestrian pathways and bikeways that serve people of all ages and abilities
- Develop safe and efficient facilities that meet current industry standards
- Plan for the seamless integration of a comprehensive bicycle and pedestrian system with existing and future development.
- Plan for connectivity to regional destinations beyond Eagle Mountain city limits.



#### **Funding**

- Identify, track, and pursue a variety of funding sources to implement, renovate, and maintain Eagle Mountain's bicycle and pedestrian system.
- Encourage, incentivize, and require new development to participate in the advancement of a robust bicycle and pedestrian system.



#### Programs, Education, & Encouragement

- Promote pedestrian and bicycle safety and awareness through education and encouragement activities.
- Leverage and support the existing number of Eagle Mountain school children walking and bicycling to school through enhanced Safe Routes to School programming.

#### MAG TransPlan50 (2019-2050 Regional Transportation Plan)

**Prepared for:** The Mountainland Association of Governments

The TransPlan50 serves as the 2019 - 2050 Regional Transportation for the Provo/Orem urban area and focuses on building a robust, intermodal, and urban transportation system. The primary goals within the plan have evolved to keep pace with rapid population growth and travel demands. The five overarching goals include:



1) Update the regional highway system to a metropolitan gridbased network



2) Explore additional freeways, add capacity



3) Create a robust regional transit system

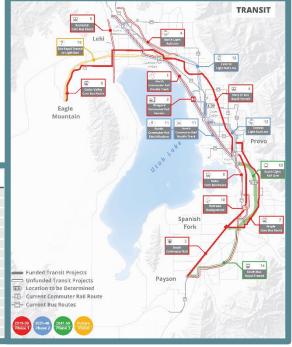






Regarding transit specifically, the plan outlines 14 projects to be completed in Phase 1 (2019-2030), Phase 2 (2031-2040), and Phase 3 (2041-2050), as well as an additional project to be considered as a future vision for Bus Rapid Transit or Light Rail between Eagle Mountain and American Fork.

	Project Name	Phase <b>Needed</b>	Phase <b>Funded</b>	Cost
1	North Commuter Rail Intermittent Double Track	1	2	\$113M
2	South Commuter Rail - Payson to Provo	1	1	\$252M
3	Vineyard Commuter Rail Station at 800 N	1	1	\$16M
4	North Light Rail Line - American Fork to Draper	1	3	\$654M
5	State St Bus Rapid Transit - State ST; Provo to Am Fork	1	1	\$313M
6	Cedar Valley Core Bus Route - Eagle Mtn to Am Fork	1	1	\$31M
7	Maple Core Bus Route - Spanish Fork to Provo	1	1	\$39M
8	Nebo Core Bus Route - Payson to Provo	1	2	\$69M
9	Redwood Core Bus Route - Saratoga Spgs to SL Co on Redwood RD	1	2	\$24M
0	Sharp - Tintic Railroad Realignment	1	1	\$7M
1	North Commuter Rail Electrification & Double Track - Provo to SL Co	2	Unfunded	\$689M
2	Central Light Rail Line - Provo to American Fork	2	Unfunded	\$1.1B
3	South Light Rail Line - Spanish Fork to Provo	3	Unfunded	\$834M
4	South Bus Rapid Transit - Payson to Spanish Fork	3	Unfunded	\$196M
15	BRT or Light Rail - Eagle Mtn to Am Fork	Vision	Unfunded	



#### North Utah County Transit Study

<u>Prepared for:</u> The Mountainland Association of Governments (MAG) and the Utah Transit Authority (UTA)

Date: March 2015

With rapidly growing population, employment, and traffic congestion in northern Utah County, the goal of this study was to examine the potential for future transit facilities to help meet the future travel demand expected due to this growth. This study was intended to provide the technical analysis of transit capital projects that could potentially be included in MAG's upcoming Regional Transportation Plan process.

Specifically, the study examined three different transit system components in detail, including:

- → Circulator service from the Thanksgiving Point commuter rail station
- → North/south light rail service as an extension from the Draper TRAX station
- → East/west transit service providing connections from commuter rail to western Lehi, Saratoga Springs, and Eagle Mountain



#### Saratoga Springs Bicycle & Pedestrian Master Plan

<u>Prepared for:</u> City of Saratoga Springs, UT

Date: September 2016

The Saratoga Springs Bicycle and Pedestrian Master Plan sets forth a vision and goals and policies for walking and bicycling in Saratoga Springs:

"Saratoga Springs will create healthy and vibrant communities through the creation of attractive and safe bicycle and pedestrian networks that can be enjoyed for recreation and transportation."

Prior to completion of this plan, the City's first-ever *Bicycle and Pedestrian Master Plan*, all bicycle planning and policy was contained within the City's *General Plan* or in the *Trails Master Plan*. This Plan proposes a system of bikeways, sidewalks, and trails connecting neighborhoods to key activity centers throughout the city, developing support facilities, and by identifying recommendations for monitoring the implementation of the Plan.

The Plan outlines three overall goals (illustrated to the right) along with a detailed list of objectives under each goal that needed to be completed in order to achieve the overall vision for the Plan.



Goal 1: Provide a continuous system of bike lanes, sidewalks, crosswalks, shared paths, and other bicycle and pedestrian facilities throughout Saratoga Springs and connections to neighboring cities that are safe and attractive to all users.



Goal 2: Increase transportation safety for all modes through education and enforcement efforts.



Goal 3: Institutionalize bicycle and pedestrian planning and routine accommodation of bicycle and pedestrian needs into city processes.

### Saratoga Springs City Center District Area Plan

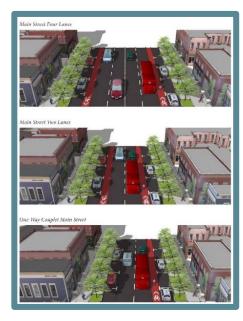
<u>Prepared for</u>: City of Saratoga Springs, UT

Saratoga Springs is the center point for transportation connections between Cedar Valley, Utah Valley, and Salt Lake Valley. Existing arterials such as Redwood Road (north-south) and SR-73 (east-west), as well as Pioneer Crossing and Pony Express Parkway, both of which are under construction, will link the plan area to surrounding communities and other major transportation corridors. A future freeway route is planned, connecting the Saratoga Springs City Center to the Mountain View Corridor to the north and into the Cedar Valley to the west. With commuter rail and bus rapid transit stops also planned

at the center of the plan area, new residents can expect seamless connections to most of Utah County and Salt Lake County.

This Plan provides a vision for the future of the Saratoga Springs City Center and describes the elements required to guide the development of a great community. Six alternative scenarios were developed, each of which is consistent with an overall vision for the property.

Related to public transportation, the Plan includes a section on anticipated new high-capacity transit. The western portion of Utah County will need a high-capacity transit system to link with the extensive system now being built all along the Wasatch Front. Two types of high-capacity transit have been addressed in the District Area Plan: bus rapid transit (BRT) and commuter rail. Both BRT and commuter-rail stops will have major effects on land use. When properly designed, land use can increase ridership and the development of stops can increase the value of the surrounding land. The concept for the District Area Plan shows higher density mixed-use development around potential transit stations. In addition, Redwood Road and Pony Express provide the two major spines of a new BRT system.



#### Saratoga Springs General Plan

<u>Prepared for:</u> City of Saratoga Springs, UT <u>Date:</u> July 2017

The Saratoga Springs General Plan serves as the City's primary planning policy document and is the basis for ordinance and policy changes to help implement the City's vision for the future. It is a long-term strategic plan that serves as a single place where various City plans and programs come together towards a singular vision for the future. As an "umbrella" document, the Plan's objectives guide decisions related to new development, redevelopment, City programs, projects, budgets, and services. This Plan shapes other City plans, spending on capital projects, development of regulations, and other programs and services, all of which effect the community in both large and small ways.

The guiding vision stated in the plan is:

Saratoga Springs is a growing community with an unparalleled quality of life. Now and into the future, we will strive to:

- Increase recreation opportunities for all ages;
- Maximize our lakeside locations;
- Provide vibrant gathering places;
- Offer a range of housing choices; and
- Encourage a variety of employment and business opportunities.

We will maintain sound fiscal strategies and sustainable city services in pursuit of these goals.



The 2017 General Plan carried over all six vision themes from the 2015 Strategic Plan, one of which was transportation. The transportation vision statement is: "In Saratoga Springs, we invest in the development and maintenance of a modern transportation system. We accomplish this by taking appropriate measures to mitigate traffic, expand critical corridors, and provide timely and essential maintenance of our roadway system." The transportation category contains objectives related to the road network, transit, and pedestrian network. Specific transit objectives included in the Plan are:

- → Support increased bus service: Plan future development to support additional Utah Transit Authority bus routes and stops within Saratoga Springs.
- → Increase access to existing and planned transit stops: Consider the UTA long-range plans for Bus Rapid Transit and Light Rail through Saratoga Springs when approving development projects and provide adequate pedestrian connections to transit throughout developments.
- → Plan development to support investment in transit options for city residents: Plan higher intensity development near access to transit stops to support transit investment and long-term ridership.

#### Saratoga Springs Transportation Master Plan

<u>Prepared for:</u> City of Saratoga Springs, UT

<u>Date:</u> January 2019

The Saratoga Springs Transportation Master Plan (TMP), adopted in 2012 and amended in 2013 and 2017, was updated in 2019. With rapid community growth comes increased traffic and the potential that the roadway network in the city will fail to meet the needs of a growing population. The purpose of this document is to provide a transportation plan that will meet the needs of the residents of Saratoga Springs through the year 2040.

Related to transit specifically, the TMP outlines that Saratoga Springs does not and is not likely to operate and maintain its own transit system, so the combined efforts of UTA, MAG, and the City will largely dictate the nature of a future expanded transit system. However, the City will remain actively involved in promoting transit and assisting in procuring the necessary funding and support to develop, implement, and maintain a sustainable transit system.

The existing UTA bus line Route 806 is unlikely to continue to meet the growing needs of the city in the future and may be supplemented by an additional express bus, specifically between Saratoga Springs and Salt Lake City. Additional bus routes will likely be added by UTA as the city expands and should be restricted to collectors and arterial streets. Due to the relatively large distances between the residential developments to the north and south and the commercial/retail center at Commerce Drive, a local bus system connecting these two areas may be beneficial as time progresses and population increases.



Three public transit services considered in this Masterplan are Light Rail (TRAX), Bus Rapid Transit (BRT), and UTA's FrontRunner commuter rail line. Due to the importance of a transit network to Saratoga Springs, and at the request of several major land holders in the city, a TRAX or BRT line is being proposed as part of the TMP, but this is a "vision"

project; the City will continue to work with UTA and MAG to determine the best location and implementation timing for the future TRAX or BRT line.

#### **Thanksgiving Point Transit Potential Evaluation**

**Prepared for:** The Utah Transit Authority (UTA)

<u>Date:</u> December 2019

Thanksgiving Point is a quickly developing employment area located in northern Utah County and is located at the "chokepoint" where UTA's FrontRunner commuter rail line and I-15 cross the county line. As a large employment area, it draws employees from across Salt Lake and Utah Counties. There are few alternatives for travel through this point, so there is a potential for severe congestion as development increases on both sides. As a result, there will be more demand for transit alternatives to the traditional single-occupant car.

This study examines the constraints and possibilities for improving local transit service in the Thanksgiving Point area and specifically:

Provides an overview of the current transitplanning context in Thanksgiving Point.

2. Explains purely geometric facts about how public transit succeeds or fails, based on the design of developments and street networks.

3. Surveys a number of comparable case studies where suburban employment areas are served by local shuttle networks, with a focus on examples for the San Francisco Bay Area, where a unique program of employer sponsorship has long been a characteristic element of transit.

4. Offers some tools that could be used in cooperation with area employers to provide improved local transit services.

#### **Utah County East-West Study**

<u>Prepared for:</u> The Mountainland Association of Governments (MAG) Date: January 2009

The *Utah County East-West Study* began in the fall of 2007 with the purpose of determining the need for future east-west transportation improvements in Utah County based on population and employment growth projections to the year 2040. The project study area included the Salt Lake County line to the north, Orem to the south, the Eagle Mountain area to the west, and the Cities of Cedar Hills and Pleasant Grove to the east. The study area was then divided into two sub-areas, eastern and western, with I-15 acting as the dividing line.

Twenty-three projects were identified as a result of the process: 21 roadway projects and 2 transit networks/intercity connector bus routes were recommended. In addition, improvements to existing local bus routes were recommended. Results of the travel-demand modeling indicated a need for larger, high-capacity projects in the western sub-area (freeways and large arterials) and smaller projects to improve connectivity and functionality in the eastern sub-area. These results were also consistent with the transportation facility types preferred by the public.

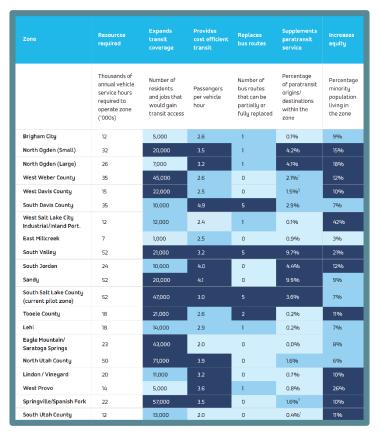
#### **UTA Microtransit Planning Project**

Prepared for: The Utah Transit Authority (UTA)

Date: September 2020

Microtransit, sometimes referred to as on-demand transit, has emerged as a promising alternative to fixed-route transit, particularly in the following areas: providing first-and-last mile connections to transit, improving mobility in hard-to-serve areas, reducing private-vehicle dependence, and replacing underperforming flex- and fixed-route buses.

In late 2019, UTA launched UTA on Demand by Via, a microtransit pilot in southern Salt Lake County. The service has grown steadily and has been popular with riders, serving approximately 400 – 500 trips per day (prior to COVID-19) with an average customer satisfaction rating of 4.8 out of 5.0. If the pilot is deemed successful, this study will provide guidance on where and how microtransit can be extended in the UTA service area.



The study evaluated 20 different potential microtransit zones on a scale of low/medium/high for the following five criteria:

- → Expands transit coverage,
- Provides cost-efficient transit service,
- → Replaces underperforming bus routes.
- Supplements ADA paratransit service, and
- Increases equity.

In addition, the plan describes some promising opportunities for future microtransit expansion, including off-peak microtransit services, combined mictrotransit zones, and integrated mobility solutions.

#### Transit-Oriented Development (TOD) Design Guidelines

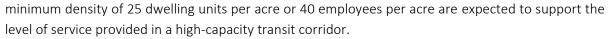
Prepared for: The Utah Transit Authority (UTA)

Date: December 2014

These guidelines are provided to offer direction for joint-development and transit supportive development adjacent to the high-capacity transit system corridors served by FrontRunner, TRAX, and Bus Rapid Transit (BRT). The document provides guidance for the types of land uses and densities which support high-capacity transit service, but allows for flexibility to accommodate specific developments. The Guidelines provide three goals:

- → Increase Ridership
- Optimize Developable Land and Support the Regional Growth Vision
- → Generate Revenue

The guidelines included minimum densities expected for various types of communities. For a station community, a

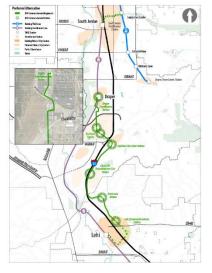


Guidelines are recommended for design including streets, pedestrian facilities, parking ratios, and streetscapes.

#### Point of the Mountain Transit Study

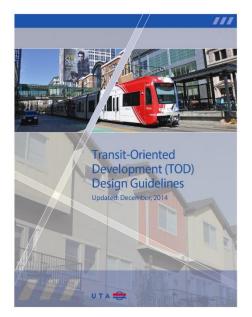
<u>Prepared for:</u> The Utah Transit Authority (UTA)

Date: December 2020



The Point of the Mountain Transit Study focused on options for high-frequency transit service between Sandy in Salt Lake County and Lehi in Utah County. The planning and alternatives analysis was completed in 2020 and the study is moving into project development. The preferred alternative is Bus Rapid Transit (BRT) service between the Draper Front Runner Station and Traverse Mountain in Lehi. The BRT will operate primarily on a dedicated right-of-way and provide high-frequency service.

Implementation of the preferred alternative will be a joint effort of UTA, the Utah Department of Transportation, Draper City, Lehi City, South Jordan City, Sandy City, Wasatch Front Regional Council, Mountainland Association of Governments, Salt Lake County, and Utah County.



#### **Central Corridor Transit Study**

<u>Prepared for:</u> The Utah Transit Authority (UTA) and Utah Department of Transportation (UDOT) Date: April 2021

The Central Corridor Transit Study evaluated options for providing expanded high-capacity transit service in Utah County, between Lehi and Provo. The purpose of the study was to determine a Preferred Alternative which identifies the transit alignment (corridor and station areas), and the transit mode (type of transit technology, such as bus rapid transit, light rail).

The options which were considered included bus rapid transit (BRT), light-rail, and commuter rail. The Preferred Alternative is a new BRT route with high-quality service connecting communities and major destinations along a north-south transit spine, generally following State Street from Lehi to Provo, and a branch connecting to Vineyard along 800 North. The Preferred Alternative:

- → Provides high-quality transit service to all communities in the study area and connects to key transit-oriented development (TOD) opportunities and transit-supportive land uses, as well as emerging development areas
- → Links key destinations and employment centers, including Silicon Slopes, Timpanogos Regional Hospital, and Utah Valley Hospital
- Integrates with the local and regional transit system by providing connections to FrontRunner, UVX, the potential Point of the Mountain transit project, and local bus service.

Next steps will be to complete a more detailed economic analysis and an environmental analysis of the proposed BRT route.

#### **UTA Five-Year Service Plan 2021-2025**

Prepared for: The Utah Transit Authority (UTA

Date: February 2021

The Five-Year Service Plan outlines service changes and enhancements to be implemented over the coming five years. Because of the impacts of the pandemic, UTA has not planned any major service changes to be implemented in 2021. Service planning in Utah County includes opening the Vineyard FrontRunner station, adjusting bus routes to serve the Vineyard station, and innovative mobility in Saratoga Springs, Eagle Mountain, and Thanksgiving Point areas. The plan calls for improving reliability and frequency of FrontRunner service by adding new sections of double tracking in Utah County.

#### North Lakeshore Area Study

Prepared for: The Utah Transit Authority (UTA

The Mountainland Association of Governments (MAG) completed a regional transportation study along the north shore of Utah Lake. Solutions to develop an improved regional transportation system were identified. The need for improved public transportation was identified. Transit and travel-demand management strategies were eliminated as a stand-along scenario because of a lack of transit-supportive densities and an unsupported level of trip reduction. The scenario recommended for additional study includes expansion and extension of Pioneer Crossing. The scenario includes the Foothill Lake Bridge and a major arterial connection between Pioneer Crossing and the Vineyard FrontRunner station.





# **Chapter III: Existing and Historic Transit Service**

#### INTRODUCTION

This chapter provides an overview of historic and current transit service serving northwest Utah County.

#### **UTA ROUTE 806**

Public transportation serving Eagle Mountain and Saratoga Springs began in April 2009 through an express bus service running between Eagle Mountain/Saratoga Springs and Downtown Salt Lake City (Route 806). In 2012, as the Utah Transit Authority's (UTA) FrontRunner rail service was coming online, Route 806 was phased out as a commuter service in order to alleviate duplicate service between it and the new commuter rail service.

Figure III-1 presents the combined long-term daily ridership trend for the routes serving Eagle Mountain and Saratoga Springs. This includes UTA's Route 806 for the period from April 2009 to March 2020, and UTA's Route 809 for the period from December 2012 to August 2013.

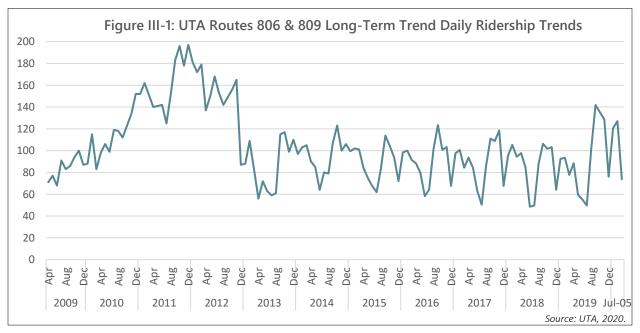
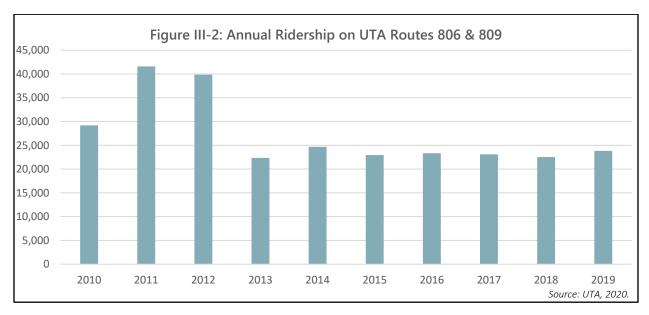


Figure III-2 presents annual ridership data for UTA's Route 806 and Route 809 for the period from 2010 through 2019. Annual ridership was highest during 2011 and 2012, and after dropping in 2013 has remained relatively stable around 23,000 annual passenger-trips.



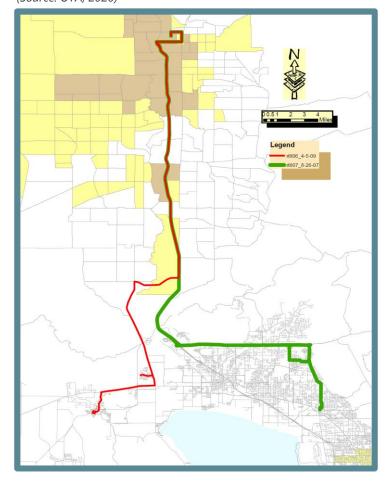
Using cost per vehicle revenue hour from the National Transit Database for 2019, along with the average number of passengers for September 2019, the average cost per passenger trip for the route is \$9.06.

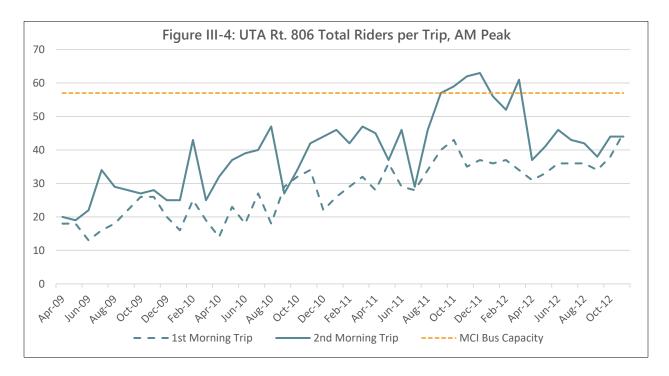
#### Historically (Pre-FrontRunner Service)

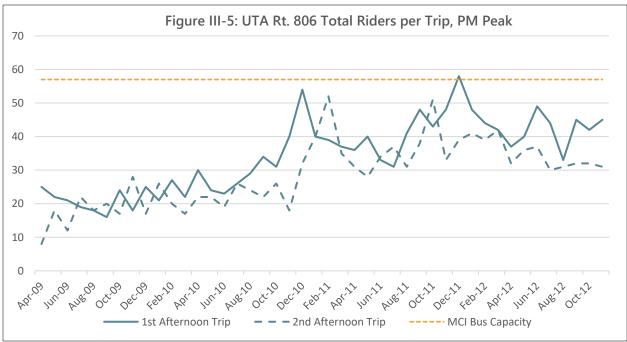
From April 2009 to November 2012, through a Congestion Mitigation and Air Quality (CMAQ) grant, UTA's Route 806 operated as an express service between Eagle Mountain/Saratoga Springs and Downtown Salt Lake City. Figure III-3 illustrates the route map for the service.

Between 2009 and 2012, the service consisted of two northbound trips during the A.M. peak period and two southbound trips during the P.M. peak period. Figures III-4 and III-5 present the total number of riders per trip on Route 806 between April 2009 and November 2012 during the A.M. and P.M. peak periods. According to UTA, during the 2011 - 2012 school year, ridership appears to have exceeded the seating capacity on the second morning trip. Ridership on all other trips generally ranged from 53 percent to 87 percent of seating capacity during this same period.

Figure III-3: Map of UTA Route 806, Apr. 2009-Nov. 2012 (Source: UTA, 2020)







#### **Current Service**

As UTA's FrontRunner commuter rail service began to come online in late 2012, Route 806 was phased out to prevent duplication of service. Instead, Route 806 was made into a local connection from Eagle Mountain and Saratoga Springs to the FrontRunner station. By the end of its time as a commuter bus service in late 2012, the acceptance of the route was very popular with its limited pool of dedicated riders. Some days there were no seats available as it left Utah County for downtown Salt Lake City, meaning 80 to 90 passengers per day traveling north in the morning and then returning south in the afternoon. In December 2012, the ridership on Route 806 plummeted as the route changed to a Utah County route with connection to the FrontRunner rail service.

While the express bus service performed very well in terms of passengers per trip, when analyzed by passengers per mile, the route was very expensive due to the overall length of the trip to downtown Salt Lake City. The limited budget of miles and hours prevented UTA from continuing to add to the Route 806 service once the FrontRunner commuter rail service was up and running.

The resources to operate the Route 806 express bus to downtown Salt Lake City were redirected to the new connector bus and FrontRunner rail service. The new routing provides a way to move more passengers from northwest Utah County to the central part of the county, primarily from Eagle Mountain/Saratoga Springs to Lehi Station, and also provides connection to places like Utah Valley University. By operating more trips throughout the day with a higher carrying capacity, the FrontRunner is able to accommodate 700 passengers a day boarding at the Lehi Station and providing a regional connection to and from Salt Lake City. This service model provides a higher level of service and a wider variety of service to the Eagle Mountain and Saratoga Springs areas. The current route map for the Route 806 service with connection to the FrontRunner rail service is shown in Figure III-6.

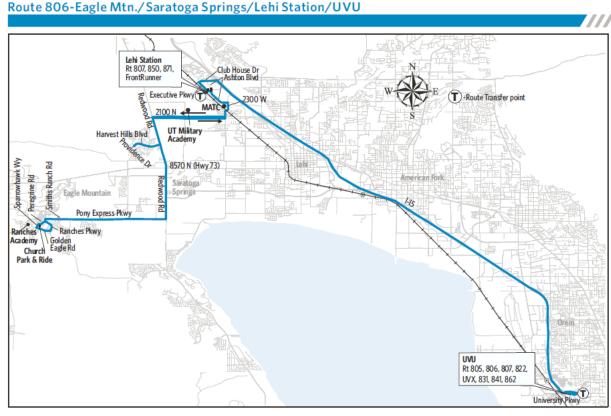


Figure III-6: Current UTA Route 806 Map (Source: UTA, 2020)

Figure III-7 illustrates average daily boardings for Route 806 during 2019. The stops with the most boarding activity included Campus Drive at 791 W (168 boardings), 1200 S at 735 W (68 daily boardings), and Lehi Station (27 boardings).





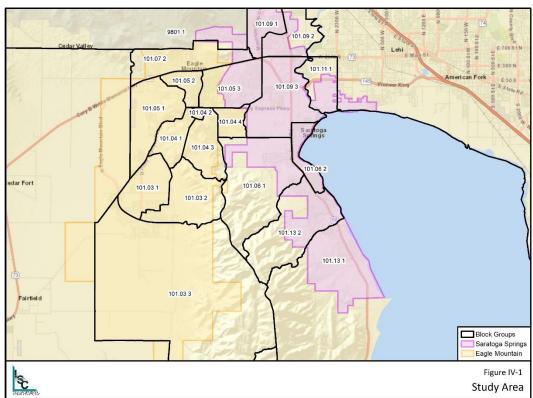
# **Chapter IV: Community Conditions**

#### INTRODUCTION

Chapter IV presents the community conditions, demographics, and select local travel patterns for Eagle Mountain and Saratoga Springs, UT.

Eagle Mountain and Saratoga Springs are located in north western Utah County, UT. They are west of Lehi and approximately 35 miles south of Salt Lake City, UT. Saratoga Springs borders Utah Lake to the east. Saratoga Springs was incorporated at the end of 1997 and became a city in 2001. Eagle Mountain is located to the west of Saratoga Springs and is to the west and north of the Lake Mountains. It is also a relatively new city. Eagle Mountain was incorporated in late 1996 and became a city in 2003. Both Eagle Mountain and Saratoga Springs are in the Provo-Orem, UT Metropolitan Statistical Area.

The demographic analysis was done by block group, which is a census-defined boundary. These boundaries do not necessarily denote neighborhoods or communities, but rather act as a standardized means for analysis. The study-area block groups are shown in Figure IV-1.



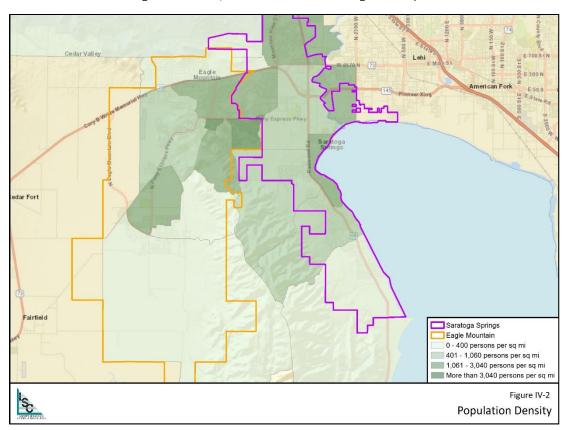
#### **DEMOGRAPHIC CHARACTERISTICS**

#### **Demographics**

Unless noted otherwise, all data listed in this chapter are from the 2018 U.S. Census American Community Survey (2018 ACS) five-year estimates. According to the 2018 ACS, the total population of the study area is 59,079.

#### **Population Density**

Population density is used to determine where population is concentrated. The size of the census block groups can skew the location of population concentrations. Transit is generally more successful in areas with greater concentrations of population. As shown in Figure IV-2, the area with the highest density is the area in north east Eagle Mountain, east of Porters Crossing Parkway.



#### **Population Growth**

According to the Saratoga Springs city website

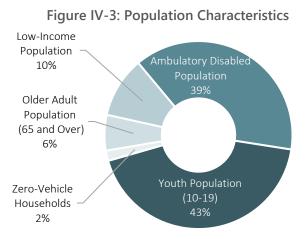
- The Utah Governor's Office of Economic Development identified Saratoga Springs with the fastest growth rate in the State from 2000-2010 at 1,672.8 percent.
- Saratoga Springs was recently identified as the epicenter for growth in Utah, with an average growth rate of 635 residential units, or 2,700 new residents, each year.
- The City's current population is nearly 38,000 residents and growing far ahead of prior projections.
- This continued growth will translate into a 35 percent population increase over the next 5 years or 51,000 total residents. At this rate, Saratoga Springs' population will nearly double in the next 10 years.

According to the Eagle Mountain 2018 General Plan, Eagle Mountain grew from a population of 250 at its incorporation in 1996, to over 30,000 people. The Mountainland Association of Governments projects a population increase of nearly 200 percent from the year 2010 to 2030, with an estimated population of 57,000 in 2030.

#### **Transit-Dependent Population Characteristics**

This section provides information on the individuals considered by the transportation profession to be dependent upon public transit. The four types of limitations that preclude people from driving are physical limitations, financial limitations, legal limitations, and self-imposed limitations. Physical limitations may include permanent disabilities (i.e., frailty, blindness, paralysis, or developmental disabilities) to temporary disabilities (i.e., acute illnesses and head injuries). Financial limitations include people who are unable to purchase or rent a vehicle. Legal limitations include being too young to drive or having no driver's license. Self-imposed limitations refer to people who choose not to own or drive a vehicle (some or all of the time) for reasons other than those listed in the first three categories.

The Census is generally capable of providing information about the first three categories of limitation. The fourth category of limitation represents a relatively small portion of transit ridership in areas with low density. Figure IV-3 presents the study area's statistics regarding transportation dependent populations. Although ambulatory disabled and low-income population data are included in the 2018 ACS, they are only available at the tract level and were apportioned to the block group level, based on the population of the block group compared to the total population in the tract. Detailed tables for this chapter can be found in Appendix A.

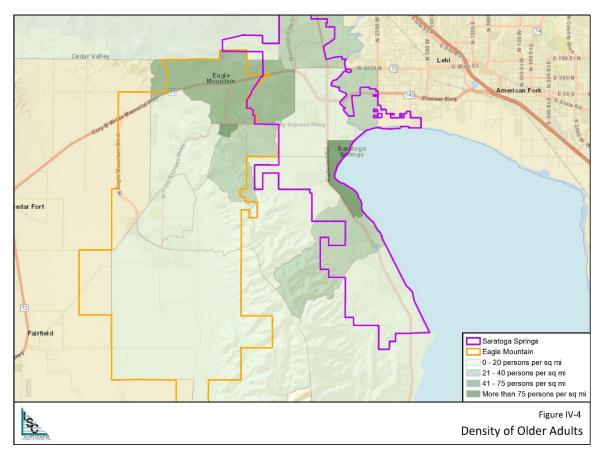


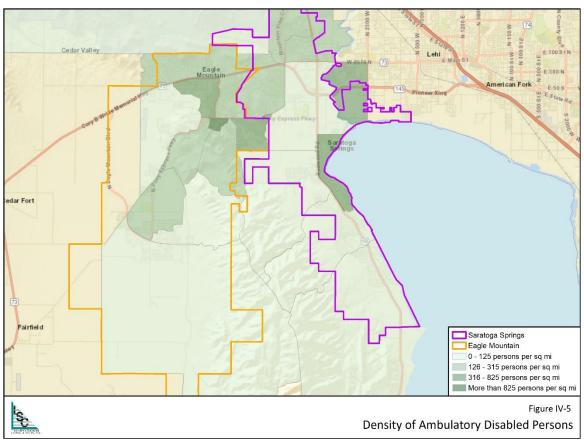
#### Older-Adult Population

The older-adult population, defined by the U.S. Census Bureau as people 65 years of age or older, represents a significant number of the national transit-dependent population and represents six percent of the total population in the study area. As shown in Figure IV-4, the areas with the highest density are in central Saratoga Springs and north Eagle Mountain.

#### Population of Persons with an Ambulatory Disability

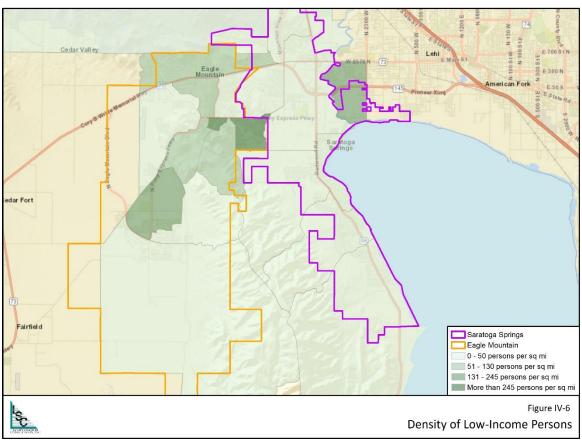
An individual is classified as having an "ambulatory disability" if they have serious difficulty walking or climbing stairs. Approximately 39 percent of the population in the selected area has some type of ambulatory disability. As shown in Figure IV-5, the areas with the highest density of persons with an ambulatory disability are in the north east portion of Eagle Mountain followed by central Saratoga Springs.





#### **Low-Income Population**

Low-income population, as defined by the FTA, includes persons whose household income is at or below the Department of Health and Human Services' poverty guidelines. The low-income population listed in the tables and GIS maps includes people who are living below the poverty line using the Census Bureau's poverty threshold. Approximately 10 percent of the population of the selected area are considered low income. As shown in Figure IV-6, the area with the highest density is in north east Eagle Mountain, east of Porters Crossing Parkway.

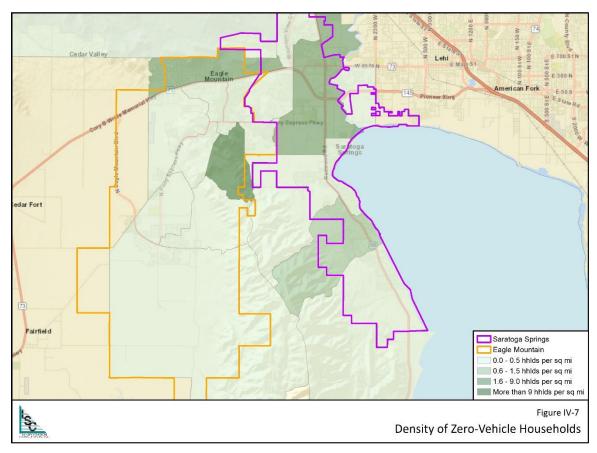


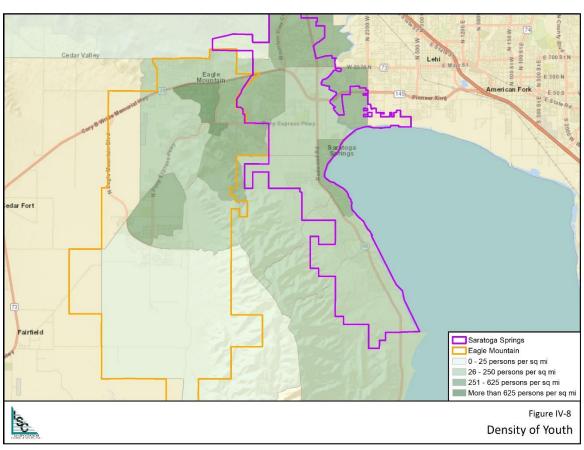
#### Zero-Vehicle Households

Individuals residing in zero-vehicle households are generally transit-dependent as they do not have access to a private vehicle. Approximately two percent of households in the selected area reported having no vehicle available for use. The density of zero-vehicle households for the study area is shown in Figure IV-7. The ranges for the density of zero-vehicle households are quite low, due to the size of the block groups, combined with the small number of zero-vehicle households in the study area. The area with the highest density is in east central Eagle Mountain, followed by north eastern Saratoga Springs.

#### **Youth Population**

The population density of youth (10-19 years of age) for the study area is shown in Figure IV-8. Approximately 43 percent of the population of the study area are youth. While youth make up the largest percentage of persons in the study area, the highest concentrations are in northern Eagle Mountain





#### **COMMUNITY ECONOMIC CHARACTERISTICS**

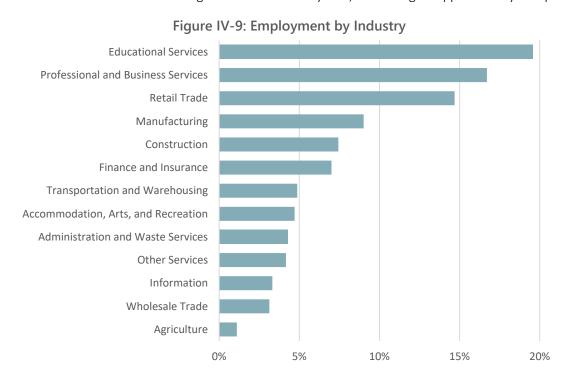
As shown in Table IV-1, according to the 2018 ACS, the study area has a total civilian labor force of 23,647, with 786 identified as unemployed (2.4 percent). This is comparable to the 2018 ACS five-year average unemployment for Utah (2.2 percent). According to 2018 ACS, the unemployment rate for the study area (3.3 percent) is similar to the unemployment rate for Utah (3.2 percent).

Table IV-1: Employment Statistics in the Study Area						
	Eagle Mountain		Saratoga Springs		Total	
	Estimate	Percent	Estimate	Percent	Estimate	Percent
Population 16 years and over	16,879		15,728		32,607	
In labor force	12468	73.9%	11179	71.1%	23,647	72.5%
Civilian labor force	12417	73.6%	11119	70.7%	23,536	72.2%
Employed	12079	71.6%	10671	67.8%	22,750	69.8%
Unemployed	338	2.0%	448	2.8%	786	2.4%
Armed Forces	51	0.3%	60	0.4%	111	0.3%
Not in labor force	4411	26.1%	4549	28.9%	8,960	27.5%
Unemployment Rate		2.7%		4.0%		3.3%
Source: US Census Bureau, American Community Survey, 2018						

According to Longitudinal Employer-Household Dynamics (LEHD) data, there were 23,197 persons in the in-area labor force for Eagle Mountain and Saratoga Springs in 2018. Of those, 22,023 persons (approximately 95 percent) were employed outside of the area. Both Eagle Mountain and Saratoga Springs have both included plans for economic development in their recent master plans.

#### **Employment Sectors**

Figure IV-9 shows the available 2018 ACS employment information for the study area by employment sector. The employment numbers reflect a five-year average and may not accurately reflect current conditions. The Educational Services sector is the largest sector in the study area, accounting for approximately 19.6 percent of



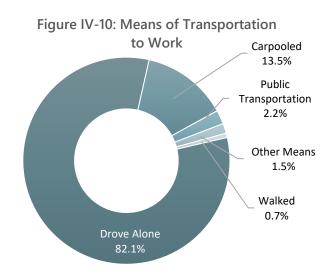
employment. The second highest industry sector is Professional and Business Services (16.7 percent). Retail Trade was the third highest sector, reporting approximately 14.7 percent of employees.

#### **TRAVEL PATTERNS**

#### **Work Transportation Mode**

The 2018 ACS yields information about the means of transportation to work for the study area's employed residents. Figure IV-10 shows the modes of travel for the study area's modes of travel to work.

These data were tabulated for employees 16 years of age and older who were employed when the ACS was completed. The majority of the study area's workforce drives alone to work (16,349 people or 82.1 percent). Carpooling (13.5 percent) was the next highest mode of transportation to work. There were 433 employees (2.2 percent) who reported using public transportation. Out of the study area's workforce, 2,382 people reported that they worked from home, requiring no mode of transportation to work. These employees were not included when calculating the above percentages.



The mean commute time for study-area residents was 33.3 minutes. Figure IV-11 shows that the most frequent response for residents' travel time to work was less than 30 to 34 minutes (17 percent of the respondents) followed by 35 to 44 minutes (15 percent). The third highest response was 45 to 59 minutes (13 percent).

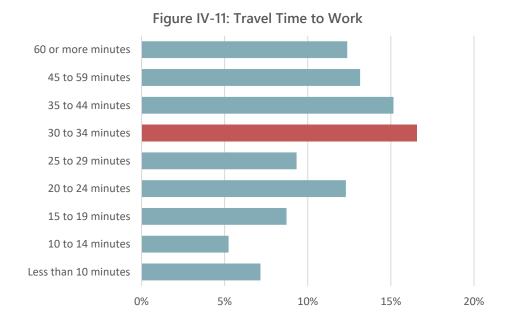


Figure IV-12 shows the time ranges for study-area residents leaving home to go to work. The most frequent responses for the study area were between 6:30 and 6:59 a.m., and 7:00 and 7:29 a.m. with 12.3 percent of the total responses. The next most frequent response was between 7:30 and 7:59 a.m. with 11.9 percent, followed by 8:00 and 8:29 a.m. with 10.7 percent of total responses.

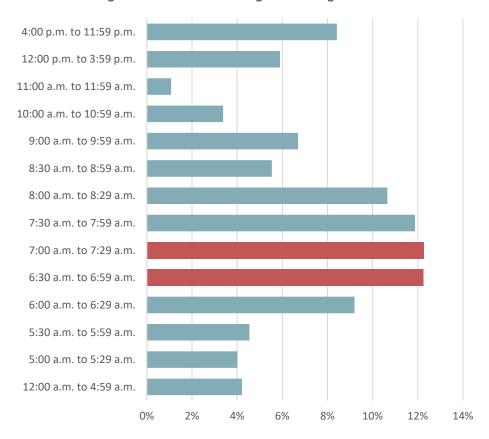


Figure IV-12: Time Leaving Home to go to Work



# **Chapter V: Community Survey**

#### **SURVEY METHODOLOGY**

As part of the effort to obtain input from the community, a survey questionnaire was used for Northwest Utah County residents. The questionnaire was developed with input from the study partners and Mountainland Association of Governments (MAG) staff and then distributed as widely as possible. The survey asked respondents to answer a series of questions about their personal and household transportation needs. The survey was available online and as a paper (PDF) version for approximately three weeks (from November 17, 2020 through December 4, 2020) and is included in Appendix A.

#### **SURVEY ANALYSIS**

A total of 942 survey responses were received and the results are discussed in the following section.

#### **Residence Location**

Respondents were asked to provide their residence location and the results are shown in Figure V-1. Approximately 75 percent of respondents indicated that they reside in Eagle Mountain, followed by 23 percent of respondents who reside in Saratoga Springs.

#### **Existing Transportation Modes Used**

Respondents were asked which types of transportation they and others in their household use and how often they use it. Figure V-2 illustrates the results. Approximately all survey respondents (100 percent) reported they or a member of their household use a personal vehicle, followed by 55 percent of respondents who indicated that they walk, 38 percent of respondents who said they use a bicycle, and 31 percent of respondents who said they receive a

Figure V-1: Residence Location

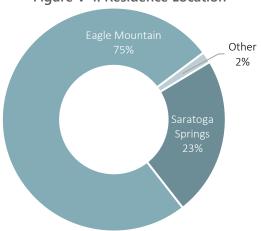
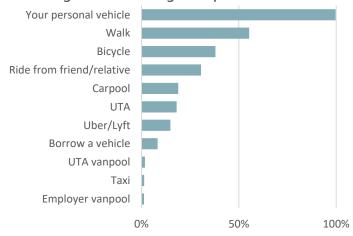


Figure V-2: Existing Transportation Modes



## Potential Public Transit Use to Reach Areas Within Eagle Mountain/Saratoga Springs

Respondents were asked to indicate if they or a member of their household would use public transportation, such as a local bus or shuttle, to reach areas within Eagle Mountain and Saratoga Springs. As shown in Figure V-3, approximately 44 percent respondents indicated that they would use public transportation to reach areas within Eagle Mountain and Saratoga Springs, while approximately 56 percent of respondents said they would not. Respondents who indicated they would potentially use public transportation to reach areas within Eagle Mountain and Saratoga Springs were then asked a separate series of questions.

#### Trip Purpose

Respondents were asked to indicate the primary trip purpose for which they or a member of their household would use public transportation within Eagle Mountain/Saratoga Springs—work/commuting, personal business. doctor/medical/health school/college, recreation, shopping, or another purpose. Respondents were allowed to select multiple responses to explain all of the types of trips they or a household member would use public transportation for within Eagle Mountain/Saratoga Springs. The results are shown in Figure V-4. Over half of respondents (55 percent) indicated that they would use public transportation for shopping trips, followed by 49 percent who would use it for commuting to and from work, and 48 percent who would use it for recreational trips.

#### Number of Potential Transit Riders per Household

Respondents were asked to indicate how many people in their household, including themselves, would use public transportation within Eagle Mountain/Saratoga Springs. The results are shown in Figure V-5. Approximately 36 percent of respondents said two people in their household would use public transportation within Eagle Mountain/Saratoga Springs, followed by 19 percent of respondents who said one person in their household and 18 percent of respondents who said two people in their household.

Figure V-3: Potential Transit Use Within Eagle Mountain/Saratoga Springs

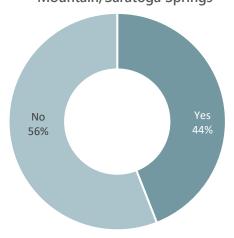


Figure V-4: Trip Purpose

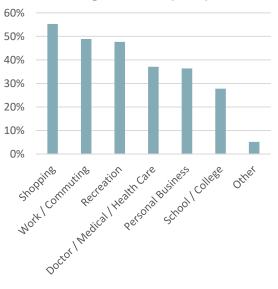
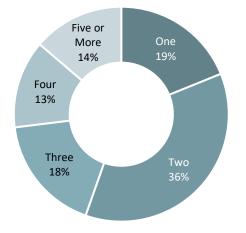


Figure V-5: Number of Potential Transit Riders



#### Frequency of Transit Use

Respondents were asked to indicate how often they or a household member would use public transportation within Eagle Mountain/Saratoga Springs. The results are shown in Figure V-6. Approximately 33 percent of respondents indicated that they or a household member would use public transportation to reach areas within Eagle Mountain/Saratoga Springs three to five days per week, followed by those who would use it one to two days per week (26 percent) and those who would use it one to three days per month (24 percent).

### Price Willing to Pay Per Trip

Respondents were asked how much they would be willing to pay per trip to use public transportation within Eagle Mountain/Saratoga Springs. The results are shown in Figure V-7. Almost half of respondents (46 percent) indicated that they would be willing to pay \$1.00 to \$1.99 per trip, followed by those who would be willing to pay \$0.00 to \$0.99 per trip (29 percent) and those who would be willing to pay \$2.00 to \$2.99 per trip (20 percent).

# Potential Public Transit Use to Reach Areas Outside Eagle Mountain/Saratoga Springs

Respondents were asked to indicate if they or a member of their household would use public transportation, such as a local bus or shuttle, to reach areas outside Eagle Mountain/Saratoga Springs. As shown in Figure V-8, approximately half of respondents (50 percent) indicated that they would use public transportation to reach areas outside Eagle Mountain/Saratoga Springs. Respondents who indicated they would potentially use public transportation to reach areas outside Eagle Mountain/Saratoga Springs were then asked a separate series of questions.

#### **Desired Destinations**

Survey respondents were asked which destination(s) they or members of their household would use public transportation to reach outside Eagle Mountain/Saratoga Springs. Respondents were allowed to select multiple destinations outside Eagle Mountain/Saratoga Springs. The most frequent

Figure V-6: Potential Number of Days Riding Transit

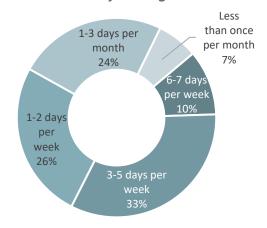


Figure V-7: Price Willing to Pay

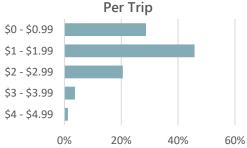
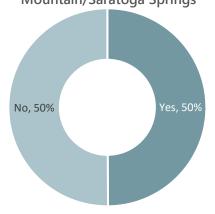


Figure V-8: Potential Transit Use Outside Eagle Mountain/Saratoga Springs





- Salt Lake City 28%
- Lehi 28%
- Orem 18%
- American Fork -14%
- Provo 11%
- Draper 6%
- Riverton 5%



responses included Salt Lake City (28 percent), Lehi (28 percent), Orem (18 percent), American Fork (14 percent), and Provo (11 percent). Combined, Oren and Provo would be 29 percent of the respondents.

#### Trip Purpose

Respondents were asked to indicate the primary purpose for which they or a member of their household would use public transportation to reach areas outside Eagle Mountain/Saratoga Springs — work/commuting, recreation, shopping, personal business, doctor/medical/health care, school/college, airport, or other purpose. Respondents were allowed to select multiple responses to explain all of the types of trips they or a household member would use public transportation to reach areas outside Mountain/Saratoga Springs. The results are shown in Figure V-9. Approximately 63 percent of respondents indicated that they would use public transportation for commuting to and from work, followed by 37 percent who would use it for shopping trips and 36 percent who would use it for recreational trips.

#### Number of Potential Transit Riders per Household

Respondents were asked to indicate how many people in their household, including themselves, would use public transportation to reach areas outside Eagle Mountain/Saratoga Springs. The results are shown in Figure V-10. Approximately 33 percent of respondents said two people in their household would use public transportation to reach areas Eagle Mountain/Saratoga Springs, followed by 30 percent of respondents who said one person in their household and 14 percent of respondents who said three people in their household.

#### Frequency of Transit Use

Respondents were asked to indicate how often they or a household member would use public transportation to reach areas outside Eagle Mountain/Saratoga Springs. The results are shown in Figure V-11. Approximately 42 percent of respondents indicated that they or a household member would use public transportation to reach areas outside Eagle Mountain/Saratoga Springs between three to five days per week, followed by those who would use it one to three days per month (20 percent) and those who would use it one to two days per week (15 percent).

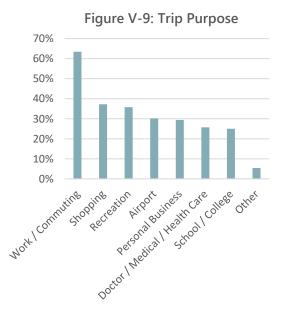


Figure V-10: Number of Potential Transit Riders

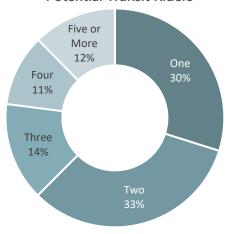
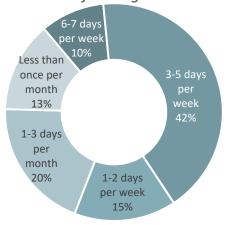


Figure V-11: Potential Number of Days Riding Transit



#### Price Willing to Pay Per Trip

Respondents were asked how much they would be willing to pay per trip to use public transportation outside Eagle Mountain/Saratoga Springs. The results are shown in Figure V-12. Almost half of respondents (42 percent) indicated that they would be willing to pay \$2.00 to \$2.99 per trip, followed by those who would be willing to pay \$0.00 to \$1.99 per trip (30 percent).

#### Desired Park-n-Ride Location

Respondents were asked if they would use a park-n-ride lot in order to ride transit if one was located in their community. As shown in Figure V-13, approximately 68 percent of respondents said yes, that they would use a park-n-ride lot located in their community in order to ride transit, while 32 percent of respondents said no.

Of those who said they would use a park-n-ride lot, many indicated that they would prefer a location at an existing major community landmark (i.e., Walmart, grocery store, library, etc.) or at an easy-to-reach location in the city center.

# **Demographic Questions**

All respondents were asked to answer a series of demographic questions.

#### Age

Respondents were asked to indicate their age and the results are shown in Figure V-14. Almost half of respondents (45 percent) were between the ages of 40 and 59, followed by 44 percent of respondents between the ages of 25 and 39.

#### **Employment Status**

Respondents were asked to indicate their current employment status—employed full-time, employed

part-time, unemployed, disabled, retired, student (college or high school), or other. Respondents were allowed to select multiple responses to explain their current employment status and the results are shown in Figure V-15. Approximately 67 percent of all respondents indicated that they are employed full-time, followed by 13 percent of all respondents who said that they are employed part-time and nine percent of respondents who indicated that they are unemployed.

Figure V-12: Price Willing to Pay

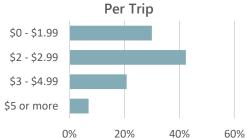
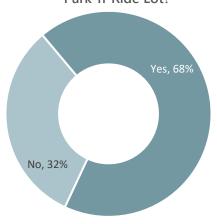
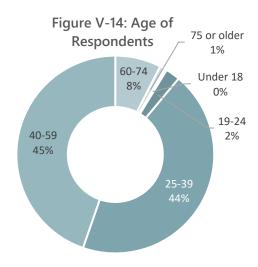


Figure V-13: Would you Use a Park-n-Ride Lot?





Respondents who indicated that they are currently employed were asked to provide the zip code of their work location. The top ten zip codes for employment locations are presented in Table V-1. The most frequent zip codes included 84005 (Eagle Mountain), 84043 (Lehi, Eagle Mountain, Saratoga Springs), 84045 (Saratoga Springs), and 84003 (American Fork, Lindon, and Highland).

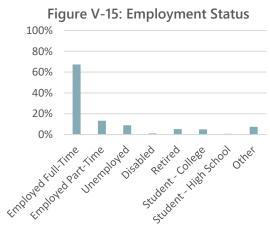


	Table V-1: Top Ten Emp	loyment Locati	ons
		Number of	Percent of Total
Zip Code	Location	Respondents	Respondents
84005	Eagle Mountain	106	17%
84043	Lehi, Eagle Mountain, Saratoga Springs	74	12%
84045	Saratoga Springs	56	9%
84003	American Fork, Lindon, Highland	38	6%
84020	Draper	32	5%
84095	South Jordan	27	4%
84065	Riverton, Bluffdale, Draper	24	4%
84070	Midvale, Sandy	17	3%
84062	Pleasant Grove, Cedar Hills, Highland	15	2%
84058	Orem, Vineyard	13	2%

#### Current Mode of Transportation to Work

Respondents were asked, if they or another member of their household currently work outside their home, how they travel to work. Respondents were allowed to select multiple responses to explain their current mode(s) of transportation to work and the results are shown in Figure V-16. The majority of respondents (96 percent) indicated that they or another member of their household drive alone or with family to work, followed by four percent who carpool, and three percent who ride UTA Trax or FrontRunner.

#### **Annual Household Income**

The annual household incomes of survey respondents are shown in Figure V-17. Approximately 41 percent of respondents indicated their annual household income was \$100,000 or more a year, followed by 21 percent of respondents who said their annual household income was between \$60,000 and \$79,999 a year and 20 percent of respondents who said their annual household income was between \$80,000 and \$99,999 per year. Only one percent of respondents indicated that their annual household income was less than \$19,999 a year.

Figure V-16: Transportation

Mode to Work

100%

80%

60%

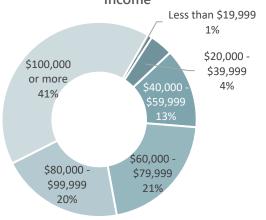
40%

20%

0%

Onive adner with far in the last of the l

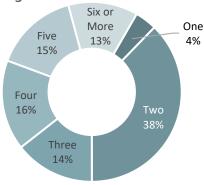
Figure V-17: Annual Household Income



#### Household Size

Survey respondents were asked how many people age 10 and older live in their household. The results are shown in Figure V-18. Approximately 38 percent of respondents said there were two people age 10 or older living in their household, followed by 16 percent of respondents who said there were four people age 10 or older living in their household.





#### Operating Vehicles and Licensed Drivers

Lack of a private vehicle influences people to use public transportation. This comparison provides an indication of the number of potential choice riders compared to those who are transit-dependent. Potential choice riders refer to those respondents that live in households with an operating vehicle and a driver's license, who may choose to use transit.

Figure V-19 shows the proportion of respondents with operating vehicles available in their household. As illustrated, approximately half of respondents (49 percent) live in households with two vehicles, followed by 43 percent of respondents who live in households with three or more operating vehicles. Approximately eight percent of respondents who live in single-vehicle households and less than one percent of respondents live in households with no operating vehicles.

Survey respondents were also asked how many people living in their household (including themselves) have a valid driver's license. The results are shown in Figure V-20. Approximately 60 percent of respondents indicated that there were two people in their household who had a valid driver's license, followed by 20 percent of respondents who indicated that there were three people in their household who had a valid driver's license. Less than one percent of respondents said there was no one in their household who had a valid driver's license.

Figure V-19: Vehicle Availability

100%

80%

60%

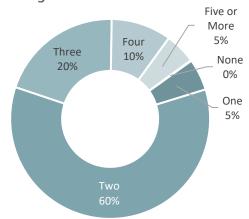
40%

20%

None One Two Three or

Figure V-20: Licensed Drivers

More

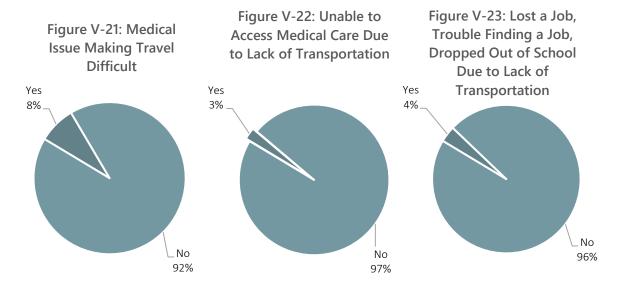


# Medical Care and Transportation

The survey asked respondents if they have or if someone in their household has a disability, health concern, or other issue that makes travel difficult. As shown in Figure V-21, approximately eight percent of respondents indicated that they have or someone in their household has a disability, health concern, or other issue that makes travel difficult.

The survey also asked respondents if they have or if someone in their household has been unable to access medical care due to lack of transportation in the last two years. As shown in Figure V-22,

approximately three percent of respondents indicated that they have or someone in their household has been unable to access medical care due to lack of transportation in the last two years.



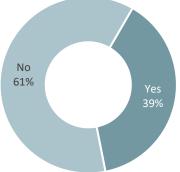
### **Employment and Transportation**

The survey asked respondents if they or someone in their household had lost a job, dropped out of school, or had problems finding work in the last two years due to lack of transportation. As shown in Figure V-23, only four percent of respondents said yes, indicating that they or someone in their household had lost a job, dropped out of school, or had problems finding work in the last two years due to lack of transportation.

#### Sales Tax Increase

Survey respondents were asked if they would support an increase in local sales tax to support enhanced public transportation. The results are shown in Figure V-24. Approximately 39 percent of respondents indicated that yes, they would support an increase in local sales tax to support enhanced public transportation, while approximately 61 percent of respondents said no, that they would not support an increase in local sales tax to support enhanced public transportation.

Figure V-24: Support for Increased Local Sales Tax for Enhance Public Transit



#### **Additional Comments**

At the end of the questionnaire, respondents were asked to provide additional comments about the public transit service they would like to see, or any other unmet transportation needs they or members of their household might have. The individual comments can be read in full in Appendix C.

Many comments revolved around a need for more frequent transit service, both locally and with connection to UTA. Many respondents indicated the benefit of a transit system to the local community, even if they would not personally use the service. Several respondents noted that new transit service must be competitive with driving their personal vehicle, both in time and cost, in order to persuade people to use it. Other respondents voiced their concerns over a local transit service, including that the

level of density in the area is not currently high enough to support it. Other comments received included support for and against a tax increase to benefit transit as well as a need for roadway improvements.

#### **PREVIOUS SURVEY EFFORTS**

Previous survey efforts in Eagle Mountain and Saratoga Springs have yielded similar results to this survey effort. Highlights for comparison purposes are provided below.

### **Eagle Mountain Public Transportation Survey**

A 2020 survey of approximately 630 Eagle Mountain residents found that 90 percent of respondents commute out of Eagle Mountain City to work most days. The most frequent responses for where residents commute to for work included Lehi, Salt Lake City, Draper, and Orem. When asked how they commute to work, 90 percent of respondents said they use a personal vehicle. Approximately 61 percent of respondents indicated that they have considered using public transportation to commute to work, but only five percent of respondents indicated that they currently use public transportation to commute to work. Approximately 83 percent of respondents said that if a public transportation solution was presented that resolved issues of time and cost, that they would consider using public transportation.

### Saratoga Springs Driver and Public Transportation Survey

A recent survey of approximately 550 Saratoga Springs residents and workers found that approximately 84 percent of respondents to the survey indicated that they commute to and from the City of Saratoga Springs to get to work most days of the week. The majority of respondents (93 percent) indicated that they primarily use a personal vehicle to commute to and from work. Approximately six percent of survey respondents indicated that they primarily use public transportation to commute to and from work. When asked how likely they would be to use public transportation if improved their commute time, approximately 38 percent said very likely and 24 percent said likely. In addition, when asked how likely they would be to use public transportation if it improved their travel costs, approximately 31 percent said very likely and 24 percent said likely. If access to Public Transportation was improved in their area, approximately 29 percent of respondents said they would be very likely to use it and 26 percent said they would be likely to use it.



# **Chapter VI: Transit Needs Assessment**

#### INTRODUCTION

To assess the appropriate mode of public transportation and the feasibility, it is necessary to have some indication of the potential demand. In this chapter, the growth and travel patterns are used with two models for estimating potential transit demand. These estimates were used to develop the transit strategies considered in Chapter VII and the feasibility of each strategy. These estimates may be used to further refine the strategies following feedback from the community.

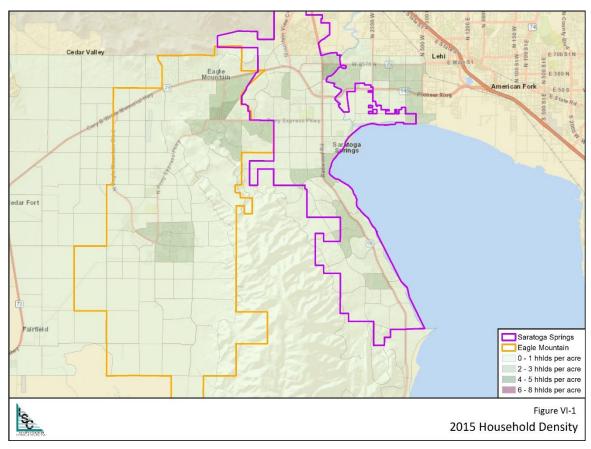
#### HOUSEHOLD AND EMPLOYMENT DENSITY

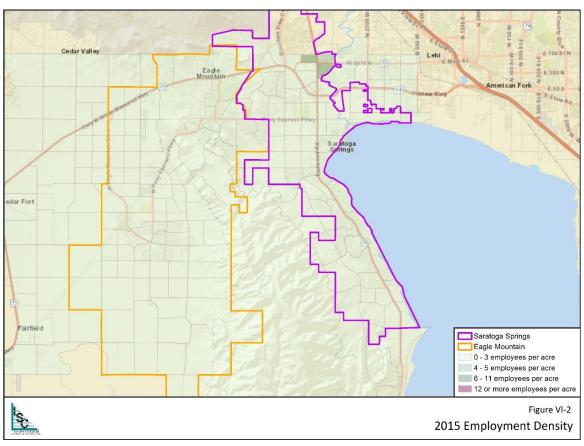
The Mountainland Association of Governments (MAG) is responsible for transportation planning in Utah County. As part of that effort, MAG has developed and maintains a regional travel demand model. Input data for the transportation model includes estimates of future population and employment. Figure VI-1 shows the base model year 2015 household density and Figure VI-2 shows the 2015 employment density. These are provided for comparison with the estimates for future growth. The 2050 estimates for household density and employment density are shown in Figures VI-3 and VI-4.

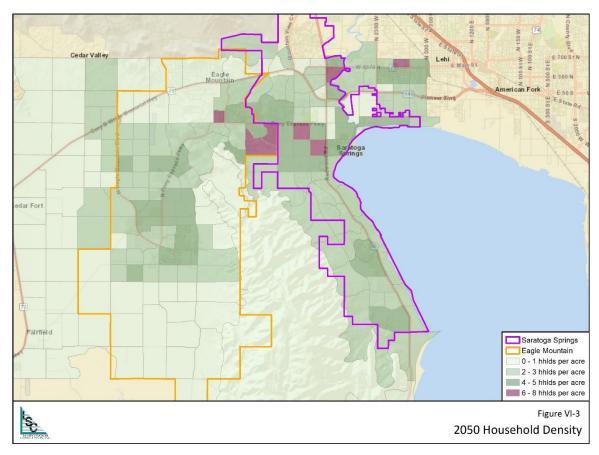
These growth patterns reflect the anticipated increase discussed in local plans and in Chapter IV. Most housing growth is anticipated in the area of Redwood Road and along Pony Express Parkway in both Saratoga Springs and Eagle Mountain. Some pockets of increased employment density are forecast for the area in the vicinity of Redwood Road and Pony Express Parkway, as well as along Pioneer Crossing.

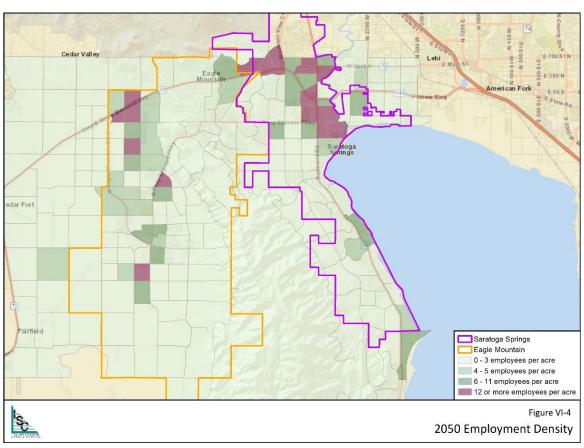


Fixed-route transit service is typically supported by household densities greater than six units per acre and employment densities of greater than 12 employees per acre. Currently there are no areas with those levels of density and only a few that are expected to reach those densities by 2050. The feasibility of either Bus Rapid Transit (BRT) or Light Rail Transit depends on even higher densities on a longer corridor than projected in the study area.



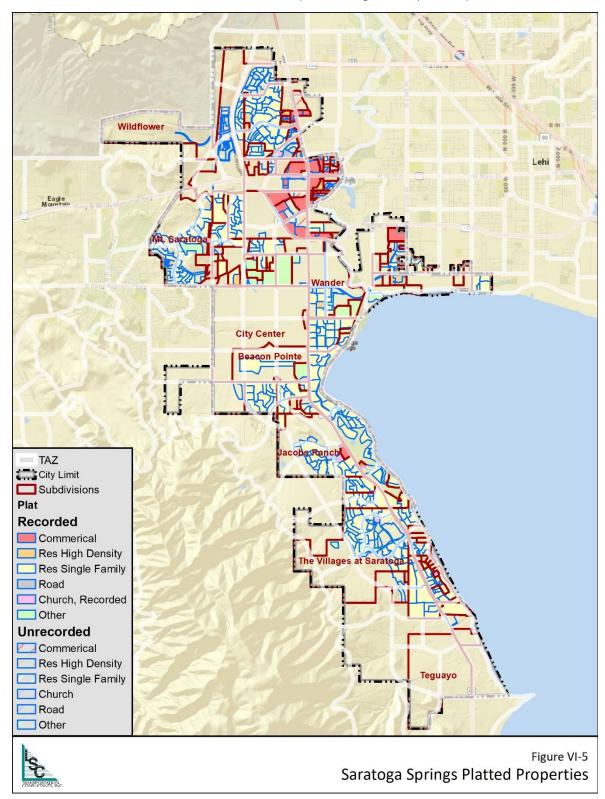






### **Saratoga Springs Platted Developments**

The City of Saratoga Springs provided information on proposed developments, showing recorded and unrecorded plat densities. The plats are shown in Figure VI-5. As shown in the Figure, there are very few locations with either recorded or unrecorded plats for high density development.



#### **COMMUTER TRAVEL PATTERNS**

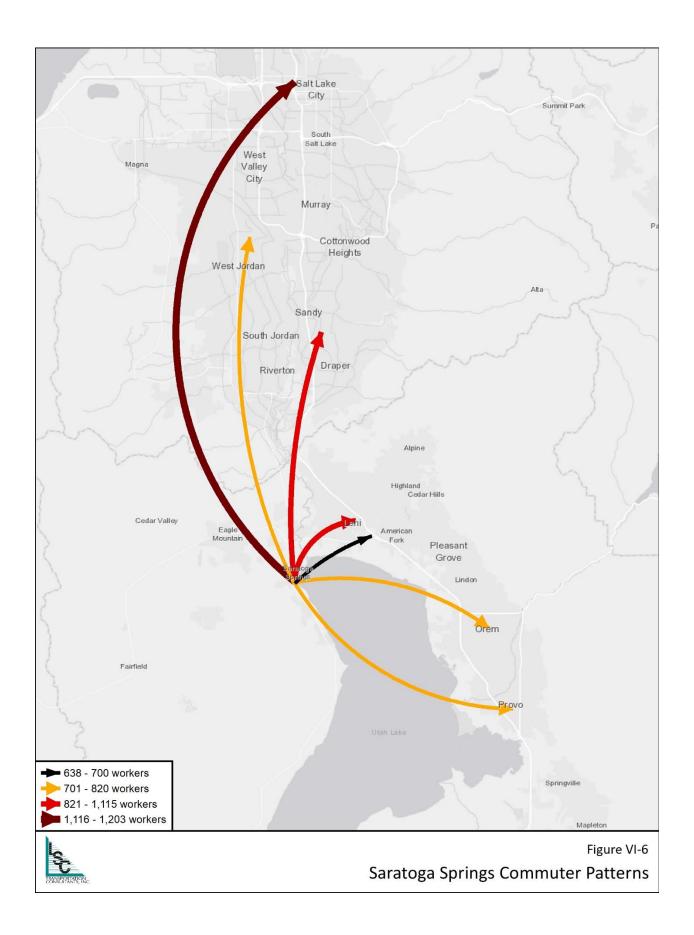
Commuter travel patterns were analyzed for residents of Saratoga Springs and Eagle Mountain using Longitudinal Employer-Household Dynamics (LEHD) data. In the absence of a better source of commuter pattern data, it is worthwhile to include these data as a general indicator of commuter patterns in the study area. However, it should be noted that LEHD data represent estimates of commuter patterns, synthesized from several sources of U.S. Census residential locations, business locations, and commute data. This data excludes federal, railroad, retired, disabled, unemployed, and self-employed employees. As such, these data should be used to provide only general commuting patterns.

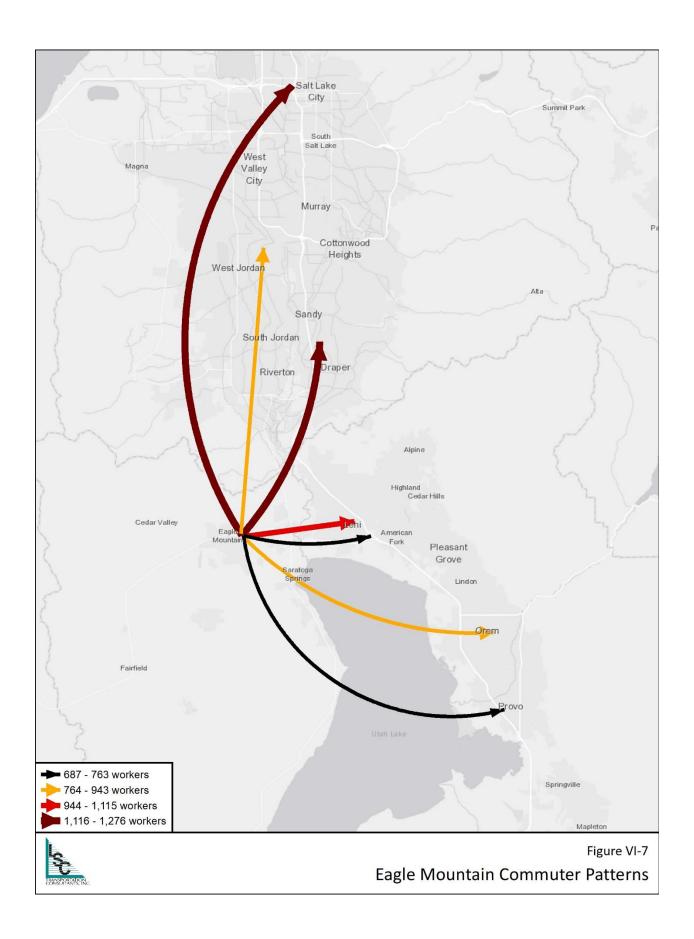
As shown in Tables VI-1 and VI-2, according to the LEHD data, the highest percentage of residents work in Salt Lake City, with approximately 19 percent of Saratoga Springs residents and approximately 18.5 percent of Eagle Mountain residents. Lehi was the next highest place of employment for Saratoga Springs residents with approximately 17.5 percent. For Eagle Mountain residents, the Draper/Sandy area was the next highest employment location with approximately 17.6 percent.

Table VI-1: Employment Lo	cation o	f				
Eagle Mountain Resid	Eagle Mountain Residents					
	Resid	lents				
Area of Work	#	%				
Salt Lake City, UT	1,276	18.5%				
Draper/Sandy, UT	1,211	17.6%				
Lehi, UT	1,115	16.2%				
West Valley City/South Jordon, UT	943	13.7%				
Orem, UT	901	13.1%				
American Fork, UT	763	11.1%				
Provo, UT	687	10.0%				
Source: LEHD, 2017; LSC, 2021						

Table VI-2: Employment Lo Saratoga Springs Resio		f
	Resid	lents
Area of Work	#	%
Salt Lake City, UT	1,203	18.9%
Lehi, UT	1,115	17.5%
Draper/Sandy, UT	1,059	16.7%
West Valley City/South Jordon, UT	816	12.8%
Orem, UT	787	12.4%
Provo, UT	741	11.7%
American Fork, UT	638	10.0%
Source: LEHD, 2017; LSC, 2021		

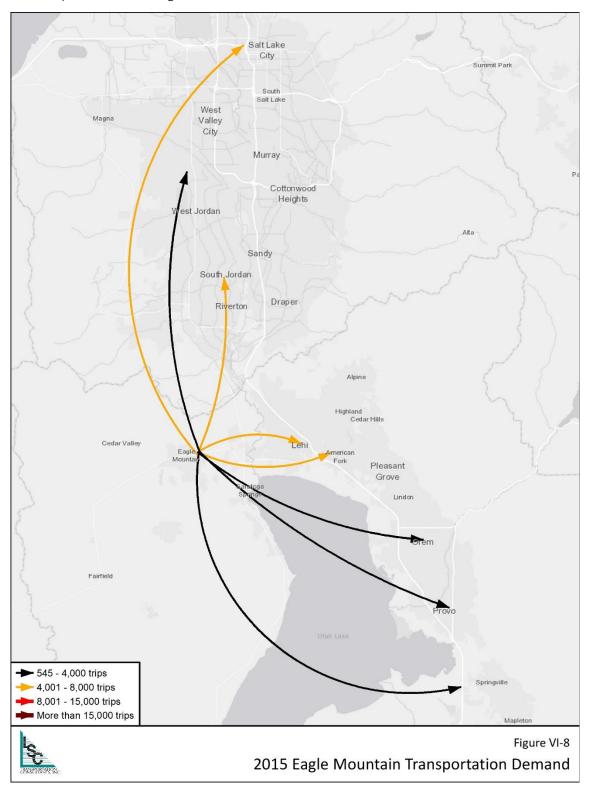
Figure VI-6 shows the commuter travel patterns for residents of Saratoga Springs. Figure VI-7 shows the commuter travel patterns for residents of Eagle Mountain. The greatest volume of commuters is along the I-15 corridor from Draper to Salt Lake City. The number of commuters to destinations in Utah County is significantly lower.

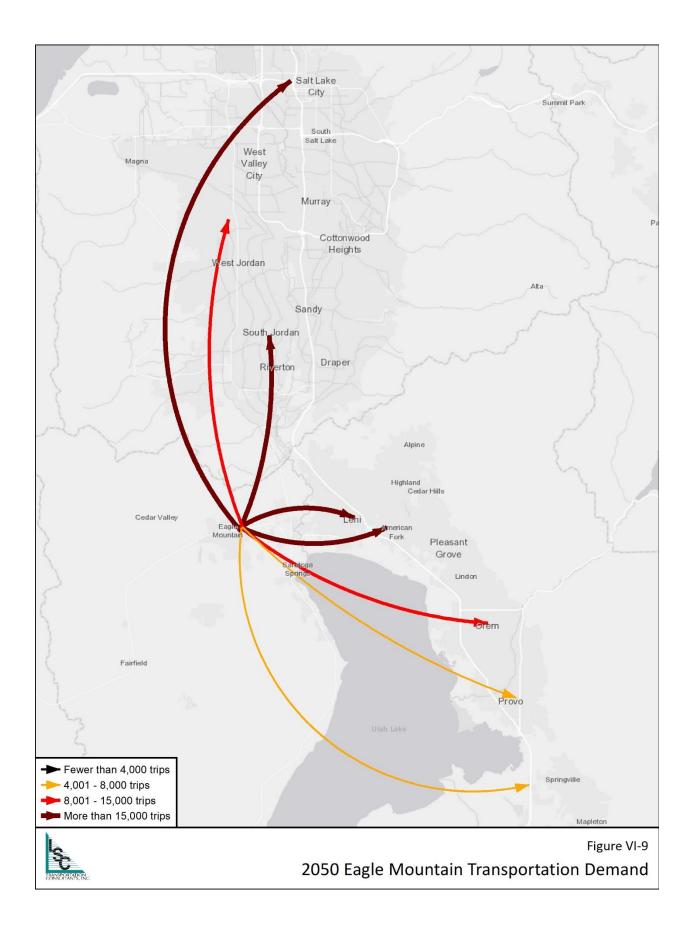


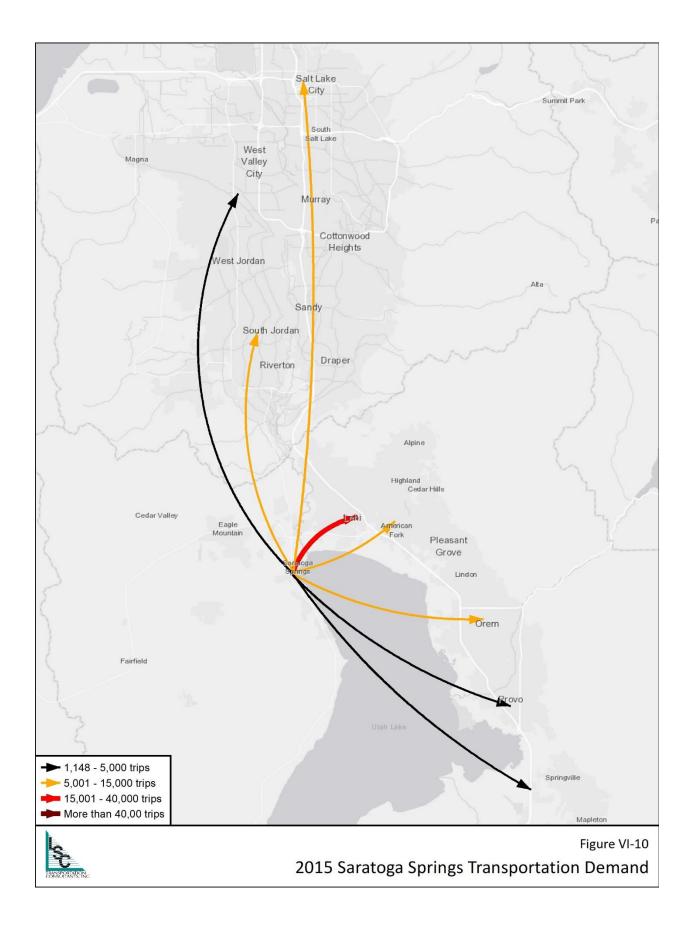


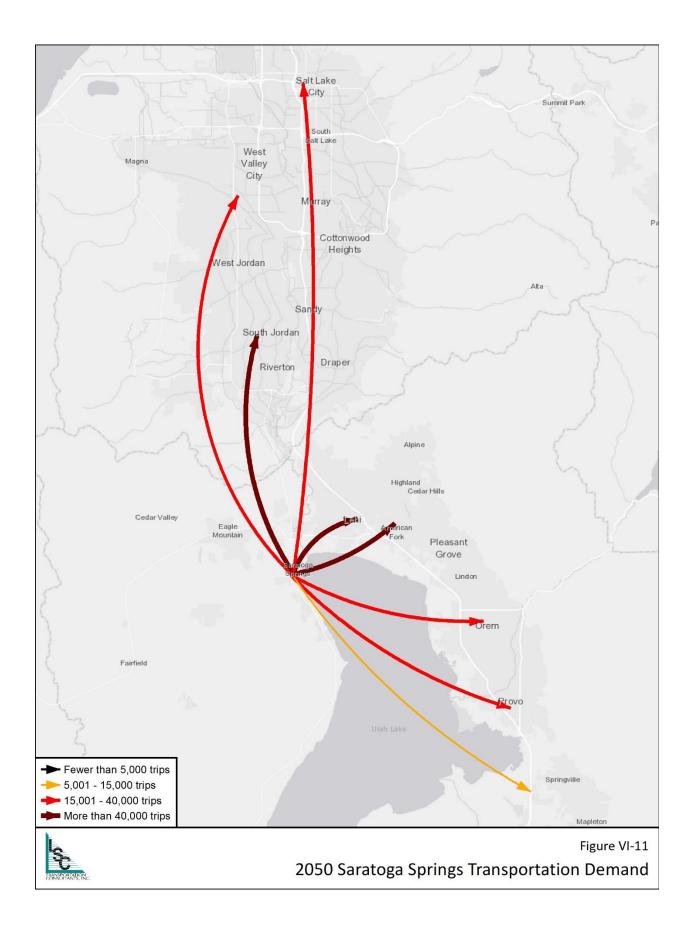
#### **REGIONAL TRAVEL DEMAND MODEL**

Using MAG's regional travel demand model, travel patterns for the base year of 2015 and the projected patterns for 2050 were analyzed to help determine the potential level of demand for public transit in the study area. The travel patterns are shown in Figures VI-8 and VI-10 for the 2015 base year and Figures VI-9 and VI-11 for the 2050 projection. As can be seen, significant increases in travel demand are anticipated as the area grows.









#### **POTENTIAL TRANSIT DEMAND**

Two methodologies were used to estimate the potential demand for transit service. The first is based on the commuter patterns using data from the LEHD analysis. The second was to apply a mode share estimate using the travel patterns from MAG's regional travel demand model.

#### **Commuter Transit Demand Model**

An estimate of the potential commuter demand was developed as part of TCRP Report 161. This model is for transit service from a rural area to an urban center. While the study area is on the fringe of the urban area, the travel patterns are likely to be similar and this methodology provides an estimate of the order of magnitude for potential transit demand. The demand model is based on the following relationship:

Proportion using Transit for Commuter Trips from Place A to Place  $B = 0.024 + (0.0000056 \times Workers Commuting from Place A to Place B)$   $- (0.00029 \times Distance in Miles from Place A to Place B)$  + 0.015 (if the Place is a State Capital)

Using this approach, the estimated current commuter transit demand would be about 350 trips per day, based on a good level of service. The demand would be decreased based on how often the service operates, travel time, convenience, and number of transfers. This estimate is higher than the observed demand in 2019 (prior to Covid-19), but reflects that there are not convenient connections to most of the employment destinations in either Utah County or Salt Lake County.

#### **Transit Mode Split**

The travel patterns from the regional travel demand model were used with an estimated mode share. The portion of trips taken by public transit in the study areas is currently very low, reflecting the low level of service and challenges serving low density areas. Looking at other areas in the region, an estimate of transit use of one percent of all trips was used to develop an estimate of potential transit demand. For the base year, the estimate would be about 900 daily trips and the estimate for 2050 would be about 4,000 passenger trips per day. This would be a significant increase over the existing observed demand, but would also depend on convenient connections to the multiple destinations.

#### **SUMMARY**



Both current and projected household and employment density will not support extensive transit service such as Light Rail, Bus Rapid Transit, or high frequency fixed-route service. Future potential demand is expected to be much higher than current levels of transit demand, but without sufficient densities, the area will remain difficult to serve and higher levels of transit service are not likely to be cost-effective.



# **Chapter VII: Transit Service Scenarios**

#### INTRODUCTION

This chapter describes proposed transit-service scenarios based on the range of potential transit demand. Scenarios are presented for a long-range horizon based on projected growth and travel patterns in 2050. An initial assessment of the benefits and challenges was completed for each scenario. Transit scenarios were presented to the Advisory Group, UTA staff, and UDOT staff. The scenarios were refined and evaluated based on input and feedback received. Specific years have not been identified for individual actions, but are grouped by how soon steps may be taken toward implementation.

#### **SHORT-TERM ACTIONS**

There are several actions which may be taken immediately to improve multimodal transportation options and to improve public transit service in Eagle Mountain and Saratoga Springs. These short-term actions are described in the following paragraphs. Some of these may be implemented immediately while others will require a longer period for completion but should be initiated to obtain funding and acquire property.

# Redwood Road/Pioneer Crossing Park-and-Ride Facility

The first recommendation is to construct a park-and-ride facility in the vicinity of the intersection of Redwood Road and Pioneer Crossing as shown in Figure VII-1. The park-and-ride facility should be designed to accommodate carpooling, vanpooling, microtransit, UTA buses, and parking for transit users. This could potentially be an opportunity for a public-private partnership to develop a future Transit Oriented Development (TOD) depending on the particular property to be developed. Initially this would be a surface parking lot with phased development in the future. UDOT owns some land in the vicinity of this intersection which may be considered for development of the park-and-ride lot. Selection of the site and development of design parameters should be a joint effort of MAG, UTA, UDOT, and Saratoga Springs.

The estimated cost to develop a park-and-ride ranges from \$15,000 to \$25,000 per space depending on multiple factors including the cost of property acquisition, construction requirements, and amenities. The public sector cost could be lower if there are opportunities for joint development with private developers.

### North Spring Run Road Park-and-Ride

A second multimodal park-and-ride facility is recommended near the intersection of North Spring Run Road and Pioneer Crossing as shown in Figure VII-1. Requirements at this location are similar for the



Redwood Road park-and-ride facility with the capability to accommodate carpooling, vanpooling, microtransit, UTA buses, and parking for transit users. This location could also provide an opportunity for TOD depending on the property selected for the facility. UDOT does own some land in the vicinity of this location which may be considered for the facility. Development of this site should be a joint effort of MAG, UTA, UDOT, and Eagle Mountain.

#### Fixed-Route Service to American Fork FrontRunner Station

Figure VII-2 shows the proposed fixed-route service operating between the North Spring Run park-and-ride facility and the America Fork FrontRunner Station. This is a proposed change to the current fixed-route service provide by UTA Route 806. The proposed changes include shortening the route on the west segment to terminate at the recommended park-and-ride lot. The shorter route provides an opportunity to increase frequency of service. The recommended schedule for this route is for the bus to serve the American Fork Station for each time FrontRunner stops at the station in both directions. This will increase the amount of service from the current 8 trips per day to about 20 trips per day depending on the FrontRunner schedule at the time of implementation.

Consideration was given to continue service to Lehi Station, but this was rejected in favor of the American Fork Station connection for several reasons. The connection to American Fork is more direct with a shorter travel time. This supports a higher frequency of service using the same resources. It also provides a shorter travel time for passengers. Extension of service to UVU and the UVX BRT is supported

by this alignment. Ridership projections are significantly higher for the connection to American Fork than to Lehi Station. The ridership estimate for the connection to Lehi Station does not meet UTA performance standards. Ridership estimates for this scenario were made using the UTA transit demand model and costs were based on the UTA cost per operating hour.

Estimated annual ridership: 100,000 passenger-trips

Estimated annual operating cost (2021): \$920,000



# **UTA Vanpool Program**

Vanpools provide a convenient, low-cost option for many commuters. UTA administers an extensive vanpool program. Most vanpools in the UTA program are subsidized by organizations other than UTA, including private employers. One option to improve travel times for commuters to the downtown area of Salt Lake City would be to subsidize vanpools at a level that gives users a cost that approximates their costs to use UTA bus and rail service. Vanpools provide a good option for commuters to Eagle Mountain and Saratoga Springs. Vanpools do not provide a good option for occasional trips or trips taken outside of the normal commute hours. While bus service, TRAX, and FrontRunner may provide transportation destinations for employment, vanpools provide transportation directly to the place of employment.

This strategy may be implemented immediately. Staff from the two communities should cooperate with UTA to promote the vanpool program among local employers and residents of the two communities. Staff should facilitate formation of vanpools with UTA providing the vehicle and

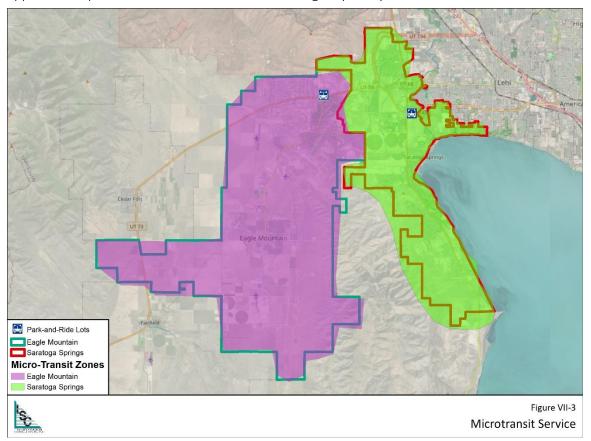
administration of the program. When the park-and-ride facilities become available, they will support the vanpool program by providing a location for vanpool participants to meet for the commute.

Estimated annual operating cost (2021): \$25,000 to \$35,000 per van

#### **Microtransit Service**

UTA completed a study of potential microtransit districts in 2020. One of the areas considered for microtransit implementation was the area of Eagle Mountain and Saratoga Springs considered in this study. This service will require new funding which should be sought immediately to ensure implementation as soon as possible to supplement the fixed-route service.

This option offers coverage of the developed areas in Eagle Mountain and Saratoga Springs as shown in Figure VII-3. The UTA Microtransit Planning Project indicated that microtransit service would require 23,000 annual vehicle hours with a productivity of only about 2.0 passengers per vehicle hour. The study showed this area would be one of the lower priorities for implementing microtransit, particularly because of the low productivity and large area to be served. However, the local communities could support the implementation of microtransit with a higher priority.



Microtransit would serve as the connection between origins and destinations in the two communities and the fixed-route service at the two park-and-ride locations, providing the first-mile/last-mile connection.

Ridership and cost estimates are taken from the Microtransit Planning Project report and the Microtransit Pilot Project.

Estimated annual ridership: 43,000 passenger-trips

Estimated annual operating cost (2021): \$850,000



#### **Corridor Preservation**

Actions should be taken to preserve the Pioneer Crossing for future transit enhancements. Sufficient right-of-way should be preserved to allow for the possible operation of buses on the roadway shoulder and possible implementation of BRT on a dedicated guideway within the right-of-way. Corridor preservation should be implemented in conjunction with the recommendations for land use and development patterns within the corridor.

Pioneer Crossing has adequate right-of-way to accommodate the proposed transit scenarios, so no additional, right-of-way acquisition is anticipated.

#### **INTERMEDIATE ACTIONS**

Future feasible enhancements have been identified as intermediate actions. These may take longer to implement but appear to be feasible strategies to enhance transit service in the two communities.

## **Express Bus Service to Utah Valley University**

Figure VII-4 show the proposed express bus connection to UVU and the UVX BRT. This route serves two purposes. First, it provides a direct connection between the two communities and UVU. Second, the proposed route will provide a direct connection to UVX with direct service to Orem, the BYU campus, and Provo. Many respondents to the community survey indicated a need for service to Orem and Provo. With a convenient transfer to UVX, the express service will meet many of those transportation needs.

The estimated demand in this corridor and for this route exceeds the minimum performance for UTA, providing justification for implementing this scenario. The service could be implemented in the short



term but is recommended as an intermediate step because the express route will be supported by microtransit as a feeder service.

Estimated annual ridership: 195,000 passenger-trips

Estimated operating cost (2021): \$2,025,000

### **Bus Priority in Pioneer Crossing Corridor**

As traffic volumes and congestion increase along the Pioneer Crossing corridor, steps to provide priority for buses should be taken. These may include bus priority at signalized intersections for the use of queue jump lanes at signalized intersections. These will allow the buses to bypass traffic at intersections and decrease the amount of delay for buses on this route.

Another strategy may be to implement bus operations on the roadway shoulder in this corridor. This could be implemented with buses operating on the road shoulder for the length of the alignment or just at approaches to intersections to allow the buses to bypass queues at signals as part of a queue-jump strategy. This is an option with a low initial capital investment although technology to give buses priority at signals would be required. Shoulder improvements may be needed at some locations along the route.

Estimated capital cost is \$175,000 to \$225,000 depending on the level of improvements to be made in the corridor.

#### **LONG-TERM SCENARIOS**

Bus Rapid Transit (BRT) has been identified as a potential service option in previous plans, including the MAG Regional Transportation Plan. BRT is characterized by buses typically operating on a dedicated alignment or dedicated lanes within a road right-of-way. Stop locations are less frequent than typical fixed-route service and are usually located at a station rather than a bus stop. BRT service typically operates at higher frequency than fixed-route service with service at least every 15 minutes and often more frequent during peak periods. This proposed alignment for fixed-route and express service connects the American Fork FrontRunner station with Eagle Mountain via Pioneer Crossing. The route serves areas with the greatest projected densities for both residences and employments, based on the 2050 Regional Transportation Plan and local land-use plans as described in Chapter VI.

Residential and employment densities are a critical consideration in determining the level of service and mode of transit for a corridor. For premium transit modes like Bus Rapid Transit (BRT), potential station-area densities are an important consideration for overall ridership. While this means that density can be more concentrated in specific areas, there is also a need for appropriate densities <u>along</u> the corridor. For example, even if there are higher density uses on one end of a corridor at a particular station area, if a BRT has to traverse a very low-density area to get to and from this high-density area a BRT mode may not be cost effective.

Federal Transit Administration (FTA) research suggests the following general characteristics for enhanced bus and BRT<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> Planning for Transit-Supportive Development: A Practitioner's Guide Section 4: Corridor Planning and Transit-Supportive Development. FTA. June 2014.



Table VII-1 Transit-Supportive Development Densities										
Transit Technology	Res	idential	Employr	nent Der	nsity Rar	Statio	eristics	Camidan		
	Co	ore	Cen	iters	Cor	ridor	Typical Spacing Range	Ideal Spacing	Sphere of Influence	Corridor Form
Enhanced Bus	20+ du/ac	200 em/ac	10- 20 du/ac	2-5 em/ac	5-10 du/ac	2-5 em/ac	500 feet - ½ mile	1⁄4 mile	Adjacent parcels	Various urban centers and industrial corridor
Bus Rapid Transit	35+ du/ac	500 em/ac	25- 35 du/ac	100- 150 em/ac	12- 25 du/ac	30-40 em/ac	½-2 miles	1 mile	1/4 mile	Various urban centers, industrial corridors, established suburban and new suburban corridors

BRT typically requires density of development of 25 or more dwelling units per acre around stations and 12 units per acre along the corridor to be feasible. UVX in Utah County is a good example where the route connects large campuses with a significant student population and campus housing rather than having overall high household density and employment. The projected densities through 2050 along the Pioneer Crossing corridor do not approach this level of development. The communities should take steps to create more transit supportive development in the Pioneer Crossing corridor. By increasing the level and density of development along the corridor, BRT may be supported in the future. Corridor preservation will be important to ensure the possibility of adding BRT at some future date.

Costs and ridership were not estimated for BRT in the corridor as many conditions will change including operating costs, capital costs, and land use. More detailed planning will be required before a decision to implement BRT in the corridor can be made.

# **SUMMARY**

Improvements to transit service in Eagle Mountain and Saratoga Springs may be implemented immediately including development of two park-and-ride lots, changing fixed-route service to operate between the park-and-ride lots and American Fork Station, and supporting greater use of vanpools. Recommendations for future enhancements include extending fixed-route service to UVU and implementing microtransit service.

As described in Chapter VI, current and projected levels of density and future development are and will be a challenge for providing effective and cost-efficient transit service in Eagle Mountain and Saratoga Springs. To better support implementation of higher levels of transit service like BRT, Eagle Mountain and Saratoga Springs should encourage significantly higher levels of density within a transit corridor

along Pioneer Crossing State Route 145 and Cory Wride Freeway State Route 73. This should include both residential development and commercial job development. Many examples of transit-supportive developments and corridors exist in the UTA service area and could serve as examples for this area. This may require cooperation among the two communities, UDOT, and UTA to create a vision for an east-west transit corridor that would provide a Bus Rapid Transit level of demand with land-use zoning to encourage greater population and job density in transit-oriented development nodes. If this is a goal of the local governments, Eagle Mountain and Saratoga Springs would need to lead this effort with support from UDOT, UTA, and MAG.

# Appendix A – Community Conditions Tables

	Table A-1: Estimated Population Characteristics in the Study Area													
6	Comment	Total		T	Zero-V House		Older A Popula (65 and	ation	You Popula (10-	ation	Ambu Disa Popul	bled	Low-Ind	
Census Tract	Census Block Group	Total	Land Area	Total	#	%	(65 and	%	#	%	#	%	#	%
101.03	вюск Group	4198	` ' '	Households 905	# 0	0.0%	# 36	0.9%	1076	25.6%	# 777	78.5%	420	10.0%
101.05	2	1453	_	366	0	0.0%	34	2.3%	333	22.9%	269	18.5%	145	10.0%
	3	1453 2475	_		12	2.0%	90	2.3% 3.6%	485	22.9% 19.6%	269 458	18.5%	_	10.0%
101.04	1	1688		604 380		0.0%	31	1.8%	269	15.9%	458 277	16.4%	248 137	8.1%
101.04					0		_						_	
	2	1824			0	0.0%	68 77	3.7%	290	15.9%	300	16.4%	148	8.1%
	3	3737		805	31	3.9%	40	2.1%	752	20.1%	614	16.4%	302	8.1%
101.05	1	3081 2086		697 554	0	0.0%	40	1.3% 2.2%	493 403	16.0% 19.3%	506 339	16.4% 16.3%	249 54	8.1% 2.6%
101.05					0		_							
	2	3122		784	0	0.0%	56	1.8%	663	21.2%	508	16.3%	81	2.6%
101.00	3	5675		1320	0	0.0%	222 77	3.9%	1082	19.1%	923	16.3%	147 76	2.6%
101.06	_	3970	_	744	0	0.0%		1.9%	1035	26.1%	861	21.7%		1.9%
404.07	2	2575	-		0	0.0%	264	10.3%	639	24.8%	559	21.7%	50	1.9%
101.07	2	1085		430	17	4.0%	174	16.0%	826	76.1%	601	55.4%	323	29.8%
101.09	1	3602	-		0	0.0%	52	1.4%	794	22.0%	574	15.9%	69	1.9%
	2	4422	-		15	1.4%	72	1.6%	1013	22.9%	705	15.9%	85	1.9%
101 11	3	2954	_	886	42	4.7%	84	2.8%	569	19.3%	471	15.9%	57	1.9%
101.11	1	3510		817	0	0.0%	67	1.9%	665	18.9%	1553	44.2%	353	10.1%
101.13	1	3061	_	751	0	0.0%	109	3.6%	710	23.2%	484	15.8%	71	2.3%
0004	2	4561	5.78	1020	8	0.8%	220	4.8%	754	16.5%	720	15.8%	107	2.3%
9801	1	0		0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
	Totals	,		14,114	125	0.9%	1,818	3.1%	12,851	21.8%	11,499	19.5%	3,122	5.3%
source: US Cen	sus Bureau, Amer	ican Community	y survey 2018, l	LSC 2020										

Table A-2: Employment by Industry						
	Eag Mou	•	Sara Spri		Study Area Total	
Industry	Total	%	Total	%	Total	%
Accommodation, Arts, and Recreation	560	4.6%	510	4.8%	1,070	4.7%
Administration and Waste Services	527	4.4%	451	4.2%	978	4.3%
Agriculture	148	1.2%	103	1.0%	251	1.1%
Construction	1,005	8.3%	686	6.4%	1,691	7.4%
Educational Services	2,184	18.1%	2,269	21.3%	4,453	19.6%
Finance and Insurance	709	5.9%	885	8.3%	1,594	7.0%
Information	437	3.6%	318	3.0%	755	3.3%
Manufacturing	1,218	10.1%	832	7.8%	2,050	9.0%
Other Services	485	4.0%	463	4.3%	948	4.2%
Professional and Business Services	2,064	17.1%	1,736	16.3%	3,800	16.7%
Retail Trade	1,943	16.1%	1,398	13.1%	3,341	14.7%
Transportation and Warehousing	469	3.9%	639	6.0%	1,108	4.9%
Wholesale Trade	330	2.7%	381	3.6%	711	3.1%
Total Employed	12,079		10,671		22,750	
Source: US Census Bureau, American Community Surve	ey 2018; LSC	2020				

Table A	۱-3· Means	of Transp	ortation to	Work		
Table A-3: Means of Transportation to Work  Eagle Mountain Saratoga Springs Study Area					Area	
Means of Transportation	Workers	Percent	Workers	Percent	Workers	Percent
Drove Alone	8,523	80%	7,826	85%	16,349	82.1%
Carpooled	1731	16%	948	10%	2,679	13.5%
Public Transportation	216	2%	217	2%	433	2.2%
Other Means	93	1%	214	2%	307	1.5%
Walked	107	1%	27	0%	134	0.7%
Total	10,670	100%	9,232	100%	19,902	100%

Note: Workers 16 years and over, those who worked at home are not included. Public Transportation excludes Taxi Cabs. Source: U.S. Census Bureau, 2018 American Community Survey 5-Year Estimates

Table A-4: Travel Time to Work								
	Eagle M	ountain	Saratoga	Springs	Total			
Travel Time	Workers	Percent	Workers	Percent	Workers	Percent		
Less than 10 minutes	745	7%	679	7%	1,424	7%		
10 to 14 minutes	389	4%	654	7%	1,043	5%		
15 to 19 minutes	693	6%	1,043	11%	1,736	9%		
20 to 24 minutes	1,017	10%	1,430	15%	2,447	12%		
25 to 29 minutes	1,077	10%	780	8%	1,857	9%		
30 to 34 minutes	1,694	16%	1,604	17%	3,298	17%		
35 to 44 minutes	1,943	18%	1,074	12%	3,017	15%		
45 to 59 minutes	1,601	15%	1,016	11%	2,617	13%		
60 or more minutes	1,511	14%	952	10%	2,463	12%		
Total:	10,670	100%	9,232	100%	19,902	100%		
Mean travel time to								
work (minutes):	3.	5	31.6 33.3					
Source: U.S. Census Bureau, 2018 American Community Survey 5-Year Estimates.								

Table A-5: Time Leaving Home to go to Work							
	Eagle M	ountain	Saratoga	a Spring	Total		
Time Ranges	Workers	Percent	Workers	Percent	Workers	Percent	
12:00 a.m. to 4:59 a.m.	482	5%	356	4%	838	4.2%	
5:00 a.m. to 5:29 a.m.	583	5%	215	2%	798	4.0%	
5:30 a.m. to 5:59 a.m.	623	6%	281	3%	904	4.5%	
6:00 a.m. to 6:29 a.m.	999	9%	831	9%	1,830	9.2%	
6:30 a.m. to 6:59 a.m.	1,438	13%	1,001	11%	2,439	12.3%	
7:00 a.m. to 7:29 a.m.	1,273	12%	1,168	13%	2,441	12.3%	
7:30 a.m. to 7:59 a.m.	1,221	11%	1,142	12%	2,363	11.9%	
8:00 a.m. to 8:29 a.m.	1,110	10%	1,010	11%	2,120	10.7%	
8:30 a.m. to 8:59 a.m.	523	5%	579	6%	1,102	5.5%	
9:00 a.m. to 9:59 a.m.	599	6%	733	8%	1,332	6.7%	
10:00 a.m. to 10:59 a.m.	362	3%	310	3%	672	3.4%	
11:00 a.m. to 11:59 a.m.	72	1%	142	2%	214	1.1%	
12:00 p.m. to 3:59 p.m.	523	5%	651	7%	1,174	5.9%	
4:00 p.m. to 11:59 p.m.	862	8%	813	9%	1,675	8.4%	
Total:	10,670	100%	9,232	100%	19,902	100%	
Source: U.S. Census Bureau, 201	8 American Co	ommunity Su	rvey 5-Year Es	timates.	•		

#### EAGLE MOUNTAIN/SARATOGA SPRINGS COMMUNITY TRANSPORTATION SURVEY

Please take a few minutes to answer the following questions about your personal and/or household's public transportation ne	eds.
Your answers will help identify the transportation needs of Eagle Mountain and Saratoga Springs residents and will assist	us in
completing the community Transit Study. <i>Thanks for your help!</i>	

To return the survey, you may:
Fill it out online at: <a href="www.surveymonkey.com/r/NWUtahCounty">www.surveymonkey.com/r/NWUtahCounty</a>
Scan and email it to: Megan McPhilimy at Megan@lsctrans.com/

tions about Transportations about Transportation ould you or a member of you thin Eagle Mountain and Sale Yes, please answer que hat are the primary reasons aratoga Springs? (Check all the	our househo aratoga Spri estions 4-7 s your house	<i>Vithin Eagle</i> old use publiongs? □ N	c transporta o, please ski	and Saratog tion, such as p to question	a bus or shutt	tle, to rea
Borrow a vehicle Ride from a friend/relative Walk Bicycle Taxi Uber/Lyft Utah Transit Authority (UTA) UTA vanpool Employer vanpool Carpool here do you live?   Sara tions about Transportation ould you or a member of youthin Eagle Mountain and Sara Yes, please answer que hat are the primary reasons aratoga Springs? (Check all the	atoga Springs on Needs Vour househo aratoga Spri estions 4-7 s your house	Vithin Eagle old use publicings?	agle Mountain c transporta	Other	er (Please specify)  a Springs: a bus or shutt	dele, to rea
Walk Bicycle Taxi Uber/Lyft Utah Transit Authority (UTA) UTA vanpool Employer vanpool Carpool here do you live?  Sarations about Transportational you or a member of you him Eagle Mountain and Sarational yes, please answer que hat are the primary reasons aratoga Springs? (Check all the	atoga Springs on Needs Vour househo aratoga Spri estions 4-7 s your house	Vithin Eagle old use publicings?	agle Mountain  c transporta  o, please ski	on Other	er (Please specify)  a Springs: a bus or shutt	dele, to rea
Bicycle Taxi Uber/Lyft Utah Transit Authority (UTA) UTA vanpool Employer vanpool Carpool here do you live?  Sara tions about Transportation ould you or a member of you thin Eagle Mountain and Sara Yes, please answer que hat are the primary reasons aratoga Springs? (Check all the	atoga Springs on Needs Vour househo aratoga Spri estions 4-7 s your house	Vithin Eagle old use publicings?	agle Mountain c transporta	on Other	er (Please specify)  a Springs: a bus or shutt	de, to rea
Taxi Uber/Lyft Utah Transit Authority (UTA) UTA vanpool Employer vanpool Carpool here do you live?  Sara tions about Transportational you or a member of you thin Eagle Mountain and Sara Yes, please answer que hat are the primary reasons aratoga Springs? (Check all the	atoga Springs on Needs V our househo aratoga Spri estions 4-7 s your house	Vithin Eagle old use publicings?	agle Mountain c transporta o, please ski	on Other	er (Please specify)  a Springs: a bus or shutt	dele, to rea
Uber/Lyft Utah Transit Authority (UTA) UTA vanpool Employer vanpool Carpool  here do you live?   Sara  tions about Transportation ould you or a member of youthin Eagle Mountain and Sara  Yes, please answer que hat are the primary reasons aratoga Springs? (Check all the	atoga Springs  on Needs V  our househo aratoga Spri estions 4-7  s your house	Vithin Eagle old use publicings?	agle Mountain c transporta o, please ski	on Other	er (Please specify)  a Springs: a bus or shutt	dile, to rea
Utah Transit Authority (UTA)  UTA vanpool  Employer vanpool  Carpool  here do you live?   Sara  tions about Transportation ould you or a member of youthin Eagle Mountain and Sara  Yes, please answer que hat are the primary reasons aratoga Springs? (Check all the	atoga Springs  on Needs V  our househo aratoga Spri estions 4-7  s your house	Vithin Eagle old use publicings?	agle Mountain c transporta o, please ski	□ □ □ Other  and Saratog tion, such as p to question	er (Please specify)  a Springs: a bus or shutt	dile, to rea
UTA vanpool Employer vanpool Carpool  here do you live?	atoga Springs on Needs Vour househo aratoga Spri estions 4-7 s your house	S	agle Mountain c transporta o, please ski	□ □ □ Other  and Saratog  tion, such as  p to question	er (Please specify)  a Springs: a bus or shutt	dile, to rea
Employer vanpool Carpool  here do you live?	atoga Springs on Needs V our househo aratoga Spri estions 4-7 s your house	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	agle Mountain c transporta o, please ski	□ □ Other  and Saratog  tion, such as  p to question	er (Please specify)  a Springs: a bus or shutt	tle, to rea
Carpool  here do you live? □ Sara  tions about Transportation  ould you or a member of you  thin Eagle Mountain and Sara  □ Yes, please answer que  hat are the primary reasons  aratoga Springs? (Check all the	atoga Springs fon Needs V our househo aratoga Spri estions 4-7 s your house	Vithin Eagle old use public ngs? □ N	agle Mountain c transporta o, please ski	☐ ☐ Other  and Saratog  tion, such as  p to question	er (Please specify)  ga Springs: a bus or shutt  8	ile, to rea
here do you live?   Sarations about Transportations about Transportation ould you or a member of you thin Eagle Mountain and Saratoga Springs? (Check all the primary Control of the primary (Check all the primary (Check all the primary (Check all the primary (Check all the primary control of the primary (Check all the primary control of the primary (Check all the primary control of the pr	atoga Springs on Needs V our househo aratoga Spri estions 4-7 s your house	S □ E  Vithin Eagle  Id use public  ngs? □ N	agle Mountain c transporta o, please ski	in □ Othe and Saratog tion, such as p to question	er (Please specify)  na Springs: a bus or shutt  8	tle, to rea
tions about Transportations about Transportation ould you or a member of you thin Eagle Mountain and Sale Yes, please answer que hat are the primary reasons aratoga Springs? (Check all the	on Needs Vour househo aratoga Spriestions 4-7 s your house	<i>Vithin Eagle</i> old use publiongs? □ N	e Mountain c transporta o, please ski	and Saratog tion, such as p to question	ga Springs: a bus or shutt 8	tle, to rea
· ·	Personal Bus			ıl/Health Care		
☐ School/College ☐  ow many people in your hough the second of the second seco	usehold (inc	•		(Please specify) _ use a public tr □ Thre	ransportation s	service <u>w</u>
available and going where and ansportation service within   6-7 Days/week  3-4	Eagle Moun	itain or Sara	toga Springs			<b>public</b> s than on
ow much would you be willi aratoga Springs?   □	ing to pay pe Less than \$1	-	-	sportation <u>wit</u> □ \$2-\$2.99	<u>thin</u> <b>Eagle Mo</b> u □ \$3-\$3.99	
tions about Transportati	on Needs C	<u> Dutside Eag</u>	<u>le Mountai</u>	n and Sarato	oga Springs:	
ould you or a member of your side Eagle Mountain and Solid Yes, please answer que	<u>Saratoga Sp</u>	rings?	•	<b>tion, such as</b> p to <b>question</b>		tle, to rea
you or a member of your hold Saratoga Springs, please ☐ Zip Code:	e specify the	zip code(s)	and City nai	me(s) of each		<u>e</u> Eagle N

11.	How many people in your household (including yourself) would use public transportation <u>outside</u> Eagle Mountain and Saratoga Springs? ☐ One ☐ Two ☐ Three ☐ Four ☐ Five or More
12.	If available and going where and when you need to go, how often would your household use public transportation outside Eagle Mountain and Saratoga Springs?  □ 6-7 Days/week □ 3-5 Days/week □ 1-2 Days/week □ 1-3 Days/month □ Less than once/month
13.	How much would you be willing to pay per trip to use public transportation outside Eagle Mountain or Saratoga Springs? ☐ Under \$2 ☐ \$2-\$2.99 ☐ \$3-\$4.99 ☐ \$5 or more
14.	If a park-and-ride lot for transit service was located in your community, would you use it to ride transit?  □ No □ Yes, please specify where it should be located:
<u>Qu</u>	estions for All Respondents:
15.	What is your age? ☐ Under 18 years old ☐ 19–24 years old ☐ 25-39 years old ☐ 40-59 years old ☐ 75 years old or older
16.	Are you: (Check all that apply)         □ Employed Full-Time       □ Employed Part-Time       □ Unemployed       □ Disabled       □ Retired         □ Student – College       □ Student – High School       □ Other (Please specify)
17.	If employed, what is the zip code of your work location?
18.	If you or another member of your household currently work outside your home, how do you travel to work?  (Check all that apply)
19.	What is your total annual HOUSEHOLD income? (Include all income from all household members)  ☐ Less than \$19,999 per year ☐ \$20,000-\$39,999 per year ☐ \$40,000-\$59,999 per year ☐ \$80,000-\$79,999 per year ☐ \$80,000-\$99,999 per year ☐ \$100,000 or more per year
20.	Including <u>yourself</u> , how many people, age 10 and over, live in your household?  ☐ One ☐ Two ☐ Three ☐ Four ☐ Five ☐ Six or more
21.	Including yourself, how many people living in your household have a valid driver's license?  □ None □ One □ Two □ Three □ Four □ Five □ Six or more
22.	How many operating vehicles are available to your household? □ None □ 1 □ 2 □ 3 or more
23.	Do you or a household member who needs transportation have a disability, health concern, or other issue that makes travel difficult?   No Yes (please specify – e.g. I use a wheelchair)
24.	In the last two years, have you or a member of your household been unable to access medical care due to lack of transportation?
25.	In the last two years, have you or a member of your household lost a job, dropped out of school, or had problems finding work due to lack of transportation?   No  Yes (please describe)
26.	Would you support an increase in local sales tax to support enhanced public transportation?  ☐ Yes ☐ No
27.	Please provide any additional comments about public transit service you would like to see or any other unmet transportation needs you or members of your household have.
28.	If you'd like to receive updates about the Eagle Mountain/Saratoga Springs Transit Study, please provide your email address: (Your email address will remain confidential and will not be shared)

- 73 needs to be turned into a freeway with frontage roads on each side of highway. We also need more than one major way in and out of Eagle Mountain in case of emergencies. This should have been done already as we are growing really fast.
- A lady in my neighborhood can't drive and has tons of trouble getting to the doctor and store, can't walk far, we desperately need a service for disabled or elderly in the community ... she is not quite 65 and no services out here, all us neighbors have to coordinate driving her.
- Access to Lehi or AF front runner
- All my answers only apply if transportation is frequent enough, not just available. It has to be often enough to make it worth it for me. We really need either more lanes in our highways or public transport that is often enough that people don't have to wait for it.
- Although I personally will probably not use public transportation, I agree there is a need for it in the community. Perhaps a connection to the FrontRunner stop in Lehi could be useful. However, I would rather support funding in our community to be spent to provide more commercial/retail options in EM, and in City Center.
- As of now there isn't any type of public transportation in eagle mountain. Uber/Lyft does now exist in Eagle Mountain (city center) so it would be nice to at least have one available to Eagle Mountain Residents.
- Because we've lived out here for so long we've adapted to what is around us. We know how
  long it takes to get places and that we needed so many vehicles to work for us. That being said,
  if we were just moving in and didn't already have the vehicles for every driving member of our
  family, we would consider public transportation a huge benefit. It just isn't now because we've
  already lived without it for so long.
- Before thinking if other transportation needs, our roads (Lake Mountain Rd.) in particular needs to be paved so we can safely drive our own cars back and forth to work and other errands.
- Better access both to Saratoga Springs and the surrounding cities in Utah County
- Bring more businesses to Eagle Mountain.
- Building moratorium for Eagle Mountain, Saratoga Springs, Lehi
- Buses would be a waste of taxpayer money out there with the current infrastructure in place.
- Charge an impact fee on new buildings so road can keep up with demand.
- City Center in Eagle Mountain is always left out of the equation- yes there are buses in and out, very limited trips- of the Ranches but nowhere to park. This area is growing tremendously and could benefit with more access.
- Cost to benefit ratio just doesn't pan out. Public transit is a poor investment of my tax dollars.
- Currently due to bus and train schedules it takes me an extra hour to go to Salt Lake City thus making it not an option.
- Currently it is not worth using it locally. It takes more time than to just go there and come back. My vehicle all get great gas mileage and it just not worth the money or the extra time. I can get to work in 30 minutes or I can get to work in 2 hours. I choice the 30 minutes.
- Do not raise taxes
- Don't need public transit out here, don't want public transit out here! Need better and more roads before transit!
- Due to COVID I currently work from home, before COVID I would have considered using a bus transportation system to get to work if the tickets were less than 30/month. Otherwise, it would not be cost effective.



- Eagle Mountain does not yet need a public transportation system. The majority if not all residents moved here knowing they would need to get to work/school and did that without relying on public transportation
- Express buses from Saratoga to downtown SLC. Please bring them back.
- Having used public transport before the biggest drawback is how much slower it is than driving myself.
- I am happy to see this conversation is happening.
- I am in college and working I would use public transportation if I could to help.
- I am worried when transport is provided to Eagle Mountain and Saratoga Springs, us smaller outskirts cities will be left out. I know we are far and that makes getting us transport harder but please offer one or two options to the cedar fort Fairfield area
- I believe it would draw people to this area. Particularly young professionals or married college students.
- I don't want to pay for other people to use public transportation.
- I don't like relying on someone else to get me places.
- I don't think a tax increase should be considered to support public transportation to these areas. Keep Eagle Mountain semi-rural.
- I don't use public transportation because it would not be going where I am going. I work in Eagle Mountain at the High School and my children are in activities, so it necessitates driving myself. My husband works from home, so we simply don't have a situation that warrants it. I would use it if it made sense and worked with my schedule.
- I drive a school bus for alpine school district. I drive in Saratoga Springs and Eagle Mountain all day long. (Mainly Redwood Road) I would strongly suggest you change the left turning light from Redwood Road to Pony Express to red and green only. Having it a blinking yellow has cause multiple accidents that I have witnessed. People run that light daily and it's getting pretty scary!
- I have 10 kids. The biggest issue we face is getting them all able to drive, especially with the cost of car insurance. If we had better public transportation, they could rely on that to go to college and work, and not need a car right away.
- I have found it difficult today and, in the past, to use public transportation due to a lack of availability of when I need it and where.
- I imagine a lot of people that work in Thanksgiving Point would love a transit option
- I just don't want to drive in bad weather
- I mean, I guess if it's needed. But in our area, I don't see it being needed. Nobody I know would use it. So no, I don't really want to pay more for something basically nobody needs or would use to my knowledge.
- I think that the 806 line should be rerouted through the talus ridge neighborhood because it would still be able to make its normal stops and that one
- I think that's a great idea and tool used everywhere else in the world. Owning different cars can be expensive and some families just have one car so it's hard for them to access education or recreational activities. I think at least it could be awesome to have a shuttle between city center porter's crossing and the commercial zone (Walmart, Costco, Smith's)
- I think the biggest issues is one-way roads with large construction vehicles going under the speed limit. Making some of the roads such a Cory B Wride a two lane both ways would help with some of the backup.
- I think the bus service that is available now is working ok. Add a few stops and make one more trip in and out.
- I want to see UDOT get serious about actually building highways. We've told them for 20 years that they better do something and were told the area would not grow very fast. Well, traffic has been a big problem for many years now and still no one is getting serious about fixing it.

- I will never support any tax and I am completely opposed to bringing public transportation out here to ruin the atmosphere we enjoy and would actively respond against it.
- I would hope for a minimal increase in local sales tax for this.
- I would like more roads and widened roads out of Eagle Mountain instead of slowing traffic with more inefficient buses.
- I would like to see FrontRunner service to SLC from Eagle Mountain
- I would like UTA Trax to eventually come out to this area. I even like the Uber/Lyft idea out here. We just need more marketing for it locally so it can get a good user base in our two cities.
- I would likely allow my teenagers to ride tracks like transportation rather than a bus.
- I would love to see Mountain View Corridor go through to Salt Lake County.
- I would love to see Trax from EM, through SS and down to UVU.
- I would support a tax increase if the additional/enhanced transportation was done in a way that the residents would actually use the service. I have a bus stop down the street from me and I see the empty buses come and go. We need light rail as buses seem totally illogical anymore.
- I wouldn't pay any extra in taxes and assume the price of the fair would cover the cost. I believe people that use the service should fund it.
- I'd be interested in letting my kids ride a bus/shuttle to places around SS/EM. Because both myself and spouse work, I can't take my kids places. Maybe they could hop on the bus/shuttle to head to Neptune park or Smith's
- I'd love another road out of Eagle Mountain.
- I'd prefer not to increase taxes especially right now with Covid hurting my husband's job. It is mostly for recreation a couple of times a year, not worth rising taxes for that.
- I'd support raising taxes to create free public transport. I'd be more likely to use it in that case over having to decide between paying for it and using my own vehicle.
- If it's too expensive, I won't use it (i.e., FrontRunner)
- If we ever had light rail or a train access in Eagle Mountain I'd be much more interested in taking public transit. As of right now we almost never use public transit.
- If you do it, it needs to be done well.
- Improve the roads and worry less about the vehicles on them. Other than the large trucks that can't seem to follow the rules. Also do not allow any use of engine breaks within or near city limits.
- In order to get home to Eagle Mountain from UVU, I have to leave work early. It would be nice if there was a later bus. Even just an hour later would help.
- In order to truly be a viable option, it needs to be time efficient, i.e., not take too long for the trip. That has been a deterrent for transit use in the past.
- It would be nice to have a bus stop in city center
- It depends on where the roads would be built if I would support an increase in taxes. If it doesn't benefit me then no.
- It has to make obvious sense, like being cheaper than paying for gas every day, or it won't work.
- It is never a fast, efficient or as convenient as my own vehicle.
- It needs to be an effective plan. Like we used to have with an express bus to downtown SLC. If it takes twice as long as driving it isn't worth it.
- It would be a nice option, but I'm not willing to pay a lot more for anything
- It would be great to have a rail down the middle of 73 and 2100 to Lehi.
- It would be nice to have but we wouldn't require it, so if taxes go up very much because of it we would prefer not to have it.
- It would be nice to see more options in and out of Saratoga Springs and to have overpasses rather than so many red lights (2100 North).

- It would need to operate for work times away from direct area Eagle Mountain and Saratoga Springs.
- It's hard for me to get to the Salt Lake City Airport. When I go, I usually stay for at least a month. Long term parking is not an affordable choice, nor is Uber.
- It's possible I would support the tax increase, but it would depend on how much and what the services were. Saying how much I would pay for a service would depend on how far it takes me, so that was kind of a tough question to answer.
- I've looked at UTA various times in the past as I'd like to use public transit to get me to work. However, when it quadruples my time round trip, it just isn't worth it. More direct routes would be wonderful.
- Just build wider roads for easier access in and out of city.
- Just get the buses to come to Eagle Mountain city center. It doesn't even come all the way down Pony Express, it just stops at the park near the school at the top of the mountain.
- Lyft and Uber are great options.
- More roadways are needed. Both ease/west and north/south in Eagle Mountain and Saratoga Springs, and to access other areas. Some transit could help but only if used.
- More route options
- My kids attend school at MTECH, Westlake, and UCAS in Provo. My UCAS kiddo takes the bus to the Thanksgiving Point station and then takes the bus or train to Orem where she transfers to UVX. My kids feel very comfortable using public transportation and would use it more often to visit friends, get to tutoring, etc. My kiddo who attends MTECH would love routes that go from Saratoga Springs and Eagle Mountain to MTECH, especially at the time when classes occur. Or a bus from MTECH to the high schools and vice versa. We have 5 cars-it is kind of obscene, but with 5 people working and no public transportation, our 2 teens who are drivers need a car to get to and from work and school. I would probably rarely use it. My husband enjoys commuting on the train when he can, but driving to Thanksgiving Point to take a train to Draper seems a waste of time.
- Need access to public transportation in city center Eagle Mountain.
- No new taxes
- No to tax increase unless it's a free service like cache valley
- Not having any public transit in the area eliminates the ability to access paratransit. It isolates people with disabilities and makes affordable housing inaccessible.
- Not looking for public transport just bigger highways to accommodate the growing population in our area. Only 2 ways in and out of city center with only 2 lane highways is not cutting it. Stop building until the highways are widened to accommodate the extra vehicles. Especially when there is building of high occupation condos. Our roads can't handle the amount of vehicles commuting.
- One bus route wouldn't help things. It would need to be extensive. I wish we could be like other cities in the world- subways, trains, BRT buses, and tons of other options. Until then, riding public transportation is way way more work, planning, and money than I would want to spend.
- One granddaughter who doesn't drive, lives in Vineyard relies on public transit to get herself to her job and parents' house in Eagle Mountain
- Only use I would have would be to get to the Lehi or American Fork FrontRunner stations when I travel to the airport for work.
- Other than work, local transit could be any time or any day just consistent in schedule and well-advertised. Only Mondays etc.
- Please don't raise taxes for public transit in our area, I believe it unnecessary
- Please don't increase taxes for public transportation



- Please stop taking crucial transportation dollars from roads. We have sidewalks and trails, we do not need more bike lanes or bus stops.
- Please sweep the bike lanes of debris on a regular basis. Thank you
- Please do not instigate public transit in Eagle Mountain. It looks like a pretty package wrapped up with a bow, but it's only headache and taxes in the future.
- Public transit is very time consuming and inconvenient. This is why we have five vehicles for four drivers.
- Public transit requires too many connections and is overall much slower than driving; it is not feasible for most commuters to Salt Lake City.
- Public transport from Eagle Mountain to the stores in Saratoga Springs would be beneficial for families with only one vehicle or where a spouse is not licensed to drive.
- Public transportation in Eagle Mountain/Saratoga Springs is virtually non-existent. Until that changes, there's no point in using the tiny bit that is there.
- Public transportation is a poor option for us as it takes far too long to anywhere near anyplace we need to go.
- Public transportation is not a right of someone. I shouldn't have to pay for them.
- Public transportation is useless.
- Public transportation would be a great alternative for our high school students that don't live within district bus boundaries.
- Rapid transit options and more frequent bus stops and further spread out.
- Sales tax is a regressive tax that hurts the lower income earners. Please consider another way to fund transportation needs than to punish those that cannot afford transportation to begin with.
- Saratoga Springs needs more bike trails that are separated from the roads. The shoulder of roads should not be called a bike trail. I'm not going to bike with my children on redwood/pioneer crossing right next to traffic that drives at freeway speeds and usually exceeds the posted speed limits too. Either build separate bike trails or make the sidewalks wide enough to accommodate bikes and pedestrians.
- School buses
- Ski routes
- So far, all the public transport we need hasn't worked because it took 3-4x as long to get anywhere, even if you could get it. I'd be much more interested in something I could let my kids ride to local needs. Also, I would much rather have a privatized contract vs. the public creation. Like cache valley used to do. Bid out and let a company create one according to some requirements. Worked way better up there.
- Something definitely needs to be done. Only 4 buses in the morning and 4 in the afternoon/evening between Eagle Mountain and the Lehi Front Runner Station is not enough. And it only goes as far as the Ranches area. At a minimum there should be more buses and an expanded route to City center. The best would be at least 1 or 2 express buses that went straight to Salt Lake City like there used to be before the Front Runner. I've talked to UTA about providing more transit in Eagle Mountain, and they said that there hasn't been much show of support by the city for that, so I'm glad this survey is being done. I personally don't think a tax increase is necessary. You have so many new people moving into this city who will be paying taxes. That in and of itself is increased revenue for the city.
- SR-73 needs less stop lights and more of a freeway like feel.
- Still waiting to see barrier free, commuter (i.e., fast), and continuous (connect Eagle Mountain to Provo) bike and running trails. Trails should be more than recreational.
- The amount UTA charges as is, they should be able to afford extending hours and service.

- The biggest problem with having public transportation in Saratoga Springs is the amount of traffic we already have here. The roads are in no way prepared for UTA yet. Decrease the population here first and then try bringing UTA here.
- The current public transport is not cost effective for us to use. It is cheaper and more time efficient for us to drive. We would use public transport to commute for work but it costs too much.
- The key to making shuttles or buses work is convenient schedules and routes. Or big parking lots for parking car to board bus/shuttle.
- The one bus that comes here is the 806. It only stops in Lehi at the train station. It would be really nice if it had stops in Saratoga Springs near Smith's/Walmart/etc. and more than just in the morning or evening.
- The only time I would ever use any public train is to get to or from the airport. But I prefer Uber for that once a year now. I live remote along the lake...in south Saratoga. My home is nearly seven miles away from the closest grocery store. A bus just isn't a feasible lifestyle for an amputee with a wheel chair buying groceries for a family of 12. People drive suburbans and 12 passenger vans...and NEED the ability to haul loads of stuff around with their big families. Not just their big families. It is not just transportation. It is where to put everything you buy.
- The service isn't frequent enough to be of much use. It would add 2-4x the time to use public transit.
- The traffic signals on Redwood Road are clearly timed to give very little time to those leaving Eagle Mountain to get through lights. It is ridiculous to have to wait through multiple lights when trying to get through intersections onto Redwood Road.
- There are not enough protected yellows along redwood road which if protected would help with traffic flow and car collisions.
- There are very few days in an out of both these cities and during peak hours, these areas are already busy. Adding public transportation will only make it worse. People move into these cities knowing they will need their own transportation.
- There is little available for those of the community who are disabled. With little available in Eagle Mountain, many citizens are forced to use Uber/Lyft which services are not widely available.
- There may come a time when we might need some kind of medical transportation but thankfully not yet!
- There needs to be a more efficient way to access I15. The single lane roads leading away from city center in eagle mountain increase my commute when I get stick behind trucks or slow drivers.
- There needs to be an alternative to Redwood Road for those of us with homes south of Grandview. The fire this past summer made that very clear as people tried to evacuate the area. Redwood was at a standstill.
- There needs to be more ways to get in and out of Eagle Mountain to travel to Southern Utah County.
- This is the biggest concern about eagle mountain right now. We live in city center and to completely take public transportation is nearly impossible. You'd have to walk to ranches, catch a bus to trax/front runner, and then hit a train to make it to my work. I used to use front runner but I would have to drive to Lehi to make it to the train on time. This is one of the main reasons we're moving out because the growth and the infrastructure is not growing at the same speed.
- Those using public transportation should pay the cost of their choices and not be subsidized by people that don't or won't use it.
- Though we would not have the need ourselves for our lifestyle, we would encourage more public transportation for better emissions.

- Time is already a huge factor. I have young kids and work nights at the hospital. My husband does construction and goes where the current business is. He and I tag team the kids and their lives. The more houses being built without more road access, the worse traffic gets. I don't have time to sit on a bus and there isn't a quick commute from here to the hospital and I cannot leave my kids home alone yet.
- Timpanogos highway has a commuter lane, redwood road desperately needs that. Also having a trax type system over to front runner would be wonderful
- Tracy line running down Redwood. For Saratoga Springs to SLC or further north would be a great transportation option for a lot of people in the valley
- Traffic is horrible and only going to get worse. We need public transportation to help alleviate some of the traffic.
- Trams are definitely the best. Had them all over Europe. So great.
- Transportation to parks, shopping centers, library, FatCats, etc. Within Eagle Mountain and Saratoga Springs city limits. An option for our teenage residents to learn independence.
- Trax to Eagle Mountain
- Two more of my kids are reaching the age where they will be working soon. They can't afford to buy cars and we can't afford to buy them cars. Having transportation to Saratoga Springs would be so wonderful so they can work. When our oldest was working in Saratoga Springs, my husband and I had to drive t her to work. Then drive home. Then drive to pick her up and then drive home again. Please bring in a bus so our kids can work without impacting the family so much.
- Using public transit would only make sense for us if Trax ran from 1300 E in Salt Lake to Saratoga Springs or from Saratoga Springs to American Fork.
- We don't have the infrastructure to support it anyway.
- Utah bus stop closer to houses. Have to walk so far to Nolan Park
- We already pay but have fundamentally nothing.
- We currently don't public transit because it is infrequent and has few stops nearby. Also, the routes and stops make travel within Eagle Mountain and Saratoga Springs impractical.
- We do not want public transportation to come any closer to residential areas. We moved here for what was already here. We did not move here to have a big city grow around us.
- We have a lot of other issues that need addressing before public transportation, based on where we are at in the lifecycle of our city. We have too many other infrastructure projects for transportation that still need addressing first.
- We need a much more efficient east/west transportation road. There are too many people commuting on Pioneer Crossing, and the congestion/accidents on that road are terrible.
- We need a way to get to and from a restaurant or bar safely.
- We need more businesses out here before we really need to spend money on public transportation.
- We need more transportation
- We probably wouldn't use it very often. The additional time that taking public transit from Eagle Mountain wouldn't be worth it for us.
- We transport our children outside of eagle mountain every day for school and work because we live in the border of the two cities and all our needs are outside of the area. I would not allow my children to use public transportation due to safety issues. We will continue to use our own vehicles.
- We would love to see a trax line or Frontrunner to run more often.
- We would love to see Hwy 73 extended as a four-lane structure at least to the eagle gate and possibly to the Tyson Facility to help with the large truck congestion.
- We'd love a shuttle to the Lehi train for downtown

- When I moved here we had Fast Bus that took me from EM to SLC, when it went to only going to the frontrunner station, I went to driving instead. Now I working South Jordan.
- While I don't currently use public transportation, I do see the benefit of having at least some basic connection to the wider UTA network, especially busses, frontrunner and Trax station in Lehi/American Fork. It would be nice to see some kind of shuttle go out that way to connect to the broader network.
- Would love to see EM added to trax system or a bus system that connects to all cities along the Wasatch front
- Yes, only if it's is a high speed transit system.
- You could put in stop lights by the Overland Community cause it's a pain to get out on the road. And remove all the trees Ivory out in because they are a danger, it blocks the view of oncoming traffic.