

## **CHAPTER 1.0 PURPOSE AND NEED OF THE PROPOSED ACTION**

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### **1.1 Proposed Action**

Utah Transit Authority (UTA) is proposing to build and operate a commuter rail line adjacent to the existing Union Pacific Railroad's (UPRR) right-of-way through Utah and Salt Lake Counties (see Figure 1-1, Provo to Salt Lake City FrontRunner Location Map). This project is called the Provo to Salt Lake City FrontRunner project, as illustrated in Figure 1-2 (Proposed Action). It is anticipated to help meet current and future demand for high capacity transit in the two most populous counties in Utah. UTA would build and operate the line, which would connect with commuter rail service that extends to the north of Salt Lake City. The Weber County to Salt Lake City Commuter Rail project commuter rail line is currently under construction and is expected to go into service in 2008. Together, the Weber County to Salt Lake City Commuter Rail project and the Proposed Action would provide transit service between Utah, Salt Lake, Davis, and Weber Counties. These four counties along the Wasatch Front comprise the urban center of the state where approximately 75 percent of population of Utah lives and works.

### **1.2 Background Information**

#### **1.2.1 Transportation Studies**

Transportation needs in Salt Lake and Utah Counties have been identified through a series of transportation studies. These studies have been conducted as part of the long-range planning efforts of several agencies, including UTA, Utah Department of Transportation (UDOT), Wasatch Front Regional Council (WFRC), and Mountainland Association of Governments (MAG). Through these studies, it has become clear that future travel demand exceeds the capacity of the existing transportation infrastructure, and the potential feasible increases in roadway capacity cannot, by themselves, accommodate future travel demand in the region.

The study of commuter rail as a viable transportation option began in the late 1990s with the Regional Commuter Rail Feasibility Study (WFRC and MAG, November 1998). The 1998 Feasibility Study evaluated two potential corridors for commuter rail between Provo and Salt Lake City. These corridors were the former Denver and Western Rio Grande Railroad mainline and the Union Pacific Provo Subdivision Railroad Line. More than 60 potential station locations were identified along these routes between Provo and Ogden.

A subsequent study, the Interregional Corridor Alternatives Analysis (IRCAA), covered a 120-mile corridor between the communities of Payson to the south of Provo and Brigham City to the north of Ogden. This longer corridor encompasses most urbanized areas in Utah as well as the primary commercial and business districts and educational institutions. This study compiled extensive data on the corridor, summarized historic trends in housing and employment, as well as forecasted population and employment growth. The study also recognized existing, planned, and programmed transportation improvements. This information, combined with interviews with key elected officials and "visioning" sessions with agency boards, formed the basis to recommend several new transportation projects, including the Provo to Salt Lake City FrontRunner project.

The IRCAA study identified a Locally Preferred Alternative that was a multimodal needs-based alternative. The Locally Preferred Alternative included commuter rail service from Provo to Ogden. The rail service would use either locomotive-hauled coaches or self-propelled diesel multiple units (DMUs). The trains would operate in the Union Pacific Railroad (UPRR) right-of-way from Salt Lake City to Ogden. The trains going south from Salt Lake City to Provo would use the former Denver and Rio Grande Western (now UPRR Mainline) rail tracks, except for a section of UTA owned track at Lakota Junction. Along the approximate 80 miles of commuter rail service from Provo to Ogden, there would be 13 stations. Stations were proposed in Provo, Orem, American Fork, Lehi, South Jordan, Murray, Salt Lake City, West Bountiful, Farmington, Layton, Clearfield, Roy, and Ogden. Each station would have associated

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parking. During peak periods, trains would arrive every 30 minutes. During off-peak periods, trains would arrive every 60 minutes. On Saturdays, there would be reduced service. A supporting network of feeder bus service would transport passengers from residential and destination neighborhoods to rail stations.

### ***1.2.2 Long-Range Transportation Plans***

The IRCAA Locally Preferred Alternative was incorporated into the long-range transportation plans by both MAG and WFRC. MAG, in cooperation with state and federal transportation and transit agencies, adopted the Utah Valley Regional Transportation Plan (RTP) 2007–2030 in 2007. The Utah Valley RTP covering the Orem-Provo Urbanized Area addresses transportation facilities such as capital-intensive roadway projects, pedestrian/bicycle paths, park-and-ride lots, transit facilities, airport improvements, and freight movements. It also specifies long-range goals for the region's transportation system, in compliance with federal guidelines. The MAG plan includes commuter rail from Santaquin to the Salt Lake County line and notes that UTA owns a rail corridor and operating rights that would allow for future commuter rail service to ultimately extend from Payson to Brigham City. As such, the Proposed Action to construct a commuter rail line from Provo to Salt Lake City is consistent with this plan.

The Wasatch Front Urban Area Long Range Transportation Plan Update: 2004–2030 was adopted in December 2003. In preparing this plan, WFRC coordinated with local cities, counties, UDOT, and UTA to determine transportation needs for the region. The plan includes over 1,220 lane miles of capacity improvements to the highway system, ten extensions to the existing light rail system, three commuter rail lines, and 175 miles of bus rapid transit (BRT) and enhanced bus service. This plan recommends capacity improvements that include widening I-15 in portions of Salt Lake County. It also includes regional transit system improvements that could be provided through commuter rail or bus rapid transit services. The plan recommends constructing commuter rail from the Utah County line to Salt Lake City within the UTA-owned right-of-way along the existing UPRR corridor. It also identified potential station locations at Draper or Bluffdale, Sandy or South Jordan, and Murray or Midvale (WFRC, 2004).

In May 2007, WFRC issued the Wasatch Front Regional Transportation Plan 2007–2030. The more recent long-range transportation plan recommends 1,070 lane miles of capacity improvements to the highway system, seven extensions to the existing light rail system, a 27-mile commuter rail line linking Utah County with Salt Lake City, and nine BRT lines and enhanced bus service. The Proposed Action to construct a commuter rail line from Provo to Salt Lake City is consistent with this plan.

### ***1.2.3 Development of the Proposed Action***

Development of alternatives for the Provo to Salt Lake City rail corridor began in 2004. This initial effort was part of the development of alternatives to be evaluated in the I-15 South Draft Environmental Impact Statement (DEIS). These alternatives originally addressed both commuter rail and highway improvements for the I-15 corridor. Well into the alternatives development process, however, the evaluation process changed.

In November 2006, referenda were passed in both Utah County and Salt Lake County that increased the sales tax by ¼ cent for funding transportation improvements. Subsequent to the approval of the increase in sales tax, UTA, in conjunction with WFRC and MAG, identified priority projects and recommendations on which projects would be locally funded and which would seek federal funding. Commuter rail was selected to be a locally funded project. This decision enabled the commuter rail alternative to move forward as a separate project from the proposed alternative for highway improvements for I-15.

As of March 2007, separate environmental review processes were defined to address the commuter rail alternatives and the highway improvement alternatives of the original I-15 South DEIS project. The highway alternatives are now being evaluated as alternatives for the I-15 South reconstruction and widening project. UDOT and FHWA are preparing a Draft Environmental Impact Statement for this federally funded project. The commuter rail alternatives are now being evaluated as alternatives for the Provo to Salt Lake City FrontRunner project—the Proposed Action.



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This Environmental Study Report (ESR) is UTA's environmental impact assessment document for the locally funded Proposed Action. The Proposed Action for commuter rail and alternatives considered are discussed in Chapter 2.

### 1.3 Statement of Project Purpose

The purpose of the Proposed Action is to:

- Facilitate the safe and efficient movement of people within the region, specifically the corridor between Provo and Salt Lake City through the year 2030;
- Provide efficient, high-capacity transit service in the project corridor;
- Enhance economic potential in the corridor by improving access to existing and planned employment and activity centers; and
- Support regional plans and policies that call for the provision of a balanced transportation system.

### 1.4 Need for the Project

The Proposed Action would establish commuter rail service linking Provo and Salt Lake City. Increasingly, this mode of transportation has been recognized as an important component of the multimodal transportation system to meet regional transportation needs. These needs are briefly outlined below and are described in more detail in the following sections.

- The Wasatch Front and, in particular, Utah and Salt Lake Counties are experiencing rapid growth in population and employment;
- Development patterns are increasingly dispersed, with a greater number of activity centers and employment areas along the corridor;
- An increase in interregional travel patterns is creating additional travel demand for both roadways and transit;
- Projected travel demand exceeds the capacity of existing and planned transportation infrastructure:
  - North-south roadway network is heavily congested,
  - Demand for express transit service exceeds supply, and
  - Intraregional and interregional trips are forecasted to increase in the future.
- Physical constraints in the corridor limit opportunities for expansion of existing roadway infrastructure; and
- A strong commitment exists within the region to develop a multimodal transportation system that includes commuter rail transit as a regional transportation solution.

#### 1.4.1 Population

The Proposed Action is located in Utah's most densely populated area. Utah and Salt Lake counties are the state's most populated counties. In 2005, Utah County had 456,073 residents and Salt Lake County had 978,285 residents. The combined population of the two counties was 1,434,358, which was 57 percent of the entire state's population (GOPB, 2006). Salt Lake City, the state capital, is Utah's most populous city and had 178,099 residents in 2005 (U.S. Census Bureau, 2006).

Population in the two-county region has increased dramatically over the past 15 years. The most substantial change was in Utah County where the population increased 73 percent between 1990 and 2005—from 263,590 to 456,073 (U.S. Census Bureau, 1990; GOPB, 2006). The average annual increase was approximately 4.9 percent. Growth in Salt Lake County was more moderate. During this period, the population increased from 725,956 to 978,285 (an



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average annual increase of 2.3 percent). In comparison, population throughout the state of Utah increased 47 percent, with an average annual increase of 2.46 percent (U.S. Census Bureau, 1990; GOPB, 2006).

The population in the region is projected to continue to experience strong growth in the coming decades. The population in Utah County and Salt Lake County is expected to increase by about 76 percent and 41 percent, respectively, between 2005 and 2030 (GOPB, 2005b). Growth is also projected for both Provo and Salt Lake Cities; though it is expected to be much more moderate because they are historic urban centers in the region. All together, the state's population and employment growth rates are expected to continue to out-pace those of the nation (by more than twice the projected rates for the nation) for the next three decades (GOPB, 2005b).

### **1.4.2 Employment**

Utah and Salt Lake Counties comprise a large portion of the Wasatch Front, where over half of Utah's population resides. Largely due to its population density, this region represents the state's economic engine. The project corridor encompasses portions of both the Provo-Orem and Salt Lake City (formerly Salt Lake–Ogden) metropolitan statistical areas (MSA).

As the most densely populated areas of the state, the Provo-Orem and Salt Lake City MSAs have the major share (80.7 percent) of all jobs in the state (EDC Utah, 2006). Employment in Utah and Salt Lake Counties in nonagricultural and nonconstruction industries is projected to grow by 61.0 percent and 57.3 percent between 2005 and 2030. Employment is also expected to continue to grow in Salt Lake City, with an anticipated growth of 24.8 percent between 2005 and 2030.

### **1.4.3 Traffic**

#### **1.4.3.1 Roadway Network**

Major regional highways are located in the study area including I-15, I-215, and I-80. However, the north-south roadway system in the corridor is characterized by a limited number of major roadways. Most of I-15 through Salt Lake County was recently reconstructed to have eight general-purpose lanes and two high-occupancy vehicle (HOV) lanes. From 10600 South in Salt Lake County to U.S. 6 in Spanish Fork, I-15 is a six-lane facility. Another major roadway is I-215, which is a belt route six-lane freeway parallel to both the east and west of I-15 in northern Salt Lake County. The Bangerter Highway is a limited access multilane highway that provides north-south capacity west of I-15 and I-215 through much of Salt Lake County.

I-15 was constructed in the early 1960s as part of the nationwide interstate highway system. It is a major north-south connection through California, Nevada, Utah, Idaho, and Montana. In 1995, it was designated as the CANAMEX Trade Corridor to foster international trade and promote economic growth between Canada, the U.S., and Mexico.

In addition to serving as a key national and international transportation highway, I-15 is important in meeting the regional mobility needs of Utah as well as Utah and Salt Lake Counties. The I-15 corridor through Utah County is the only north-south freeway, and therefore provides the only continuous highway access between the Salt Lake City and the central and southern portions of the state. I-15 also serves as the only continuous north-south highway for local travel within Utah County and is used extensively for local trips. Although other north-south roadways such as Redwood Road, Geneva Road, and State Street are used for local north-south trips in Utah County, Redwood Road is the only major roadway other than I-15 that connects Utah and Salt Lake Counties.

#### **1.4.3.2 Existing Traffic Volumes and Level of Service**

As the state's largest urban area, traffic volumes on I-15 are high in the study area. Traffic volumes just south of Salt Lake City now exceed 120,000 vehicles per day. The segment between Alpine and 10600 South carries between 123,600 and 148,500 vehicles per day. Another high volume segment is between University Avenue in Provo and Pleasant Grove where traffic volumes range from 120,300 to 132,200 vehicles per day.

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The effectiveness of existing transportation facilities, specifically highways, can be evaluated through analysis of daily and peak hour traffic volumes. Traffic analysis completed originally for the I-15 South Draft Environmental Impact Statement shows that two noticeable peak periods exist on I-15. These peak periods occur in the morning and the late afternoon/early evening. While heavy traffic volumes are common on I-15 during the late afternoon/early evening peak period, traffic volumes are highest on southbound I-15 in the afternoon. Northbound I-15 generally experiences heavier peak hour volumes during the morning peak hour. The exception is the segment of I-15 northbound between Provo Center Street and Orem. Here, higher peak hour volumes occur in the late afternoon/early evening peak period due to localized traffic.

An analysis of existing (2005) peak hour traffic conditions shows that one southbound segment of I-15 (12300 South to Bangerter Highway) and three northbound segments (Pleasant Grove to American Fork East, American Fork East to American Fork Main, and Bluffdale to Bangerter Highway) are currently operating at level of service (LOS) E in the p.m. peak hour. In addition, 12 southbound segments and 13 northbound segments experience LOS D in their peak hours. UDOT's goal is to operate at LOS D or better during peak hours.

### 1.4.3.3 Forecast Traffic Volumes and Level of Service

Analysis also looked at future (2030) conditions along I-15 for the morning and afternoon peak periods. The configuration of I-15 for 2030 matched its existing configuration. The analysis showed that the highest volumes for the southbound direction are anticipated in the p.m. peak hour. In the northbound direction, the segment between University Avenue (interchange 263) and Bluffdale (interchange 288) is anticipated to have its highest volumes during the p.m. peak hour, while the rest of the segments experience their peak during the a.m. peak hour. In the 2030 peak hour, 22 out of 26 study segments located between Salt Lake City and South Santaquin are expected to operate at LOS E or F in the southbound direction. And, a total of 17 out of 26 segments in the northbound direction will experience LOS E or F.

Growth in the Salt Lake region is expected to continue through 2030 and traffic volumes are estimated to more than double in the I-15 corridor. Overall, most of the corridor will operate at unacceptable levels of service during peak hours in both the southbound and northbound directions and travel times and delays will increase. Considering these severe congested conditions, motorists would be expected to seek alternate routes to I-15 where possible. This would result in spillover onto parallel arterials, such as Redwood Road at the Utah–Salt Lake County line. In addition to the potential for spillover onto parallel facilities, the length of the peak periods (e.g., 6–9 a.m. and 3–6 p.m.) will likely increase in duration as travelers seek less-congested times to make their trips.

Unlike the highway, the Proposed Action commuter rail service will not be similarly affected by the anticipated increases in congestion. It will operate on its own separate right-of-way. As such, travel time by commuter rail will remain consistent and a reliable alternative to the highway system.

## 1.4.4 Travel Patterns

Travel patterns in the project corridor were examined to further evaluate travel demand in the region. A county-to-county analysis was undertaken to assess interregional trip characteristics. Both existing and future travel patterns were investigated.

As part of the IRCAA study, existing travel patterns were analyzed based on data collected for the 1993 Wasatch Front Home Interview Survey (WFRC and MAG, 1993). The results indicated that most trips are short and remain within the county of origin. For nonwork trips, more than 85 percent remained within the counties of origin. Similarly, more than 50 percent of work trips remained within each county. Salt Lake County retained the most trips—more than 95 percent.

A similar review of interregional travel patterns was conducted for future 2030 conditions and then compared to conditions reported by the IRCAA study. The comparison of future travel patterns to existing conditions shows that by the year 2030, the majority of trips will continue to remain within the county of origin. Salt Lake County will

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continue to retain the major percentage of its trips, far more than Utah County. The IRCAA study, however, found that by the year 2030, there would be a clear trend of significantly increasing numbers of interregional trips. Between 1993 and 2030, work trips between Salt Lake and Utah Counties are forecasted to more than triple (60,000 as compared to 17,000).

A similar travel pattern analysis was completed. This study examined travel demand characteristics for six specific subareas that influence travel within the project corridor. These subareas are listed below and are shown on Figure 1-3, Subareas for Travel Demand Analysis.

- Subarea 1: South Salt Lake County, including Bluffdale and Draper;
- Subarea 2: North Utah County, including Lindon, Pleasant Grove, American Fork, Lehi, and Alpine;
- Subarea 3: Central Utah County, including Provo and Orem;
- Subarea 4: South Utah County, including Springville, Spanish Fork, Payson, and Santaquin;
- Subarea 5: West Utah County; and
- Subarea 6: North and Central Salt Lake County.

In particular, two types of trip patterns were examined: daily home-based work person trips and total daily person trips. Home-based work person trips—commuters traveling between homes and work—are concentrated in the morning and evening peak periods when transportation facilities are most heavily loaded. A review of all 2030 home-based work person trips in the corridor shows two primary destinations that need to be served. Central Utah County (Provo and Orem) will receive about 39 percent of the trips from all subareas, and North and Central Salt Lake County (and points north) will receive about 28 percent of the trips from all subareas. The remaining trips are about equally divided between North and South Utah County destinations. The results of this analysis are shown in Figure 1-4, 2030 Home-Based Work Daily Person Trips.

Figure 1-5, 2030 Total Daily Person Trips, summarizes the analysis of 2030 total daily person trips. These projected trips show similar trends. The primary destinations are Central Utah County (39 percent of all trips), North Utah County (20 percent of all trips), and North and Central Salt Lake County (14 percent of all trips).

The examination of home-based work person trip movements and total daily person trip movements helps to identify potential opportunities to serve trips by transit. The model shows a rapidly developing market for long-distance trips from throughout the project corridor into Salt Lake County, as well as a market for serving trips into the center of Utah County.

These trends indicate that the demand for interregional transportation facilities will greatly increase by the year 2030. Current interregional facilities, such as I-15 and U.S.-89, will be carrying both more traffic and increased bidirectional traffic in the future. The analysis suggests that there will be many more long interregional trips (i.e., trips that traverse three counties), than there are today. Expansion of I-15 to a ten-lane facility, as is currently being studied by UDOT, would alleviate, but not eliminate, traffic congestion on I-15. To effectively support interregional travel needs, transportation facilities and services will need to serve trips to activity centers along the entire corridor instead of focusing primarily on downtown Salt Lake City. See Figure 1-6, Activity Centers.

## 1.4.5 Transit

### 1.4.5.1 Existing Services

UTA, the largest transit service district in Utah, is the provider of the transit services in a six-county region (Salt Lake, Box Elder, Utah, Tooele, Davis, and Weber Counties). Transit ridership in Utah and Salt Lake Counties has continually increased over the years, but annual increases have been more dramatic since 1999. The existing transit system in the project corridor consists of an extensive network of local and express buses and two light rail transit lines. One light rail line links Sandy to downtown Salt Lake City, and the other connects downtown Salt Lake City to

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the University of Utah campus. In addition, in the spring of 2008 UTA will be providing commuter rail service between Salt Lake City and Weber County (Pleasant View Station). UTA is also studying a bus rapid transit (BRT) corridor along University Parkway and University Avenue between the Utah Valley State College campus and the Provo Town Center Mall. These transit services are described in more detail in the paragraphs below.

UTA provides light rail transit service within the northern portion of the project corridor for the Proposed Action. The TRAX North/South line provides light rail service on 15-minute headways from about 5:00 a.m. to 12:00 a.m. from the Sandy Civic Center Station at 10000 South to the Arena Station in Salt Lake City.

Buses, however, are the primary mode of public transportation in the region, and I-15 is a major corridor used by UTA. Within the project corridor, UTA provides intracounty and intercounty express and local bus service. The express bus system provides higher speed service from park-and-ride lots and major stops at activity centers to downtown Salt Lake City (SLC) and to other key activity centers such as the University of Utah (U of U) and its Health Services Center, Salt Lake City International Airport, Utah Valley State College, and the Provo/Orem areas. UTA's experience with express bus service has been positive. Express routes typically carry more than twice the number of passengers per trip (ranging from 23 to 56 passengers per trip) as compared to the overall UTA system average (17 passengers per trip).

Major bus routes that currently serve commuters along the project corridor are primarily express routes using I-15. These express routes are:

- Route 801: SLC/Orem/Provo Express;
- Route 802: SLC/Utah County Express;
- Route 803: North Utah County/Salt Lake Express;
- Route 804: SLC/Lindon Express;
- Route 805: South Utah County/SLC Express;
- Route 810: U of U/American Fork Express;
- Route 811: Utah Valley/TRAX Connector; and
- Route 817: Provo/Orem TRAX Express.

Most of these routes (801, 802, 803, 804, 805, and 810) provide limited express service during peak commute hours. Route 811 provides more frequent service from just after 4:00 a.m. to nearly 11:00 p.m. with some weekend service. Based on July 2004 ridership data, the three UTA routes with the most passengers per trip operate along the I-15 corridor are Route 801, Route 802, and Route 804. UTA also operates many non-express local buses throughout the region.

In addition to the bus and light rail transit systems, UTA also operates 32 park-and-ride lots. There are nine lots in Utah County and 23 lots in Salt Lake County (14 south of Sandy and nine north of Sandy). Utilization of the lots is estimated to be 75 percent in Utah County, 61 percent for the lots south of Sandy, and 56 percent for lots north of Sandy. UTA is also proposing to construct new park-and-ride lots in the corridor.

### 1.4.5.2 Proposed Services

UTA is currently moving forward with a major expansion of its transit system by developing light rail, commuter rail, and bus rapid transit projects throughout the region. These other expansion projects include:

- Weber County to Salt Lake City FrontRunner North Commuter Rail: a 44-mile commuter rail line between Salt Lake City and Pleasant View (under construction)
- West Valley Light Rail Transit Project: a proposed 5-mile LRT line between the West Valley Intermodal Center and downtown Salt Lake City

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- Mid-Jordan Light Rail Transit Project: a proposed 10-mile LRT line extending from the 6400 South TRAX Station to 5600 West south of Webley Junction in West Jordan to the new Daybreak Development in South Jordan
- Airport Project: a proposed 6-mile LRT line connecting the downtown Intermodal Center in Salt Lake to the Salt Lake International Airport
- Draper/Bluffdale Project: a proposed 8-mile LRT line extending from the current TRAX Sandy Civic Center Station in Sandy to a station at 12400 South in Draper
- Salt Lake Bus Route Redesign: a major restructuring of the bus routing system to provide greater frequency of service in high demand corridors with better connections across routes and to current and future TRAX lines. Changes include consolidation of the current route structure, an increase in the number of high frequency buses (15-minute service), and expansion of suburban service.
- 3500 South Bus Rapid Transit Project: a proposed 10-mile bus rapid transit line with 23 stops connecting Magna to the 3300 South TRAX station (under construction)
- Salt Lake Intermodal Hub TRAX Extension: an extension of the existing TRAX line from the Arena Station to the Salt Lake City Intermodal Center (under construction)
- Sugar House Transit Corridor Analysis: a preliminary analysis evaluating transit alternatives for the area between 1700 South and I-80 and from TRAX to 1300 East
- West Valley Intermodal Center: a proposed 10-bay bus hub located at 2840 West and 3650 South in West Valley City, a southern park-and-ride lot adjacent to the bus hub, and a northern park-and-ride lot located at approximately 2840 West Lehman Avenue

## 1.5 Summary of Project Purpose and Need

The previous sections clearly demonstrate the expected population and employment growth and the associated growth in local and regional travel demand. The existing transportation system cannot effectively accommodate such growth and, as a result, transportation improvements are needed in Utah and Salt Lake Counties.

The purpose of the Proposed Action is to meet the following objectives:

- Facilitate the safe and efficient movement of people and goods within the project corridor through the year 2030,
- Provide efficient, high-capacity transit service in the project corridor,
- Enhance economic potential in the corridor by improving access to existing and planned employment and activity centers, and
- Support regional plans and policies that call for the provision of a balanced transportation system.

The Proposed Action is needed for the following reasons:

- The Wasatch Front and, in particular, Utah and Salt Lake Counties are experiencing rapid growth in population and employment,
- Development patterns are increasingly dispersed, with a greater number of activity centers and employment areas along the corridor,
- An increase in interregional travel patterns is creating additional travel demand for both roadways and transit,

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- Projected travel demand exceeds the capacity of existing and planned transportation infrastructure:
  - North-south roadway network is heavily congested,
  - Demand for express transit service exceeds supply, and
  - Intraregional and interregional trips are forecasted to increase in the future.
- Physical constraints in the corridor limit opportunities for expansion of existing roadway infrastructure, and
- A strong commitment exists within the region to develop a multimodal transportation system that includes commuter rail transit as a regional transportation solution.

The Proposed Action would substantially improve transit access to jobs, health care, educational opportunities, housing, and recreation in Salt Lake and Utah Counties. With connections to bus and light rail networks, the Proposed Action would serve staff, faculty, and students at several universities and colleges. It would also serve workers in downtown Salt Lake City, downtown Provo, and many other major employment centers along the project corridor. By helping to alleviate congestion and offering an alternative to commuting by automobile, the Proposed Action would support planned and projected economic development in the corridor. For these reasons, the Proposed Action has widespread support from city and county officials, the Governor, the Legislature, and the public.

## 1.6 Purpose of the Environmental Study Report

UTA is preparing this Environmental Study Report (ESR) to help decision makers and the public consider the benefits and impacts of the Proposed Action to develop a new commuter rail corridor from Provo City to downtown Salt Lake City.

The ESR will help UTA and its partners and shareholders further define the Proposed Action. The preparation of the ESR will require their coordination on preliminary engineering, environmental impact assessment, and public involvement activities. In this way, UTA and its stakeholders will be able to collaboratively determine how the Proposed Action can be developed in a manner that is cost-effective, yet provides the greatest benefits and minimizes adverse impacts.

The information presented in the Draft ESR is based on alternatives analysis and screening, preliminary engineering studies, environmental research and analysis, and public involvement efforts associated with project scoping. The Final ESR is designed to serve as the primary document to facilitate review of the Proposed Action and its impacts by federal, state and local agencies, as well as the general public. The Final ESR will document the continued public involvement efforts associated with the public and agency review of the Draft ESR and will provide responses to comments received on the Draft ESR. The ESR documents the purpose and need for the project and describes the alternatives evaluated. It discloses the anticipated beneficial and adverse impacts of the Proposed Action and defines appropriate mitigation measures. This document also summarizes the transportation benefits and effects of the Proposed Action, as well as potential environmental impacts in the following areas:

- Land Use;
- Social and Economic Impacts, including Displacements and Relocations;
- Air Quality;
- Noise;
- Vibration;
- Water Resources (Surface Water, Floodplains, Groundwater);
- Biological Resources (Wetlands, Vegetation, Wildlife and Fisheries, Sensitive Species);
- Hazardous Materials and Hazardous Waste;
- Historical, Archaeological, and Paleontological Sites;



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- Parks, Open Space, and Recreational Resources;
- Visual Resources;
- Public Safety and Security; and
- Construction Impacts.