Freight transportation is closely tied to economic development, particularly in the Reno-Sparks metropolitan region. Effective freight movement is important to the economic competitiveness of Northern Nevada and to the overall health and efficiency of the transportation system. Freight distribution, logistics, and advanced manufacturing have become increasingly important to the regional economy, with strong employment growth in these sectors over recent years. This growth and diversification is supported by the nationally significant I-80 corridor, I-580, the US 395 critical urban freight corridor, the Union Pacific Railroad (UPRR), and the Reno-Tahoe International Airport and Reno-Stead Airport. Centers of freight distribution activities include:

- Sparks industrial area and Sparks rail yard
- North Valleys, including the Reno-Stead Airport and US 395 corridor
- South Meadows industrial areas
- Pyramid Highway industrial areas
- Reno-Tahoe International Airport

\(^1\)(The Transportation Planning Capacity Building Program | Freight Planning Capacity Building Workshop http://www.fhwa.dot.gov/planning/freight_planning/archive/freightworkshop.cfm#intro)
MAP-21 established a policy to improve the condition and performance of the national freight network. The purpose of the policy is to provide a foundation for the United States to compete in the global economy and achieve goals related to economic competitiveness and efficiency, congestion, productivity, safety, security, and resilience of freight movement. This is particularly significant in Northern Nevada, through which a significant amount of national freight movement occurs.

The passage of the current transportation bill, Fixing America's Surface Transportation (FAST) Act, further reinforces the importance of freight to the national economy. Specifically, the FAST Act established both formula and discretionary grant programs to fund critical transportation projects that benefit freight movements. These programs mark the first time that a dedicated source of federal funding for freight projects, including multimodal projects, have been provided. The FAST Act emphasizes the importance of coordination between local governments and freight transportation providers.

**WESTERN US HIGHWAY FREIGHT FLOWS, 2010**
(Source: MG&A, 2015 based on USDOT, FHWA data)
Logistics and operations are identified as the economic development focus for Northern Nevada in *Unify, Regionalize, Diversify: An Economic Development Agenda for Nevada*. This plan highlights strategic opportunities in warehousing and distribution, advanced logistics, air cargo, and integrated manufacturing-distribution. The parallel I-80 and freight rail corridors and cargo capacity at Reno-Tahoe International Airport, combined with proximity to the Port of Oakland and major West Coast markets, give the region significant locational and geographic advantages. These strengths make the region attractive for manufacturing and assembly companies that have integrated supply chains or rely on streamlined transportation and distribution infrastructure. Linkages to Northern California agricultural industries also make the region supportive of food processing operations.

The regional transportation network supports industrial land uses that concentrate around I-80, I-580/US 395, and the Reno-Tahoe International Airport and Reno-Stead Airport. The area surrounding the Sparks intermodal transfer terminal south of I-80 is home to the largest cluster of industrial and manufacturing companies in the region.
10.1 NEVADA STATE FREIGHT PLAN

The 2040 RTP supports the vision and goals described in the Nevada State Freight Plan (NSFP), which was adopted in September 2016. The following strategic goals were identified in the NSFP with supporting objectives and performance measures:

- Economic Competitiveness
- Mobility and Reliability
- Safety
- Infrastructure Preservation
- Advanced Innovative Technology
- Environmental Sustainability and Livability
- Sustainable Funding
- Collaboration, Land Use, and Community Values

These goals provide the context for the implementation of 18 strategies listed in the NSFP that will collectively address improvements to Nevada’s freight network to achieve the desired vision.

The NSFP also developed a project prioritization process to implement improvements throughout the state. A project list was developed specifically for the Reno-Sparks urbanized area in consultation with the RTC. The project list identifies improvements on the National Highway Freight Network, which includes a hierarchy of the Primary Highway Freight System (PHFS), Critical Urban Freight Corridor, and other Interstate not on the PHFS. Proposed improvements on the National Highway Freight Network provide potential access to dedicated federal funding sources. In addition, the project list also identified improvements on freight corridors that have regional significance. Figure 3 shows the locations of some of the proposed improvements. Most of these projects are also listed in this 2040 fiscally constrained RTP.

Recent developments in this market area indicate that Northern California companies are increasingly seeing Reno as an extended submarket that has competitive advantages over the markets in the San Francisco Bay Area and Central Valley. As a result, the Reno-Sparks-Carson City area is moving toward greater economic integration and becoming a more diverse and integral subcomponent of the Northern California market.

-Nevada State Freight Plan

The Nevada State Freight Plan also promotes development of the proposed I-11 corridor. This continental corridor would link Nevada and other western states to Mexico and Canada. The plan highlights the benefits to the state of creating a north-south freight corridor in addition to the existing I-80. An intermodal I-11 corridor represents a significant opportunity to increase the ability to perform distribution functions, becoming crossroads with multi-directional access. This added connectivity would increase synergy between Nevada’s major hubs and improve their access to western U.S. markets, eventually to Canada and Mexico.

Of the several strategies identified to support the goals in the NSFP, the expansion of freight truck parking in the region is an important key to improving safety and mobility. According to the Federal Highway Administration, truck parking shortages are a national safety concern. An inadequate supply of truck parking spaces can result in negative consequences. For example, tired truck drivers may continue to drive because they have difficulty finding a place to park to rest. In addition, truck drivers may choose to park at unsafe locations, such as on the shoulder of the road, exit ramps, or vacant lots, if they are unable to locate official, available parking. Truck parking facilities with amenities should be spaced closely enough to provide drivers more options for layovers to meet their hours-of-service regulations. Rest areas are useful for short stops; however, for longer durations, such as fulfilling a 10-hour forced rest, truck drivers prefer to rest where there are amenities.
“Northern Nevada’s critical mass and competitive advantage in logistics and operations is evident in the wide range of national-name logistics/distribution companies that have already set up operations in the region. Linked with these activities are a number of assembly-based and light manufacturing operations that have also set up facilities in Northern Nevada, primarily to serve as a West Coast hub and take advantage of the region’s strong distribution and transportation network.”

*In Unify, Regionalize, Diversify: An Economic Development Agenda for Nevada*
This figure highlights the major road and rail corridors that currently serve the state and the western United States, highlighting the possible future I-11 corridor that could serve the region (Source: MG&A, 2015, based on Cambridge Systematics, AAPA, USDOT (FHWA, FRA), Oak Ridge National Laboratory, BEA, Fortune, Rand McNally).

The regional transportation network supports industrial land uses that concentrate around I-80, I-580/US 395, and the Reno-Tahoe International Airport and Reno-Stead Airport. The area surrounding the Sparks intermodal transfer terminal south of I-80 is home to the largest cluster of industrial and manufacturing companies in the region.

**10.2 AIR CARGO**

Reno’s proximity to major West Coast ports provide next day capability for movement of cargo back and forth for import and export as well as domestic spoke and hub services via air, truck or rail. At the same time, Reno has customs facilities and personnel to handle nearly all import and export needs, while Reno-Tahoe International Airport (RNO) is capable of handling a variety of international and domestic services and flights. In 2014, RNO handled more than 64,500 tons or 129 million pounds of cargo shipments. This was the highest annual cargo tonnage reported at this airport during the last 8 years (Reno-Tahoe Airport Authority, 2014). Approximately 310,000 pounds of cargo arrives or departs the airport each day. Companies handling air cargo at RNO include Amerijet, DHL, FedEx, and UPS (Reno-Tahoe Airport Authority, 2015). RNO is within a designated foreign trade zone, and is located within 2 miles of two major highway corridors, I-80 and US 395, and less than 1 mile from the Union Pacific (UP) Sparks Intermodal Facility.

“There is a strong opportunity in Northern Nevada to expand the amount of air cargo throughput at the Reno-Tahoe International Airport, and especially to position the region as a strong alternative West Coast air cargo hub to Los Angeles, as Reno’s airport is significantly less congested, costly, and bureaucratic. The Reno-Tahoe Airport also has potential to attract an increasing amount of international air cargo from China, especially as a gateway for goods moving from China through the United States to South America (because planes must stop for fuel along this route).”

– In Unify, Regionalize, Diversify: An Economic Development Agenda for Nevada

**10.3 RAIL**

Nevada’s geography and historic development patterns have resulted in two primary rail corridors, which generally run east-west across the state, along with a few supplemental branch and excursion lines. The UP Railroad operates two east-west corridors; Burlington Northern Santa Fe (BNSF) Railway has rights to operate on nearly three-quarters of the UP railways in Nevada. The northern corridors serve Reno and Sparks, as well as other Northern Nevada communities, and connect with Salt Lake City and Denver to the east and with Sacramento and the San Francisco area to the west. Amtrak operates once a day passenger rail service in each direction across this northern Nevada corridor; I-80 generally parallels the rail lines in this corridor. Most of the freight traffic in Nevada is highway-based. The Federal Highway Administration (FHWA) commissioned a 2016 Freight Analysis Framework Study, which found that truck-based shipments accounted for 32 percent of all shipments from Nevada to other states (12.6 million tons), 37 percent of shipments to Nevada (18.8 million tons) and 99.7 percent of total shipments within the state (41.6 million tons) in 2015. By comparison, rail shipments accounted for eight percent of the shipments to other states, six percent of the total traffic to Nevada and less than one percent of in state traffic in 2015.
**Nevada State Rail Plan**

The 2012 Nevada State Rail Plan was developed by the Nevada Department of Transportation (NDOT). The plan reflects Nevada’s leadership with public and private transport providers at the state, regional and local levels, to expand and enhance passenger and freight rail and better integrate rail into the larger transportation system. The 2012 Nevada State Rail Plan:

- Provides a plan for freight and passenger rail transportation in the state
- Prioritizes projects and describes intended strategies to enhance rail service in the state to benefit the public
- Serves as the basis for federal and state investments in Nevada

Goals were developed to provide big picture strategic guidance for developing rail in the state of Nevada including:

- Enhance the safe operating efficiency of the state’s rail transportation system
- Optimize Nevada’s rail potential to effectively address social, economic, environmental, and energy effects
- Develop an organizational structure and strategies yielding a streamlined process for implementing Nevada's rail transportation improvements

**FREIGHT RAIL FACILITIES IN NEVADA**

10.5
Sparks Rail Yard
The first UP rail yard in Sparks was built in 1904. From that point, Sparks was an important stop for trains serving Nevada businesses and residents. Today, the Union Pacific yard in Sparks is an integral part of the railroad’s 32,000-mile operation. Playing a major role in the application of distributed power, the Sparks yard has been a focal point for the safe and efficient operation of freight trains over Donner Summit. With nearly 1,200 miles of track and 600 employees in the state, the Sparks yard plays a critical role in the efficient movement of goods in and around Nevada.²

Industrial Roads generally carry heavier loads and at least 6 percent trucks. Typical truck activity levels by roadway type are summarized in the table below.

<table>
<thead>
<tr>
<th>Functional System (Urban)</th>
<th>Percent Trucks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interstate</td>
<td>8.6</td>
</tr>
<tr>
<td>Freeways/Expressways</td>
<td>5.57</td>
</tr>
<tr>
<td>Principal Arterials</td>
<td>5.1</td>
</tr>
<tr>
<td>Minor Arterials</td>
<td>5.5</td>
</tr>
<tr>
<td>Collector</td>
<td>3.4</td>
</tr>
<tr>
<td>Local</td>
<td>2.9</td>
</tr>
</tbody>
</table>

I-80
I-80, designated as a part of the nation’s Primary Highway Freight System, is a heavily used goods movement corridor through the western states. Along some sections of I-80 through the four western states, trucks can reach as high as 45% of the total volume of traffic on the roadways. States have implemented key strategies to mitigate the impacts of truck traffic on the roadways while still providing a good route for trucks to travel for their commercial needs, even during winter months when truck holds at the Nevada/California state line can be frequent.

I-580/US 395
I-580 exists today from I-80 in Reno south to Fairview Drive in Carson City. Eventually, the highway will continue in a southerly direction from Fairview Drive to terminate at the junction of US 395 and US 50 just south of Carson City. US 395 in Nevada is a major freeway from I-80 north to the state line and has been designated as a critical urban freight corridor. It serves significant freight traffic generated by the industrial and warehousing developments in the North Valleys area. These routes are absolutely vital to the state’s freight network, serving as the state’s primary truck routes connecting Nevada to the national freight network.

10.4 ROADWAYS
Area roadways provide a critical link in both national and local goods movement. Regional roads connect manufactures to intermodal transfer sites as well as the larger freeway network. This area includes local industrial roads, I-580/US 395, and I-80. The Pyramid Highway corridor has also experienced strong growth in industrial activities and is a designated Critical Urban Freight Corridor. USA Parkway provides access to the Tahoe Reno Industrial (TRI) Center from I-80 and is being extended to provide a secondary access from US 50 in Lyon County.

Industrial Roads accommodate significant freight movement through the Reno-Sparks metropolitan planning area and to and from major freight traffic generators, including; industrial areas, inter-modal rail and air facilities, and the regional freeway network. The Industrial Road network defines critical connections for freight movement throughout the area and these roadways need to maintain the function of, and capacity for truck movements.

² (http://www.uprr.com/newsinfo/releases/community/2012/train-towns/0926_sparks.shtml)
USA Parkway (I-80 to US 50)
USA Parkway is a partially-constructed roadway beginning at the interchange on I-80 approximately 10 miles east of Reno in Storey County.

The Nevada Department of Transportation, in cooperation with the Federal Highway Administration, is constructing an extension of USA Parkway 10.26 miles from the current end of pavement south to U.S. 50 near Silver Springs in Lyon County. The extension will complete the 18-mile-long roadway and provide an additional connection between I-80 to U.S. 50. The new alignment will enhance accessibility and mobility between Lyon and Storey counties, as well as provide transportation infrastructure to support existing and planned land uses and economic development in both counties. The USA Parkway Project is currently under construction and is expected to open by late 2017.

USA Parkway would serve the Tahoe Reno Industrial (TRI) Center. The TRI Center is a 107,000-acre industrial park located in Storey County about seven miles east of Reno. The park has five miles of track with access to BNSF and UP service on the Overland Route. The facility includes transloading and warehousing capabilities. Companies located at the facility include the Tesla Gigafactory, Switch Data Center, Ebay Commerce, Wal-Mart distribution center, and Chewy.com to name a few. The USA Parkway extension southward from the TRI Center will connect I-80 with US 50 benefiting truck access.

10.5 OUTREACH AND COORDINATION
As part of outreach for the development of the RTP the RTC hosted the RTC 2040 RTP Freight Forum on Thursday, March 31 2016 at The Innovation Center. During the forum, there were presentations and discussions about the strengths and challenges of the transportation network in supporting freight movement, important infrastructure investments that will support improved freight movement, and RTC’s role in better engaging the freight, logistics, and manufacturing industries.

10.6 RTP PROJECTS SUPPORTING FREIGHT AND GOODS MOVEMENT
Several projects in the RTP focus on improving freight and goods movement through Northern Nevada. A summary of these projects are listed below.

- System wide ITS improvements on I-80 and US 395/I-580
- Pyramid Highway/U.S. 395 Connector
- Reno-Sparks Freeway (Spaghetti Bowl) Study and U.S. 395 Widening
- Interchange improvements in the North Valleys area
- Additional lane capacity on I-80