

# CHAPTER 8

## Transportation



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## 8.1 Chapter Introduction

### 8.1.1 Chapter Introduction

The goal of the transportation element is to connect Storey County residents with their communities and neighboring jurisdictions to enhance the quality of life. Safety, efficiency, maintenance, mobility, sustainability, and economic development are incorporated to support this goal. Whether by vehicle, bicycle, rail, or walking transportation fundamentally impacts the way people interact with their surroundings.

Current growth in the community and the types of growth (e.g., commercial, residential, industrial) place demands on the transportation systems. These demands must be considered when evaluating the best plan to reduce travel times, encourage economic development, and increase safety. As a rural community, Storey County's topography and population size present unique challenges when developing an interconnected transportation network. Furthermore, connections to neighboring jurisdictions, particularly Reno, are increasingly important to provide residents of Storey County access to goods and services not locally available. These challenges are discussed throughout this chapter and highlight potential improvements to develop a more connected community.

This chapter presents inventories and reviews of the existing and proposed transportation infrastructure serving county residents, and discusses how current needs are met, where they can improve, and how to meet the future needs. While the total population of Storey County is approximately 4,095 people (U.S. Census Bureau estimate for 2022), Storey County residents are spread throughout four general areas, based on the unique transportation needs: Virginia City/Gold Hill, Virginia City Highlands, Mark Twain, and Lockwood. In addition, the McCarran area is comprised of commercial, industrial, and other non-residential uses, and connections between the McCarran area and the aforementioned communities are critical to the economic viability of Storey County. A future planned unit development in the Painted Rock area will also require unique transportation as the region continues to expand. These areas are described below.

Virginia City and Gold Hill's combined population is approximately 1,146 people per the Governor of Nevada's certified estimate for 2022. The major economic sector is tourism. Over one million people travel to and from Virginia City each year and continued growth is expected in the local tourism sector. Connecting Virginia City to the surrounding area is critical to the local economy of Storey County.

The Virginia City Highlands population is approximately 1,430 people and the Mark Twain area population is approximately 780 people (governor's certified estimate for 2020). Both areas are bedroom communities with little commerce outside of small, home-based businesses such as contractors, daycare, and family agriculture. Connecting these communities to the surrounding areas is critical in providing residents access to commerce.

Lockwood is a mixed-use community of approximately 1,333 residents (governor's certified estimate for 2020). There are several light industrial uses in the area mixed with residences, a school, and county public service facilities. The Lockwood Regional Landfill, which services areas of Nevada and other states, is on the south side of the community. Highway access is provided via Interstate 80 to

the north.

McCarran is on the north side of the county between Lockwood and Painted Rock and is home to the Tahoe-Reno Industrial Center, which includes nearly 107,000 acres of light- and heavy manufacturing and distribution, commercial energy generation, data management centers, and other industries. USA Parkway (State Route 439) and Waltham Way serve as the major arterial routes connecting the industrial center to Interstate 80 to the north and US Highway 50 to the south. These links will receive special attention in this chapter due to their impact on Storey County and northwestern Nevada as a whole. A development agreement between Storey County and the Tahoe-Reno Industrial Center reserves the entire industrial center exclusively for commercial and industrial uses and prohibits residential development. The prohibition of residential development encroaching near the industrial is found appropriate by this master plan, due to the intensity of allowed uses in the industrial center.

Painted Rock is approximately 18 miles east of the city of Sparks and five miles west of the city of Fernley along the southern bank of the Truckee River. Painted Rock includes the Truckee River riparian lowlands and the northern foothills of the Virginia Range. The area is dominated by open space land along the riparian areas of the Truckee River. It includes approximately a dozen large estate single-family residential dwellings. A planned unit development is anticipated to bring new residents to the area, making connections with this area more critical in the future. There are no commercial or industrial uses in this area. The development agreement between Storey County and the Tahoe-Reno Industrial Center stipulates that roads, rail, water, and sewer infrastructure are developed up-front by the industrial center, and that Storey County reimburses costs over a set period of time and with no-interest costs. To date, the total cost of those improvements exceeds \$80,000,000. At the time of preparation of this master plan, Storey County has reimbursed approximately \$40,000,000 of the cost of improvements for roads, drainages, and the McCarran Government Complex. For the purpose of this discussion, the size of this investment should be put into perspective. If a county of one million people made an equivalent investment, \$12.5 billion dollars would need to be invested. With this level of investment, Storey County has clearly made economic development a priority. The county needs to continue to align future investments and administrative processes so that maximum return on investment can be realized.

The safety of residents, visitors, and economic partners is the primary concern for the transportation system in Storey County, and zero fatalities related to transportation remains a major goal.

## **8.1.2 Transportation Systems and Issues**

### **8.1.2.1 Safety**

In 2023, 97 total traffic accidents were recorded, 56 of which resulted in injury and/or death, 27 in property damage, and 7 were categorized as hit-and-run. No fatalities are acceptable, and continued effort should be made to achieve the goal of zero fatalities each year. Furthermore, 3,719 traffic stops were made and 1,560 citations were issued. The partnership between Storey County and the Nevada Department of Transportation should be maintained to deliver the maximum reasonable safety benefits to the traveling public. Projects in conjunction with the “Safe Routes to School” program should be explored more earnestly to help develop and maintain infrastructure connecting students with their schools and surrounding areas within the Lockwood and Virginia City communities, as well as explore opportunities for school facility expansions in Lockwood, McCarran, or the Painted Rock areas.

### 8.1.2.2 Interconnection

Connections in Storey County between the Lockwood, Mustang, McCarran, and other northern communities with Virginia City to the south are becoming increasingly important as commercial, industrial, and residential growth continue. Multiple master plan workshops were held to help identify and discuss the potential benefits, adverse impacts, and unique challenges associated with constructing a north-south arterial route connecting Virginia City to the Mustang and Lagomarsino areas. An east-west route linking the Lagomarsino area to Mustang, McCarran (and the Tahoe-Reno Industrial Center), and Washoe County was also explored during the master plan workshops. The US 50 Operation Study conducted by the Nevada Department of Transportation provides further information on potential connections in the area. The following is a discussion of topics and concerns expressed in the workshops.

Connecting Lockwood/Mustang and Geiger Grade Road via a direct north-south link between Long Valley Road and Mustang Road may be feasible; however, cost-to-benefit analyses needs to be further reviewed. Incorporating a third link between this route and McCarran near the center of the county was also discussed. Highlands and Lockwood residents expressed concerns about traffic and adverse human-caused impacts that may occur after connecting the region in this manner. Lockwood residents reminded the planning commission that decades of effort by area residents and county officials resulted in rerouting Lockwood Regional Landfill truck traffic away from Canyon Way and to Mustang Road, and that connecting Canyon Way to a regional road system (north-south and/or east-west) would recreate unsafe road conditions that once existed back to the Lockwood community. Major roads connecting the south and central parts of the county with the interstate should align with Mustang Road and avoid Canyon Way at Lockwood.

Also considered during the workshops was a north-south connection between McCarran and Virginia City via USA Parkway (State Route 439) to Highway 50 and Six Mile Canyon Road, an alternative connection that bypasses Highway 50 north of the Mark Twain area. Further discussion with Lyon County on aligning inter-county roads in this area should be further discussed. Other north-south connector alternatives were discussed but were determined to be cost-prohibitive or strongly opposed by Highlands and and/or Lockwood residents. Those alternatives included an alignment between Geiger Grade and Lockwood using Lousetown and Long Valley roads and Canyon Way. These routes were strongly opposed by Highlands and Lockwood residents due to concerns that traffic and other activity would be concentrated through the approximate center of both residential communities, threatening the rural integrity, fire and life safety, and other characteristics of the area. A direct northerly connection between McCarran and Six Mile Canyon was also considered; however, local topography makes such an alignment cost-prohibitive.

The potential for an east-west connector route linking the Lagomarsino area to Mustang, McCarran, and Washoe County was also discussed. Concerns were expressed that such a roadway may encourage residential sprawl from Washoe County that may threaten the rural lifestyle of the Highlands area and conflict with industrial uses and entitlements existing in the Lagomarsino planning area. Concerns surrounding potential traffic and other adverse impacts of an east-west connector to the Lockwood community were also discussed. Despite these concerns, a desire remains to develop a secondary access for the Lockwood community, particularly in the event of emergency. Nevada Department of Transportation has begun studying the feasibility of an east-west connection between South Meadows and the Tahoe-Reno Industrial Center. Further discussions and coordination with the Nevada

Department of Transportation should occur before moving forward to identify a solution to help connect the aforementioned communities and provides a secondary access while minimizing sprawl and potential adverse impacts to the Highlands and Lockwood communities.

Planning Commission Chairman Larry Prater requested the following statement be added to this chapter of the 2024 Master Plan. The statement below (from the 2016 Master Plan) reflects his opinion on the importance of considering future connection between the northern and southern communities of Storey County.

#### **POTENTIAL INTRA-COUNTY ROAD NETWORK**

*Sometime in the future Storey County may decide that it would be beneficial to connect Lockwood and TRIC [Tahoe-Reno Industrial Center] to Virginia City via roads entirely within the county. Factors that may drive such a decision could include increased emergency management requirements, growing traffic congestion in the Reno/Sparks areas and demand by residents and businesses for quicker access to the county seat in Virginia City.*

*There exists a series of roads, some of which are very primitive, that connect the three areas now and also provide access to potential cultural assets like the petroglyphs and Cottonwood Springs. These roads are as follows:*

*Leaving Virginia City, proceed north on Highway 341 to Lousetown Road (both of which are paved) then northeast to Long Valley Road (graded dirt). Continue northeasterly to where the road turns northwest toward Cottonwood Springs and proceed northeasterly on the jeep trail through the Chalk Hills to the south edge of the relatively flat plateau area referred to as Nevada Uplands. The distance to this point from Lousetown Road is about 10 miles and there is very little change in elevation.*

*At this point the road divides – northeast to TRIC and northwest to Lockwood. The TRIC road is a jeep trail which skirts the south side of Cinder Mountain, continues down Martin Canyon past the Gooseberry Mine to USA Parkway south of the Bush Industries warehouse. The distance from Nevada Uplands to USA Parkway is about 9 miles with a 1,500-foot drop in elevation.*

*The road to Lockwood is a jeep trail that proceeds 4 miles northwesterly and skirts the petroglyphs (1/4 mile to the west). At the northwest corner of the Uplands the jeep trail intersects an improved dirt road with numerous switchbacks that continues northwesterly to Canyon Way, a paved road into Lockwood. Trucks and other heavy vehicles would be required to divert northerly around the Waste Management landfill to the Mustang exit on I-80. The distance from the Uplands to Lockwood is about 7 miles with an elevation drop of about 1,700 feet. [Prater, 2016]*

While certain regional interconnection may be necessary in the future, the County should work closely with area residents to determine alternatives that are consistent with the goal of this master plan and prevent unintended negative consequences. The county should also consider future population and other influential factors of the planned unit development in Painted Rock, and potential developments in other parts of the county, before making substantial capital investment in directly connecting Virginia City with the north end of the county. Additional concerns regarding emergency access have been continually expressed during master plan workshops. The Lockwood and Highlands areas currently have one available emergency evacuation route. As the region continues to grow, a second

evacuation route becomes an increasingly important priority, particularly in the event of a disaster which may impact residents' abilities to safely evacuate along a particular route. While the Lockwood community expressed support for a secondary access route, the Highlands community was not interested. A second evacuation route servicing the Lockwood area should be studied in more detail going forward. Should the Highlands neighborhood reconsider their position, a secondary access should be evaluated.

### **8.1.2.3 Transportation Supporting Resources**

With only three vehicle fueling stations in the county, tax revenue earmarked to address transportation needs is insufficient to meet transportation infrastructure needs in the county. Each year, the Storey County Public Works Department requires additional resources from the County to cover the maintenance needs of the county roads. Development trends along Interstate 80 and the Tahoe-Reno Industrial Center should help as new sources of fuel revenue develop in the future. Even with these future sources, it is not expected this additional revenue will cover maintenance costs.

Gas tax indexing was made available to the counties in the 2015 Nevada legislative session. Historically the gas tax rate was fixed at cents per gallon. The indexing allows the county tax on gasoline to adjust with inflation. This allows the assessed tax to adjust with the price of gasoline and is fairer to all consumers over time because the users of the transportation system pay for the roads. The County should consider implementing to help address the funding deficit for roads, deliver a better product to the public, and show statewide support for transportation improvement and maintenance.

### **8.1.2.4 Roads**

#### **General Description**

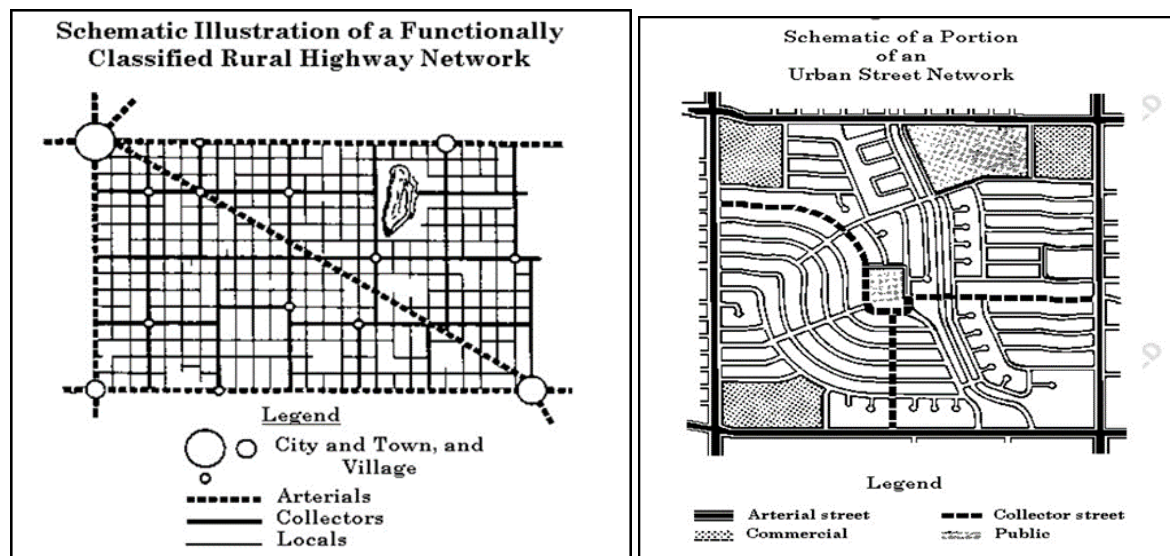
Storey County's communities are separated by long distances and extreme mountainous topography. These conditions create fragmented communities and make accessibility to the county seat, Virginia City, difficult for outlying residential and commercial developments. One must currently travel through Washoe County, including Reno and Sparks, or through Lyon County to travel between the north and south communities of Storey County. Approximately one hour is needed to travel between Virginia City and Lockwood, and Virginia City and the Tahoe-Reno Industrial Center. Total net commuters in Storey County have increased substantially from 2010 to 2021, with the increase attributed to inbound commuters (increased from 2,593 in 2010 to 17,527 in 2021). Conversely, the total number of outbound commuters has slightly decreased over the 11-year period.

Nevada State Route 341 and State Route 342 are the principal vehicle transportation routes connecting Virginia City and the Highlands to U.S. Highway 395 in Reno and Sparks, and Highway 50 and 395 in Carson City. Six Mile Canyon Road is a secondary route connecting Virginia City and Mark Twain with U.S. Highway 50 in Dayton, ten miles east of Carson City. Interstate 80 runs mostly along the northern bank of the Truckee River in Washoe County. Interchanges and bridges at Lockwood, Mustang, Patrick, Tracy/Clark, USA Parkway, Painted Rock, and Orchard provide access to communities, ranches, and other areas in the county along the southern bank of the Truckee River within Storey County. While there are a couple rough, unimproved four-wheel-drive-only trails that link the northern communities to Virginia City and the Highlands, most travelers must use I-80, I-580,

and Nevada State Route 341 for access to and from Virginia City. Several Revised Statute 2477 (RS 2477) roads throughout Storey County are currently being identified. RS 2477 was an 1866 Act which authorized the construction of roads across federal lands to assist in the development of the western United States as it continued to develop. This Act granted to counties and states the ability to establish rights-of-way across federal land, creating public highways. These roads often traverse federal lands, and were used for various purposes, including accessing mine sites, recreation areas, and general transportation. In 1976, RS 2477 was repealed under the Federal Land Policy and Management Act (FLPMA); however, this repeal was subject to “valid existing rights.” Following the repeal of RS 2477, many of these historic rights-of-way were closed, often with controversy. To identify the validity of past RS 2477 roads, Storey County is performing a comprehensive overview to locate and map all RS 2477 roads, particularly where they intersect private lands. This mapping exercise is anticipated to be completed in 2025 and will help clarify the location and validity of historic rights-of-way.

### Definition and Functional Classification

This section describes the functional classification for all major roads in Storey County. Figure 8.2-1 provides definitions and illustrations of the functional classifications, including arterial routes, collector routes, and local streets for both rural and urban settings.



Source: Federal Highway Administration 1989, Figures II-2 and II-3

**Figure 8.2-1. Functional Class Descriptions**

Figure 8.2-1 (left) depicts a functionally classified rural network and Figure 8.2-1 (right) depicts a functionally classified urban street network— with the same basic concepts applying in both settings. A similar hierarchy of systems can be defined; however, because of the high intensity of land use and travel throughout an urban area, specific travel generation centers are more difficult to identify. In urban areas, additional considerations such as spacing, become more important in defining a logical and efficient network.

Figure 8.2-2 through Figure 8.2-6 depict roadway functional classifications for Storey County and the areas of Mark Twain, Tahoe-Reno Industrial Center, Lockwood, and Virginia City, respectively. The figures were provided by the Nevada Department of Transportation.

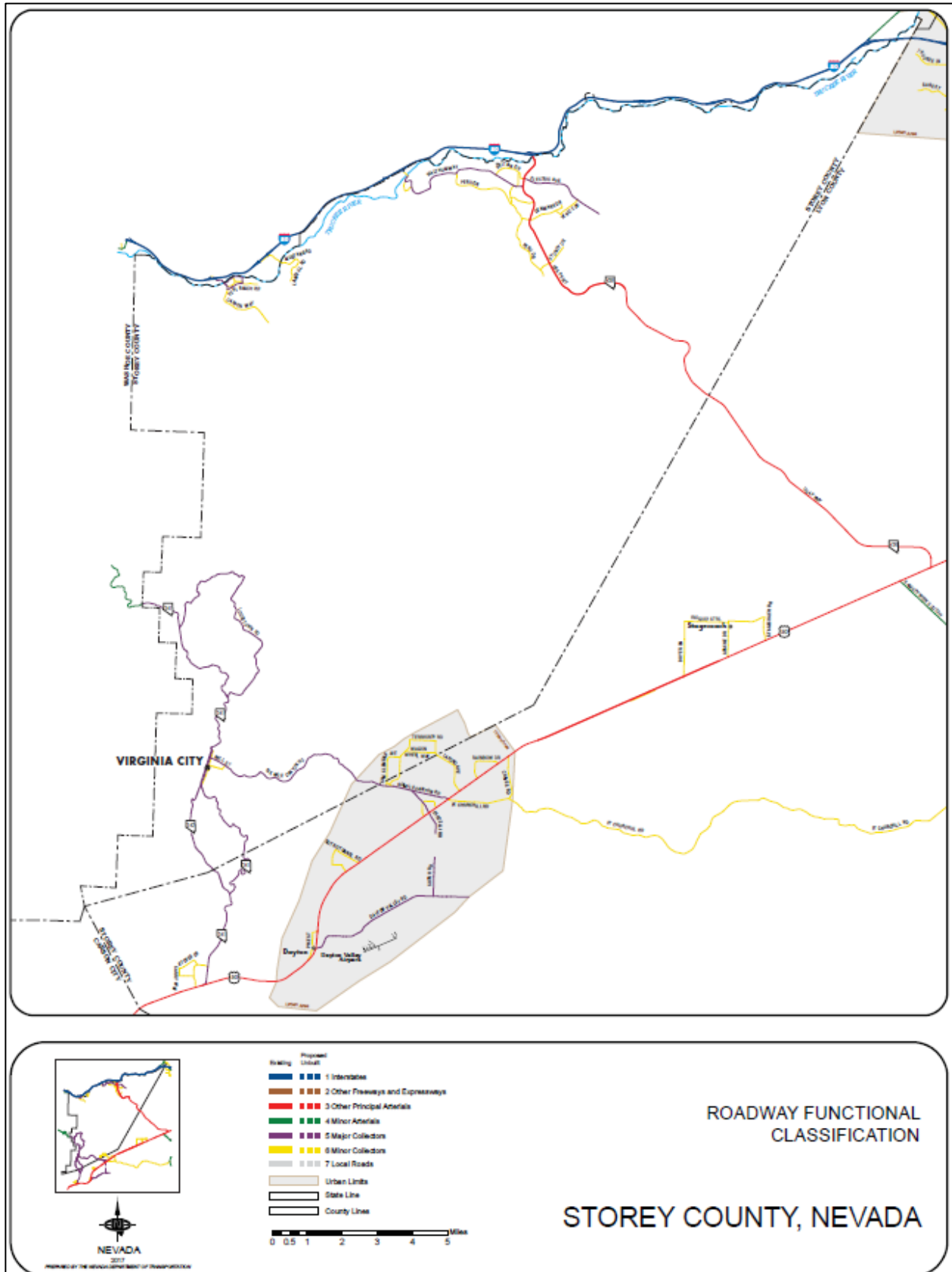


Figure 8.2-2. Roadway Functional Classification – Storey County

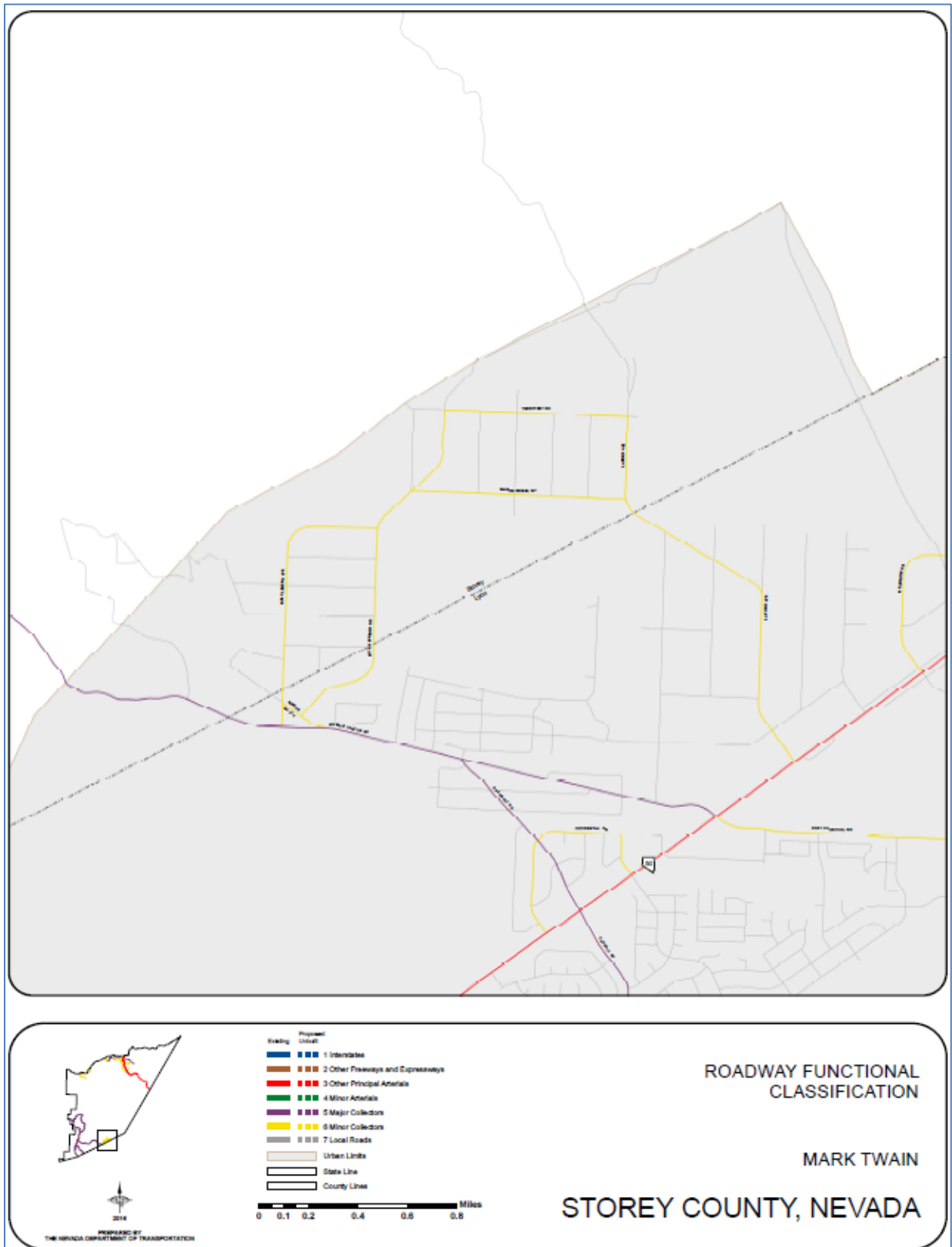


Figure 8.2-3. Roadway Functional Classification – Mark Twain Area

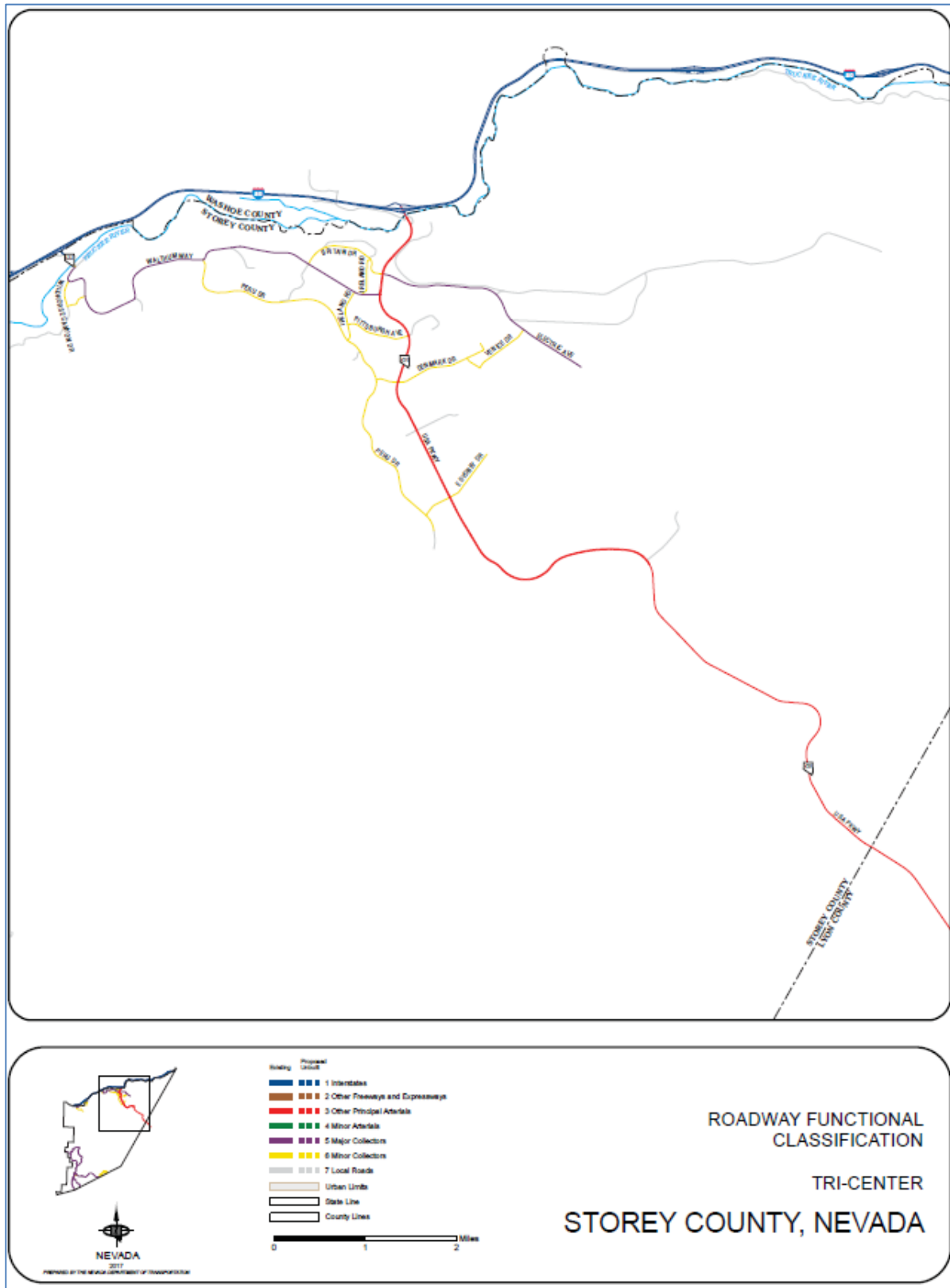


Figure 8.2-4. Roadway Functional Classification – Tahoe-Reno Industrial-Center

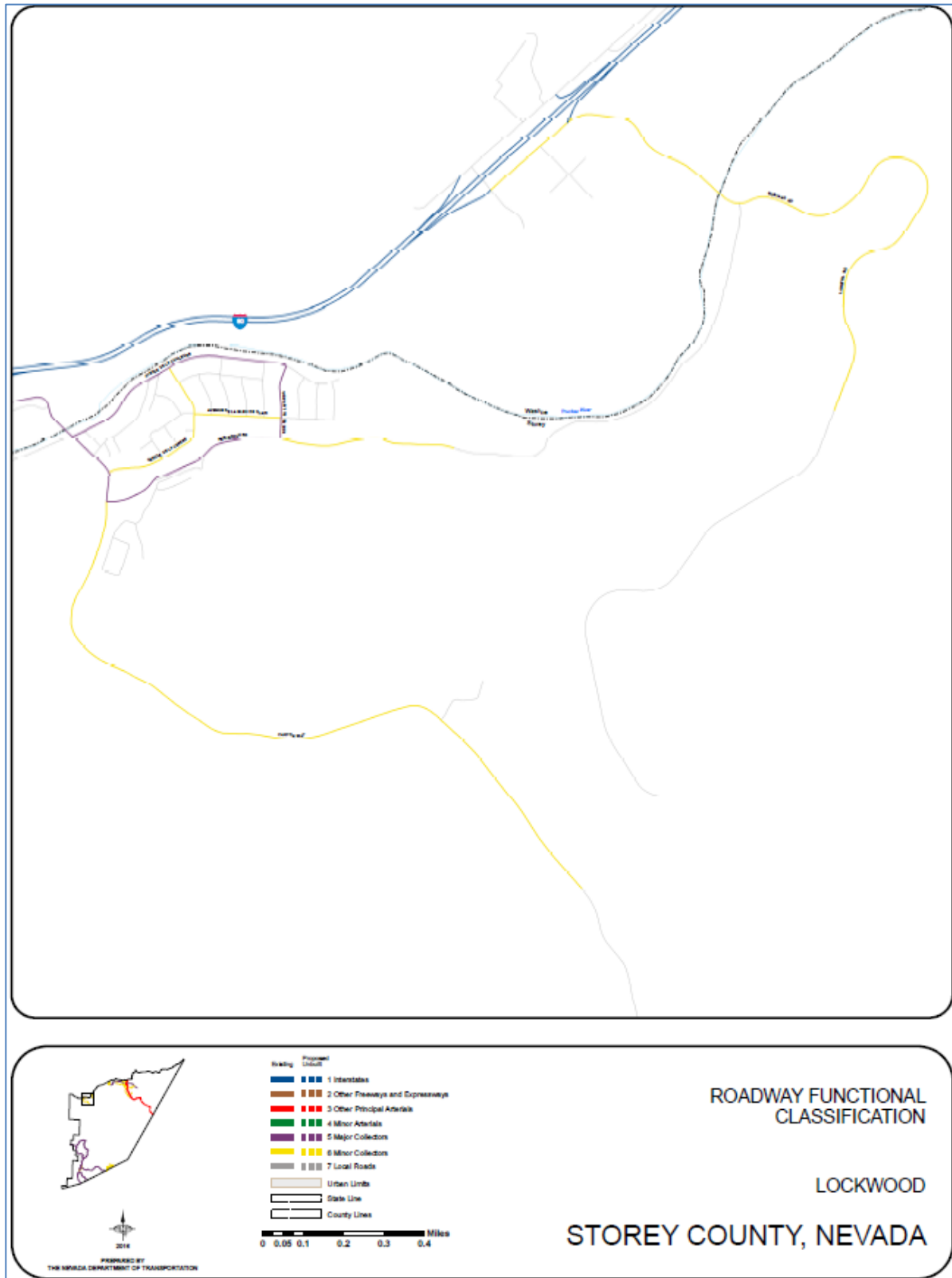


Figure 8.2-5. Roadway Functional Classification – Lockwood Area

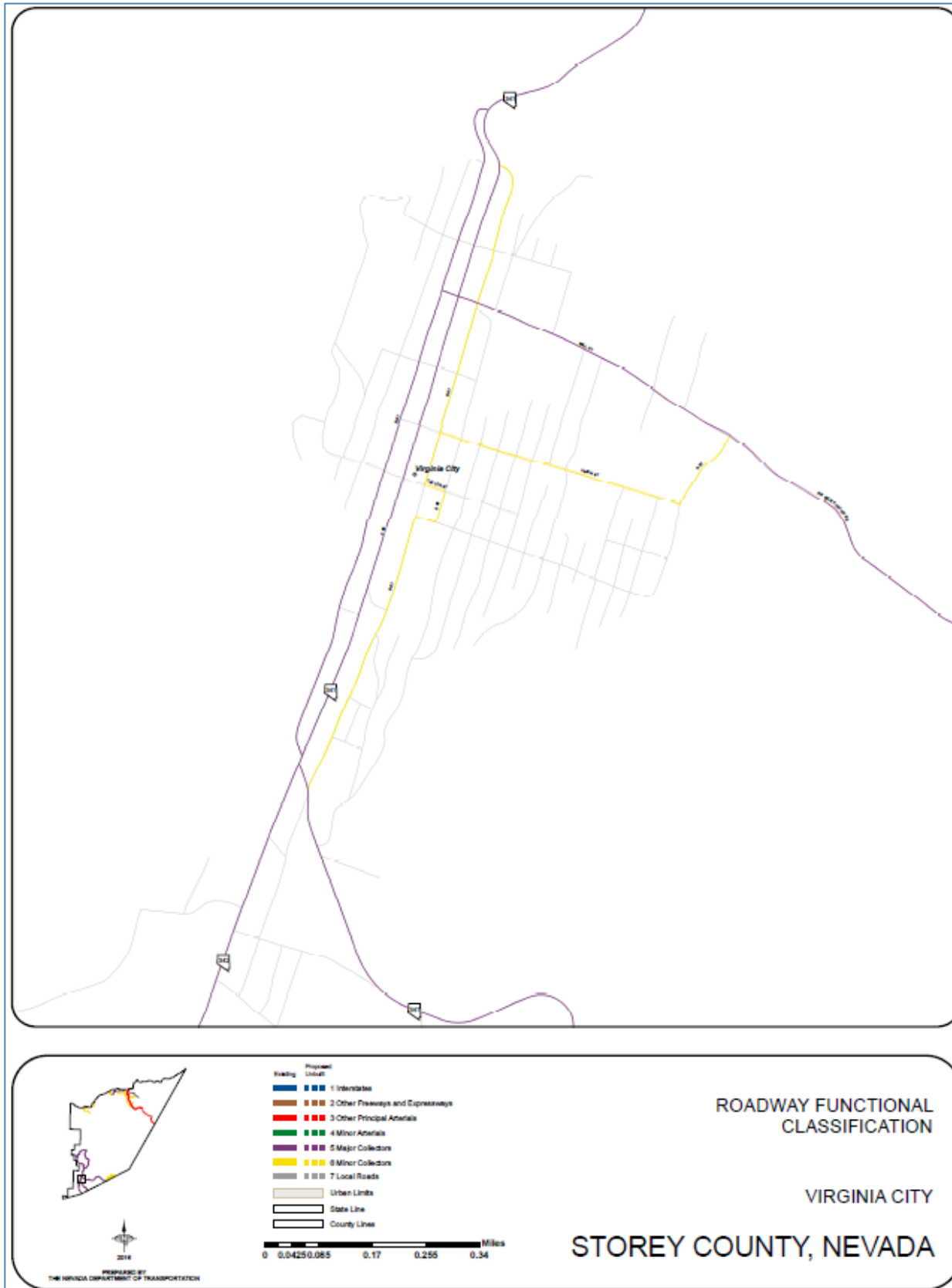


Figure 8.2-6. Roadway Functional Classification – Virginia City

### 8.1.2.5 Comstock Roads

Virginia City is a mixed-use community of low- to medium-density residential uses integrated with commercial, industrial, public, and tourism uses. Single-family and multi-family residences exist in the downtown commercial area and its surrounding neighborhoods. In addition to the approximately 1,146 residents that live in Virginia City and Gold Hill, as well as the abundant local businesses in the area, there are an estimated one million visitors arriving to the Comstock each year. Accordingly, there are notable transportation challenges in Virginia City and Gold Hill for towns with their population. Key transportation challenges identified on the Comstock, and potential short- and long-term remedies, are described below.

A new parking study is currently being developed which will analyze the existing conditions in the downtown Virginia City area. The parking study will identify available lots that could be used for parking, parking minimums required to accommodate the anticipated traffic, and whether parking could be added along the streets surrounding “C” Street.

#### Downtown Virginia City

Vehicle and pedestrian traffic often overwhelm arterial and collector streets in- and around downtown Virginia City, especially during special events that occur nearly every weekend between April and October. Storey County and the Virginia City Tourism Commission conducted preliminary ad hoc analyses between 2009 and 2015 to determine the feasibility of developing alternative routes to effectively bypass a significant portion of northbound and southbound traffic around the downtown area. The following concepts were found to warrant further study:

- Motor vehicle access to C Street may be removed in the downtown area, and traffic may be directed to bypass this area by concentrating vehicular traffic onto B- and D Street, and possibly portions of E Street and F Street.
- Northbound or southbound traffic may be diverted around C Street and the downtown area and directed to B-, D-, or F Street. This option would allow one-way traffic on C Street and would include perpendicular or angled parking in combination with one-way vehicle circulation.
- Both B- and D Street may be restricted to one-way traffic in conjunction with the above options. This would create a “loop” bypassing the downtown area. Parallel, perpendicular, and angled parking would be added along this route where needed.

C Street is owned by the Nevada Department of Transportation, and any improvements or modifications to the right-of-way must be approved by the agency. Many obstacles exist along these corridors that may hinder major modifications to existing traffic patterns. They include, but are not limited to: insufficient and irregular street widths, particularly for facilitating combined two-way traffic and on-street parking; irregular street alignment and private properties which encroach well into the existing traveled way; insufficient area and topography for connecting B- and D Street to State Route 341 at their north terminus; a bottleneck toward the central part of D Street caused by the expansion of the Virginia City Middle School building into the street right-of-way; and adverse safety and quality of life impacts to local residential areas caused by high volumes of through traffic.

While geographical and other constraints may inhibit significant improvements to traffic circulation in and around the Virginia City downtown area, many of the physical street characteristics act as traffic calming devices that encourage slower driving and contribute to vehicle and pedestrian safety. Until the comprehensive road improvements summarized above can be made to these entire corridors, it is recommended that the existing constrained conditions facilitating cautious driving remain in place.

### **Areas Outside of Downtown Virginia City**

Many local and collector streets in Virginia City and Gold Hill are currently developed to rural standards with no curb-and-gutter, sidewalks, street lighting, and other such improvements. Most streets toward the eastern residential portions of Virginia City developed slowly over time with local residential development, and today many remain unimproved or with gravel surface. Many streets throughout Virginia City have the following characteristics:

- Terminate at dead-ends with no cul-de-sacs or vehicle turn-arounds
- Encroach into adjacent private properties or lands believed to be owned by the U.S. Bureau of Land Management.
- Need improvements including gravel base or paving
- Lack sufficient lighting and signage at intersections
- Lack pedestrian improvements such as sidewalks and crosswalks
- Too narrow for two-way traffic
- Private improvements which encroach into existing rights-of-way.

Many unimproved rights-of-way also fail to follow local topography. Chapter 3, Land Use, suggests that parcel mergers and re-plats should be considered in certain areas in the Comstock to better align parcels and local streets with area topography.

Discussed further in Chapter 3, Land Use, parcels and street alignments in Gold Hill appear to have been haphazardly located according to squatters' code of "first-come first-served" during the heyday of Comstock Lode mining. Land plats are riddled with inaccuracies, overlapping ownership, clouded titles, and travel ways diverging significantly outside of rights-of-way. Mapping and alignment of roads in this area will require determination of actual ownership and extensive cooperation with landowners and surveyors to resolve mapping inconsistencies on a case-by-case basis, mostly initiated by private property interests. County officials should continue to explore options toward resolving this matter community-wide.

Figure 8.2-7 illustrates existing travel ways significantly outside of rights-of-way, as well as misaligned rights-of-way which conform very little to area topography, railroads, and other ground conditions.



Source: Storey County Assessor's Office

**Figure 8.2-7: Virginia City Aerial View with Lot Lines**

### **Intersections on C Street**

Vehicular and pedestrian congestion on C Street in Virginia City, especially during regularly occurring special events, can make navigating intersections in the downtown area challenging. This is especially evident at the intersection of C Street and Taylor Street. Vehicular traffic is slowed by narrow roads and frequent pedestrian crossings, effectively calming area traffic. However, County officials and the Nevada Department of Transportation should continue to coordinate plans to improve visibility and other safety measures while maintaining necessary parking space in the area. Potential improvements may include increased signage, speed humps, curb extensions, and designated crosswalks.

### **Intersection at the Fourth Ward School Museum**

The intersection of State Routes 341 (Truck Route), State Route 342, and B Street facilitates existing local- and tourist vehicle traffic loads without noticeable issues. Fourth Ward School Museum and other attractions draw tourists to the immediate area. It is suggested that County officials communicate the conditions to the Nevada Department of Transportation so improved pedestrian access may be considered. Improvements to the area should address both all pedestrians crossing the road including tourists who commonly stand on- and near the road to view and photograph the immediate area. Storey

County is also considering the construction of a county rest area with restrooms near the south end of Virginia City.

The historic Fourth Ward School is considered one of the “crown jewels of the Comstock.” Plans and efforts to protect the building should be of utmost importance, and preserving the surrounding environment should receive the consideration. This master plan recognizes that the adjacent vehicular intersection may one day become overwhelmed as residential, tourism, and other growth occurs in Virginia City, Gold Hill, and outlying communities such as the Highlands and Painted Rock. If traffic flows at the intersection warrant additional traffic control devices, County officials should strongly discourage the installation of a lighted traffic signal, and instead work with the State agency to plan for and develop a round-about, or other such traffic management device that does not detract from the historic integrity of the adjacent Fourth Ward School.

Future plans include a Capital Improvement Project to extend the boardwalk from C Street through the Fourth Ward School intersection to the commercial and residential areas in the Divide area. This project would help connect local residents and tourists between the motel area and the attractions in the Comstock. Major improvements to this intersection should include landscaping to enhance the “south gateway” to Virginia City as supported by this master plan (see Chapter 3, Land Use). A survey of this intersection should be conducted to identify locations of existing right-of-way and private property boundaries to clarify the extent of possible improvements.

### **Virginia City Middle School**

The expansion of the Virginia City Middle School along D Street has created increased congestion and safety risks (see Figure 8.2-8). The current street width at the site is not sufficient to facilitate the traffic loads present during peak hours, particularly at moments when students would be arriving and leaving the school. With the potential for the existing middle school to relocate to the Virginia City High School campus within the next 5 years, future opportunities to address traffic circulation will become more easily available. Studies looking at potential street alterations should be explored in more detail in preparation of the anticipated school relocation.



**Figure 8.2-8. Intersection of State Route 341 Truck Route, State Route 342, and B Street Adjacent to the Historic Fourth Ward School**

Figure 8.2-9 shows the bottleneck created by the addition to the Virginia City Middle School built in the D Street right-of-way. The remaining street width is not sufficient to facilitate regular heavy traffic loads. Figure 8.2-10 shows the Virginia City Middle School before and after the addition.



Source: Storey County Planning Department 2016

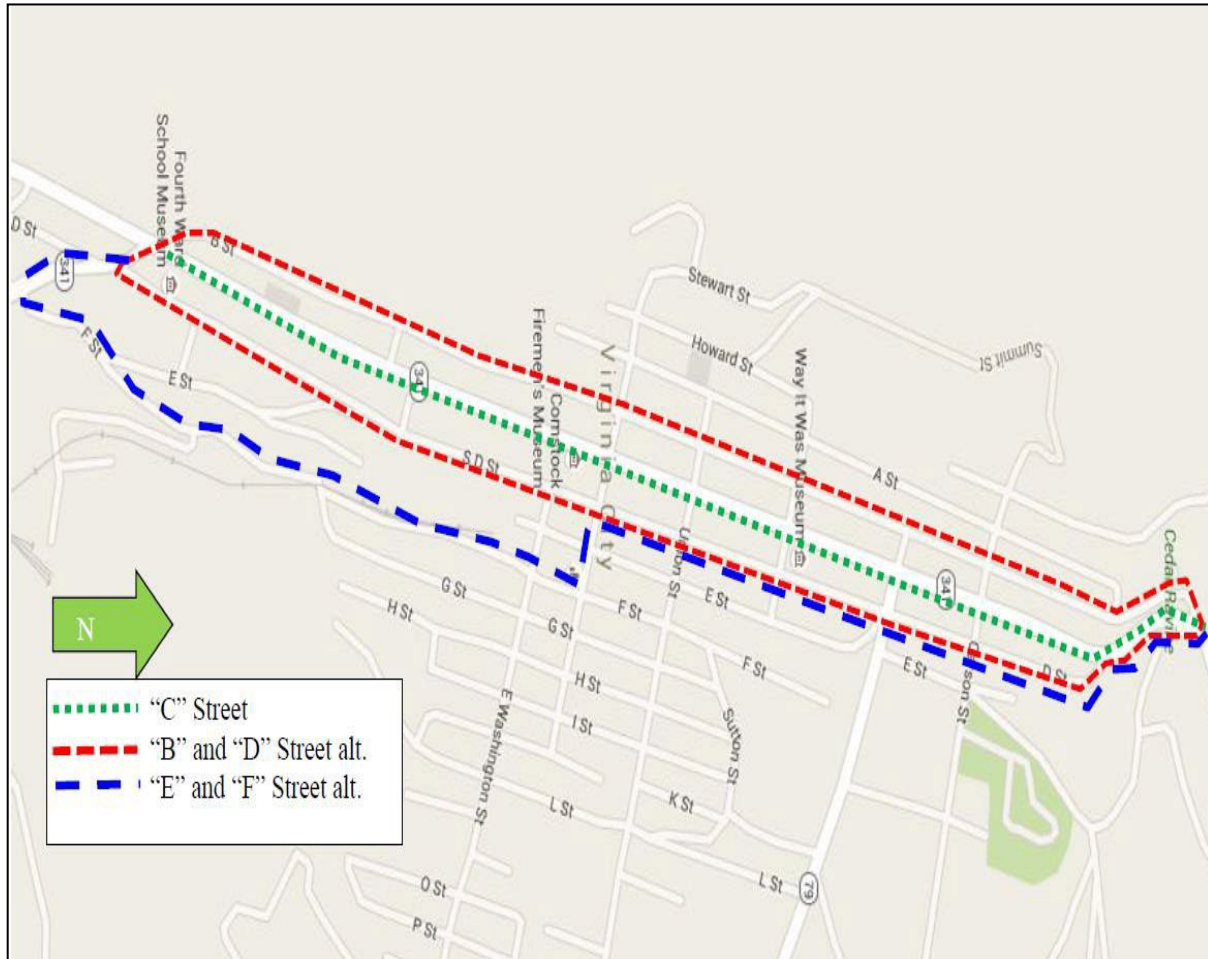
Figure 8.2-9: Bottleneck by Virginia City Middle School



Source: Storey County School District 2016

Figure 8.2-10: Virginia City Middle School – Before and After the Addition

Figure 8.2-11 depicts alternative concepts for routing traffic off C Street.



Source: Storey County Planning Department

**Figure 8.2-11: Concepts for Rerouting Traffic Off C Street**

### 8.1.2.6 McCarran

#### USA Parkway (State Route 439) and US Hwy 50 Conditions

The connections for the Tahoe-Reno Industrial Center are USA Parkway which has an interchange on Interstate 80 on the northern part of the county, and the recently completed US Highway 50 expansion. USA Parkway is a four-lane state highway which runs through Lyon, Storey, and Washoe counties. The route connects US Highway 50 to Interstate 80 via the Tahoe-Reno Industrial Center. The USA Parkway connection with U.S. Highway 50 offers increased capacity to service the industrial center. However, as the Tahoe-Reno Industrial Center continues to grow, increasing the capacity of USA Parkway and US Highway 50 should be considered to accommodate the anticipated increase in employee and residential travel.

Storey County should continue to coordinate with the Nevada Department of Transportation and the Washoe County Regional Transportation Commission in monitoring traffic volumes and patterns as

employment and other growth occurs at McCarran. Planning and other preemptive strategies need to be employed to maintain functionality of USA Parkway, US Highway 50, Waltham Way, and their connections to the interstate system, particularly Interstate 80. Waltham Way offers another connection to the interstate system through the Patrick Interchange. The existing Patrick Interchange needs to be upgraded to a full interchange within five to ten years, to service the additional demand for the industrial center. This full interchange will also allow expected commercial development on the south side of Interstate 80 at Waltham Way to include fueling station, truck stops, hotels, restaurants, and other types of traveler and logistics accommodations.

Discussion has occurred at the local, state, and federal level about the future potential for USA Parkway to become part of a regional interstate system, such as the Interstate 11 project between Mexico and Canada. An interstate designation can only come from the U.S. Congress. The Fixing America's Surface Transportation Act of 2015 designated Interstate 11 between Las Vegas and Reno. Designation as an interstate highway is a firm demonstration to the importance and the construction of Interstate 11 to the United States. Interstate 5 in California is at full capacity and significant expansion is seen as having too great of an environmental impact on that alignment. This project is expected to significantly influence the western United States and national economy.

It may be in Storey County's best interest to support aligning Interstate 11 with USA Parkway. Storey County should actively coordinate with the Tahoe-Reno Industrial Center and the Nevada Department of Transportation to evaluate the potential alignment. This alignment may be ideal due to the available vacant land at the surrounding the Tahoe-Reno Industrial Center, and the lack of residential development. This alignment may help Storey County and the Tahoe-Reno Industrial Center establish northwestern Nevada as the major international economic center for the region.

### **USA Parkway (State Route 439) Future Capacity**

A brief analysis of expected traffic flows in the next 20 years reveals that USA Parkway (State Route 439) is the most likely transportation corridor in the county to experience congestion. The completion of USA Parkway through to Silver Springs offers traffic relief on USA Parkway, Interstate 80, and local arterial ways such as Waltham Way. With average daily traffic counts around 4,000 as of 2013, and 7,500 in early 2015, the delays due to congestion could significantly increase when the average daily traffic count hits an anticipated mark of 10,000 (Highway Capacity Manual Methods 2010). Employment numbers are growing quickly in the Tahoe-Reno Industrial Center, and it is expected traffic count will exceed 10,000 within five years. Average traffic count numbers and overall traffic efficiency should be closely watched. With an increase in traffic, additional signaled intersections may become necessary to facilitate movement, which may contribute to increased congestion along these corridors. Future street improvements must consider the impacts of congestion on the surrounding areas, and alternative paths and traffic calming measures should be studied in more detail. Alternative methods for workers to arrive and depart from the Tahoe-Reno Industrial Center should be planned and developed. Possible alternative methods considered should include car/van pools connecting population centers and other commuter services such as commuter transit by buses and the rail network. Van pools are currently being used in the industrial center and show great promise for efficiently moving employees. The planning efforts related to commuter transit should continue to be coordinated with the Washoe County Regional Transportation Commission and the Nevada Department of Transportation.

**Patrick and USA Parkway Interchanges**

McCarran and the Tahoe-Reno Industrial Center are now principally accessed from Interstate 80 at the Patrick Interchange to the west and USA Parkway interchange to the east.

The USA Parkway interchange was developed in 2005 and meets traffic capacity for the area. However, the Nevada Department of Transportation initiated a traffic capacity analysis in the spring of 2015 to determine what improvements may be needed to the interchange to meet anticipated future traffic loads and patterns.

The Patrick Interchange was constructed long before the McCarran area was developed. Patrick Interchange connecting half of the industrial center to the interstate, is substandard for existing traffic loads and may become a major factor inhibiting further development in the immediate area. A portion of the interchange is in Washoe County, but its principal function is to provide access to McCarran, located entirely in Storey County. It is recognized that the interchange and associated collector road are under the jurisdiction of the Nevada Department of Transportation. However, county officials are encouraged to collaborate with State transportation officials to secure funding and resources necessary to improve the infrastructure.

**Road Dedication per Tahoe-Reno Industrial Center – Storey County Development Agreement**

Tahoe-Reno Industrial Center and Storey County entered into a development agreement in 2000. The agreement detailed the process for the developer to devote resources to infrastructure investment in the center. After the infrastructure is constructed, the improvement may be dedicated to the County. The County will then own, manage, and maintain the facility. The County will reimburse the developer for the investment once net revenues become available from the infrastructure. The development agreement allows for rapid and efficient public investment. To date, many roads have been constructed and dedicated to the County.

**McCarran to USA Parkway Interstate 80 Corridor**

Continuous population and development growth in western Nevada is increasing pressures on the existing roadway systems. The Interstate 80 corridor east of the city of Sparks to SR 439 (USA Parkway) has seen a significant increase in congestion and safety issues as a result of the growth in the region. The Tahoe-Reno Industrial Center encompasses approximately 107,000 acres which are privately owned; however, much of this land is mountainous. The annexed portions of the industrial center include over 100 businesses employing roughly 15,000 permanent employees. Employee projections at the industrial center range from 35,000 to 50,000 employees; however, these projections will be heavily influenced by the type of industries arriving to the industrial center. For example, once attracting primarily distribution and manufacturing supporting thousands of employees, the Tahoe-Reno Industrial Center has recently become a principal hub for data centers, each averaging far less than 100 employees. Portions of the Interstate 80 corridor cross steep terrain within the Truckee River canyon and have sinuous alignment with minimal shoulders. These conditions, combined with high traffic volumes, result in a system sensitive to even minor incidences (e.g., weather, accidents, vehicle breakdown) and that routinely breaks down with delays lasting hours. The need to improve the corridor is apparent. Consequently, many reports and presentations have been prepared by various public agencies and private stakeholders to better understand and address the changes and developing

needs within the Interstate 80 corridor.<sup>1</sup>

A list of recommendations and proposed projects to address the issues identified along the Interstate 80 corridor has been provided in the Interstate 80 Corridor Study prepared for the Nevada Department of Transportation. The overall recommendation is to widen Interstate-80 from Vista Boulevard in Sparks to USA Parkway, providing one additional lane in each direction. Widening the interstate may exceed \$2 billion and require a decade of environmental impact assessment work before construction could begin. Both cost and time for assessment prevent traffic needs from being immediately addressed.

Storey County should continue to work closely with the Nevada Department of Transportation to identify and implement the most desirable and effective proposals to make the Interstate 80 corridor a safer and more efficient roadway, especially as the region continues to grow and attract more travelers. The County should also continue to support, and incentivize if possible, housing opportunities that divert travelers away from the Interstate 80 corridor toward areas that are aligned with this master plan.

### **8.1.2.7 Virginia City Highlands and Mark Twain**

The Virginia City Highlands area is five miles north of Virginia City. Access is provided by Nevada State Highway 341 (also called Geiger Grade) on the west side of the community. Within the Virginia City Highlands area, local and collector paved and unpaved roads are maintained privately.

Cartwright Road and Lousetown Road are both two-lane paved roads and are rural collectors to connect the community to State Highway 341. All the paved portion of Lousetown Road and about two miles of Cartwright Road are maintained by the County. The other roads in the Virginia City Highlands area are either maintained by the two property owner associations in the area or are not maintained by any formal organization. There are several jeep trails on the northern and eastern part of the Virginia City Highlands that can offer emergency ingress and egress to the area.

The Virginia City Highlands area is less than half built out with many parcels of empty land. While water availability to service the potential residential growth is of concern, the status of the roads is also an obstacle to growth. General upgrading of the roads to either better-maintained gravel roads or paving more of the roads would increase demand for the properties in the Virginia City Highlands area and help drive infill.

Steep grades and sharp- and blind corners are a problem, especially for school buses, in some sections of the Virginia Highlands. Poor weather conditions can create hazardous driving conditions. Many cul-de-sacs do not have sufficient turn-around space for emergency vehicles. There is little the County can do policy-wise with these issues because many of the roads in the Virginia City Highlands area are privately maintained. One major concern for residents in the area is lack of a secondary road and additional access points for emergency routes. With only one identified roadway into the Virginia City Highlands community, residents worry that an emergency could lead to congestion along the route, causing potential catastrophic results. While a secondary road is not desired by the local residents at this time, if opinions change moving forward, feasibility studies can be conducted to analyze the costs

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<sup>1</sup> I-80 Corridor Study; North McCarran Boulevard to USA Parkway; Reno/Sparks Freeway System; Nevada Department of Transportation

and impact of constructing a secondary road with additional access points which aligns with this master plan.

Due to increased traffic, and continued residential and commercial growth, the Nevada Department of Transportation conducted a study to evaluate potential future enhancements along U.S. 50 in Dayton, Nevada. The study addressed long-term highway improvements to enhance safety, capacity, and intersection operations along an eight-mile segment of U.S. 50 from Pinecone Road to Neigh Road. As a result of the study, three long-term concepts emerged for potential future consideration. The concepts range from controlling or limiting points of highway access for a less-congested highway commute to additional highway access via multiple intersection control designs. Specific enhancements could include a divided highway, additional highway lanes or frontage roads, roundabouts, traffic signals, and other intersection designs.<sup>2</sup>

### **8.1.2.8 Lockwood-Mustang**

#### **Lockwood-Interstate 80 Interchange**

The Interstate 80 to Lockwood Interchange currently provides principal access to Lockwood and portions of the Lagomarsino area. Canyon Way is the main collector route connecting the area to the interchange. This infrastructure serves approximately 1,333 residents and 15 local commercial and light-industrial users. The connection also provides primary access to a large quarry mine and the Nevada Uplands industrial area, both accessed approximately three miles south of Lockwood toward the south terminus of Canyon Way.

The road infrastructure was constructed long before much of the existing commercial and residential development in Lockwood. Nominal improvements were made to the interchange and roadway in 2023 including a 1,100-foot expansion of the western ramp and associated 10-foot increase in the width of the roadway. However, the interchange remains substandard for existing and anticipated future traffic loads and types. Figure 8.2-12 depicts the intersection connecting the Lockwood area with Interstate 80. On the north side of Interstate 80, the westbound offramp traffic (heading toward Lockwood) must negotiate a sharp turn and this offramp meets with the westbound onramp traffic (heading west on Interstate 80).

In 2009, Mustang Road, approximately three miles east of Lockwood, was extended to the Lockwood Regional Landfill resulting in a major reduction in truck traffic on the interchange and Canyon Way because all truck traffic to and from the landfill was permanently diverted to the Mustang interchange and Mustang Road. The reduction in truck traffic significantly improved safety for children and pedestrians crossing Canyon Way between their residential neighborhoods and the Lockwood Market convenience store.

This master plan supports industrial and other economic activity in the Lagomarsino area. However, it is recognized that under existing circumstances such activity may increase truck and other traffic on Canyon Way and the Lockwood interchange. It is recommended that County officials collaborate with Lagomarsino area land developers to establish alternative principal access alignments, such as to Mustang Road. This master plan supports conducting additional feasibility studies to analyze

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<sup>2</sup> US 50 Operational Study; Lyon County, Pine Cone Road to Neigh Road; CA Group, Inc.; Nevada Department of Transportation

emergency access alignments when Interstate 80 is not available.

It is recognized that the Lockwood interchange and portions of Canyon Way are in Washoe County and are therefore under the jurisdiction of the neighboring county and the Nevada Department of Transportation. However, Storey County officials should continue to coordinate with State transportation officials to secure necessary funding and resources to improve this infrastructure for current and anticipated future uses. Land developers causing substantial impacts to these systems should also be required to directly contribute toward improvements needed to support new uses.



Figure 8.2-12: Existing Infrastructure and Intersection Connecting Lockwood Area to Interstate 80. View to north.



### 8.1.2.9 Painted Rock

Interstate 80 is the primary access to Painted Rock. Painted Rock Road from the Painted Rock Exit connects the area to the interstate. The design and condition of local roads, bridges, and other such infrastructures is problematic for this community.

The bridge crossing the Truckee River from Washoe County is the only practical access to this area. The bridge is one-lane, antiquated, and below the Federal Emergency Management Agency 100-year base-flood-elevation. Canal Road, serving five local residences, is also problematic. Running along the Truckee Carson Irrigation District Canal, the one-lane road is narrow and windy with no shoulder or barriers between the roadway and the canal.

Secondary access exists via approximately 12 miles of unimproved roads and trails between Painted Rock and Fernley. However, many of these routes are insufficiently mapped, difficult to navigate, and encroach into private property including into Union Pacific Railroad rights-of-way and encroach into Pyramid Lake Paiute Tribal lands. Further exacerbating the problem, the Union Pacific Railroad has employed concerted efforts to removing at-grade railroad crossings in the area without providing alternative means of accessing adjacent land.

The county should consider working with land developers, federal grant administrators, the Union Pacific Railroad, and other organizations to improve and provide reliable secondary access to the northern and southern parts of this area. Until improved railroad crossings are developed by the Union Pacific Railroad, the County should strongly contest barring of access over existing at-grade railroad crossings.

## 8.2 Other Transportation Modes

### 8.2.1 Railroads and Light Rail

Rail service is provided to the McCarran community via a nine-mile-long spur at the Tahoe-Reno Industrial Center. This connection provides vital support throughout the industrial center by connecting the community to the Union Pacific transcontinental railroad. The rail system is freight only and provides no passenger services. As the Tahoe-Reno Industrial Center continues to grow, expansion of rail services will be necessary to maintain the success of the region. Per the development agreement between the Tahoe-Reno Industrial Center and Storey County, the Tahoe-Reno Industrial Center may expand the rail line as they see fit, and Storey County maintains the right to access and utilize the infrastructure provided. As future traffic loads increase on USA Parkway and Waltham Way, the rail line may add passenger services to help supplement the industrial area.

In Virginia City, the restored Virginia & Truckee Railroad is operated solely as a tourist attraction. A recent extension of the rail crosses US Highway 50 in Mound House and connects to the communities of Virginia City and Carson City – this extension will help provide additional access to Gold Hill and Virginia City, increasing mobility and potential economic boosts. The Virginia & Truckee Railroad offers round trip, weekend tours from Virginia City to Gold Hill and an extended route from Carson City to Virginia City.

### 8.2.1.1 Bus, Aircraft, and other Transit Modes

#### Bus Service

Currently, there is no public bus service in Storey County. Local and inter-local bus services are provided in the neighboring jurisdictions of Washoe County and Carson City, but no services connect with Storey County. The Storey County School District offers bussing for students to and from school. Storey County Health and Community Services provides shuttle services for Storey County residents over the age of 60 to and from medical appointments, pharmacies, grocery stores, social outings, etc. The Virginia City Tourism Commission provides additional shuttle services for residents and tourists during events at the fairgrounds and other special events around the Comstock.

In 2009 Storey County and the Carson City Regional Transportation Commission piloted an inter-local transit bus system between Carson City and Virginia City. The bus operated two to three days per week. Despite continued efforts by County staff to promote ridership, including the arrangement of a hosted ride-and-learn event for hesitant riders (Figure 8.3-1), popularity of the system quickly declined, and one year later it was discontinued. Riders cited confusing bus schedules in Carson City and the fear of missing the inter-local connection home as the reasons for not using the service.

County officials should maintain the potential for inter-local transportation between Virginia City and neighboring counties. However, County officials should consider the known logistical limitations of implementing public transportation services in the connected areas when compared to major metropolitan areas when planning for future expansion of services. Additionally, County officials must keep the public perception and hesitancy associated with public transportation in mind when considering expansion.

This master plan recognizes that bus services may become economically and otherwise viable as growth continues in McCarran. With the completion of USA Parkway between Interstate 80 and US Highway 50 and the associated growth that it and other infrastructure improvements in the region will cause, the need for transit services between the Tahoe-Reno Industrial Center and the surrounding areas of Fernley and Silver Springs may become increasingly important. Accordingly, the county is working with the Washoe County Regional Transportation Commission to determine the feasibility of providing bussing and other public transportation systems to residents and workers at the northern part of the county. Special focus is being directed toward providing this service to workers at the Tahoe- Reno Industrial Center. County officials should recognize and prepare ancillary improvements, such as park-and-rides and bus staging areas, which will support existing and anticipated public transportation systems.

**Wednesday route gives access to shopping, movies, doctors**

BY JANICE HOKE

The new bus service between Virginia City and Carson City was a big hit with 60 riders on last Wednesday's drive, both Comstock residents and visitors from Carson.

At 9:30 a.m. on Oct. 7, the Storey County Senior Center, 13 enthusiastic riders climbed aboard the 21-passenger bus driven by William Orman of Virginia City, regular driver for Jump Around Carson, the Carson City transit authority.

"Usually I drive to Carson City," Chuck Siefert of Virginia City Highlands said. "This way, I get to look everything and I won't have to do the driving."

At the next stop at the Delta parking lot on C Street, seven people from Carson



**Art Kuzniewski, right, gets off the bus and heads across the street to his job at the Delta Saloon.**

Photos by Janice Hoke and Angela Mann

**A full bus pulls into the Delta Parking lot to load more passengers.**



City disembarked to visit the Comstock. Last stop was across from the Fourth Ward School, and the bus, now full, veered left to take the truck route to Carson City.

"This is perfect," said Art Kuzniewski, who works at Delta. "I'm getting here half an hour early. I'd like to do this

See Bus, page 8

Think it's my ever... a seat back at... and here... at West... so stop... is even... void... to Slot... the bus to... k. What... ger on... Virginia... two hours... Robert... ly had... went... g back... Is a fast... story. I

**Rosie Conley, left, Mario Monte, Karen and Ben Wiener see at their destination for shopping.**

Photos by Janice Hoke

novice on transit, but he's smart, not frustrated easily, makes friends with the seniors. He's learning fast.

Souza said, "Storey County is demonstrating that it listens to its residents and strives to meet resident needs."

She said more work is needed, however.

"I would love to see the county also make progress on public transportation for Mark Twain and Lockwood residents. We certainly have residents in need of transportation in these communities."

**Karen Lasley of Stagecoach will drive the afternoon Virginia City bus.**

her... bother her friends for rides. Karen Wiener of Cold Hill, who serves on the board of the senior center, came along to learn the routine of charging buses so she can help others, she said. "This is a great idea," Wiener said. "A lot of seniors don't have transportation."

planner, who has worked nine months to bring the project to fruition.

In the one-year agreement between JAC and Storey County, JAC supplies the buses, bus drivers, maintenance and scheduling as well as publicity in Carson City. Storey County pays a fee which Osborne said divides out to about \$2 per Storey County citizen per year, which does not include some revenue from fares.

JAC Director Patrick Pittenger first came more than a year ago to propose the arrangement to the Storey County Commission at the prodding of Katherine Souza, a marriage and family counselor at Community Chest Inc.

"Dr. Katherine Souza, she's the one," Pittenger said. "She was the first person to ask the county board to form an RTC (Regional Transportation Commission)."

In March of 2008, Souza published results from a

**Osborne checks with the driver to make sure this bus is going to Wal-Mart.**

This article in the *Comstock Chronicle* (Janice, 2009) features a field trip provided to senior citizens of Storey County that was sponsored by Storey County and its planning staff. The purpose of the field trip was to educate local citizens and reduce anxieties associated with navigating sometimes challenging inter-local bus transfer schedules. Participants were guaranteed a ride home by the County – even if they missed a connecting bus. The trip included lunch, self-guided and hosted errands, and other affairs in Carson City using its "Jump Around Carson" bus system.

Figure 8.3-1: *Comstock Chronicle* Transit Article (2009) Pedestrian

### **Aircraft**

No airports or airstrips exist in Storey County. Small, non-schedule airports exist in Carson City and Silver Springs. The closest commercial airport, the Reno-Tahoe International Airport in Reno, is approximately 20 miles from Virginia City and McCarran. Taxi services are available to and from the Reno-Tahoe International Airport, but all taxi companies are based in the adjacent jurisdictions of Reno, Sparks, and Carson City. Other ride-share options such as Uber provide alternative transportation services throughout the region.

### **Vanpools**

Vanpool transportation services are available to employees and companies of the Tahoe-Reno Industrial Center. To date, there are over 50 vans in operation, reducing the number of drivers by 500 drivers per day from Interstate 80 between the Tahoe-Reno Industrial Center and the neighboring cities of Reno, Sparks, and Fernley. Unlike fixed-route bus systems, these vanpool programs provide site-specific scheduling, creating needed flexibility to meet the demands of companies and their employees. Expansion of these services is expected as the region continues to grow.

Walkability is important to the health and wellbeing of a community. This master plan aims to support walkable and mixed-use communities through neo-traditional community design.

With the unique topography of Storey County and the desire to promote tourism, there are marketable pedestrian opportunities throughout the county, particularly in Virginia City/Gold Hill and Painted Rock.

#### **8.2.1.2 Comstock**

Virginia City/Gold Hill provides many walkable destinations for both locals and tourists. C Street contains most of the destinations in the area, including restaurants, historic sites, hotels, and shops. Tourists park in the area surrounding C Street and walk the street using the boardwalk. Pedestrian infrastructure is limited in Virginia City to the boardwalk and limited improved sidewalks along C Street. The boardwalk area of C Street is a popular attraction for the historic downtown and should be preserved. Sidewalks beyond the boardwalk areas of C Street are a patchwork at best. The adjacent streets, B Street and D Street, have little to no pedestrian infrastructure – tourists and locals must walk along roads to connect to C Street and the surrounding communities. Increased pedestrian traffic is expected in the future, but there are no planned pedestrian infrastructure improvements. Maintenance of the boardwalk and potential expansion north and south for the length of town has been identified as a potential Capital Improvement Project.

The development of the fairgrounds on F Street presents a unique pedestrian issue for Storey County. With crowds of 4,000 people, pedestrian accessibility to the fairgrounds will be crucial. Shuttle services, temporary infrastructure, public information campaigns, and other event planning should be examined for each large event.

Furthering the 1993 Parking Inventory Study by Leigh, Scott, and Cleary, Inc. (Appendix D) parking areas should be planned outside the Virginia City downtown area, and investments should be made for pedestrian improvements to connect the new parking areas to downtown. The existing infrastructure is a problem due to the broken and degraded condition of the curbs along much of C Street. Improved pedestrian infrastructure along and surrounding C Street to assist with the safe movement of tourists and locals should be a priority. A parking study addressing current issues and potential solutions throughout

the Comstock is in development and is expected to be completed by 2025.

### **8.2.1.3 Highlands and Mark Twain**

Within Highlands, Mark Twain, and other rural areas of the county there are few pedestrian destinations. Most of the pedestrian activity is for recreation and fitness. There is no pedestrian infrastructure in these locations. While no need for infrastructure is expected, Storey County should promote health, wellness, and recreational activities for its residents. County officials should consider developing trails for pedestrian/bicycle recreation that can help connect the community as well as provide safe and accessible recreation opportunities.

### **8.2.1.4 Lockwood and Mustang**

Lockwood contains a few pedestrian destinations including retail, community center, and school. While there is little pedestrian infrastructure in these locations, pedestrian activity should be encouraged and safety maintained. Further consideration should be given to the expansion of pedestrian infrastructure connecting the residents of Lockwood and Mustang to existing retail and community destinations, as well as including integration with the Truckee River.

### **8.2.1.5 Painted Rock**

It is anticipated that the Painted Rock development will be a mixed-use development. As the development plan is prepared, there should be a significant pedestrian component to allow for pedestrian movement. Connecting Painted Rock residents to their surroundings via sidewalks and/or trails should be at the forefront of development planning.

### **8.2.1.6 McCarran**

The Tahoe-Reno Industrial Center has potential pedestrian destinations and is expected to have more in the future. Because it is expected that vehicular demand on USA Parkway (State Route 439) will exceed capacity, traffic management practices will be implemented and demand for other modes of transportation will increase. There is no pedestrian infrastructure in the industrial center. Pedestrian activity in the industrial center and the demand for infrastructure are expected to increase. Priority infrastructure improvements should cover crosswalks at potential high pedestrian origins and destinations. Additional infrastructure improvements should focus on maintaining any shoulder or clear space for pedestrians on and around roads to use as infrastructure for future pedestrian improvements. The pedestrian situation in the industrial center should be actively monitored year-to-year to address safety situations as they arise.

Some of the employees in the industrial center may want trails/multi-use paths as recreation options as well. The County should welcome conversations with the Tahoe-Reno Industrial Center to support such improvements.

## **8.2.2      Bicycling**

Many commuters have turned to cycling to avoid congestion, and recreational cycling is becoming popular for all ages. The Nevada Department of Transportation is in the final stages of producing county bicycling plans for each county in the state. This plan for Storey County will identify the County's role in Nevada for bicycling. The Nevada Department of Transportation plan identifies the Interstate 80 corridor as a national cycle touring route. The stretch of interstate between Sparks and Fernley exhibits questionable safety levels for bicycle use, creating a desire for alternative routes to connect the two communities.

State Route 341 (Geiger Grade) is a regional attraction for bicyclists. More advanced riders are attracted to the elevation gains and natural scenery. Bicycle and motor vehicle safety on Geiger Grade has been a perceived concern by local residents; however, data from the Nevada Department of Transportation suggests that this bicycle safety is not a large concern now or expected to be in the foreseeable future. Future design of bicycle access infrastructure should also consider safety for bicycles and motor vehicles. Modest economic activity in the region and in Virginia City is associated with cyclists. There may be an economic opportunity for a bicycle mountain climb, downhill race, or related event to be hosted in Virginia City. Currently there are many areas of Storey County that are difficult to access except by jeep trail. These areas show potential for mountain biking ecotourism.

### **8.2.2.1      Lockwood, Mustang, and Painted Rock**

Lockwood, Mustang, and Painted Rock are just south of Interstate 80 in the northern part of Storey County. There is limited bicycle activity throughout these areas; however, as these communities continue to grow, future bicycle infrastructure should be explored. Multi-use paths could help create a safe east-west alternative to Interstate 80 and allow for additional commuter traffic to and from the Tahoe-Reno Industrial Center. The Tahoe Pyramid Trail should be considered as a potential connection in the future. However, Lockwood residents have expressed concerns about the expansion of bicycle trails through the center of their community, much of which includes the privately owned common interest communities of Rainbow Bend and the Lockwood Community Corporation. The County supports the effort of the Tahoe-Pyramid Trail; however, the County has consistently advised the bikeway organization to coordinate with the Lockwood community to develop alternative alignments which could lessen impacts and do not encroach on private property.

### **8.2.2.2      McCarran**

An opportunity may exist to connect Lockwood and Sparks via a multi-use path (Tahoe-Pyramid Trail). There may also be an opportunity to connect the Tahoe-Reno Industrial Center with the Lockwood and Painted Rock areas as commuter routes.

### **8.2.2.3      Comstock and Highlands**

Very modest cycling activities exist in these areas. The significant vertical variations throughout the area present a challenge that is expected to limit cycling activity.

### 8.3 Capital Improvement Projects

Please refer to the Capital Improvement Project Plan (Appendix H) for all planned capital improvement projects addressing transportation needs in Storey County.

### 8.4 Goals, Policies, and Objectives

**Goal 1: Direct and manage development that provides for orderly, efficient, safe, and sustainable multi-modal transportation that connects communities.**

<b>Policy</b>	
<b>Policy 1.1</b>	Develop pedestrian-friendly communities and downtown.
<b>Objectives</b>	
<b>Objective 1.1-1</b>	Situate new residential developments so enterprise areas, schools, and public gathering places are in close proximity and easily accessible to area residents.
<b>Objective 1.1-2</b>	Implement walkable systems via improved sidewalks and trails that connect residential areas with enterprise areas, schools, public gathering areas, and other uses outside of residential developments.
<b>Objective 1.1-3</b>	Align and design walkways, roads, and other transportation systems in ways that encourage multi-use by foot, bicycle, and horseback.
<b>Objective 1.1-4</b>	Separate walkways, pathways, and access roads from collector, arterial, and other high-speed traffic routes.
<b>Objective 1.1-5</b>	Relocate a substantial portion of vehicular parking away from C Street and toward centralized parking areas.
<b>Objective 1.1-6</b>	Enhance vehicle and pedestrian visibility at key road crossings on C Street.
<b>Objective 1.1-7</b>	Develop walkways and stairways in addition to visual and other physical separations between pedestrian and vehicle ways on east-west orientated streets near C Street.
<b>Objective 1.1-8</b>	Consider revisions to the intersections of Taylor, Union, and C Streets for safer pedestrian and vehicle crossing.
<b>Objective 1.1-9</b>	Design streets around parks, schools, and other public gathering places to encourage pedestrian mobility, particularly in areas situated away from more trafficked vehicle ways (e.g. local access roads, minor arterials).

<b>Policy</b>	
<b>Policy 1.2</b>	Provide rest areas in key places around pedestrian corridors and parking areas.
<b>Objectives</b>	
<b>Objective 1.2-1</b>	Add sitting benches and tables along the C Street boardwalk.
<b>Objective 1.2-2</b>	Add sitting benches between remote vehicle parking areas and C Street, and in parking lots.
<b>Objective 1.2-3</b>	Secure funds to develop “pocket-parks” on vacant parcels along C Street in downtown Virginia City.
<b>Objective 1.2-4</b>	Assess the feasibility of converting several C Street parking spaces into “parklets” after sufficient vehicular parking and downtown transportation is completed at the Virginia City Freight Depot multi-modal transit center.
<b>Objective 1.2-5</b>	Add sitting benches and water stations along established bicycle/pedestrian trails.

<b>Policy</b>	
<b>Policy 1.3</b>	Locate high-speed, collector, and arterial routes along the edges of developments.

<b>Policy</b>	
<b>Policy 1.4</b>	Implement traffic-calming design and devices to slow traffic where close connection between vehicle and non-motorized ways exist.

<b>Policy</b>	
<b>Policy 1.5</b>	Maintain and expand existing and future alternative transportation systems.
<b>Objectives</b>	
<b>Objective 1.5-1</b>	Reserve necessary property, right-of-way, and easements in new planned unit developments to support existing and future pedestrian, bicycle, bus, rail, and other transportation systems.
<b>Objective 1.5-2</b>	Align rights-of-way and easements for transit systems with existing transit system rights-of-way, easements, and planned corridors.
<b>Objective 1.5-3</b>	Connect bicycle ways in Mustang, McCarran, and Painted Rock to the Tahoe-Pyramid Trail alignment, and by coordinating with the Lockwood community in its desire for the bikeway alignment in the area. Coordination with the Lockwood community will be crucial in identifying desired bikeway connections throughout the Lockwood area.

**Objective 1.5-4** Collaborate with Union Pacific Railroad, Washoe County Regional Transportation Commission, Tahoe-Reno Industrial Center, and other agencies and entities to assess and consider the feasibility of light-rail commuter systems utilizing new and existing infrastructure along the Truckee River and Interstate 80 corridor.

**Goal 2: Connect communities in the county.**

<b>Policy</b>	
<b>Policy 2.1</b>	Evaluate alternative means by which to connect the county.
<b>Objectives</b>	
<b>Objective 2.1-1</b>	Assess the benefits and adverse impacts (including traffic, safety, noise, light pollution, wildland fire risk, and attraction of other undesirable development) that a north-south and east-west transportation interconnection may have on the Highlands and Lockwood communities and allowed uses in the Lagomarsino planning area.
<b>Objective 2.1-2</b>	Coordinate with Tahoe-Pyramid Bikeway to develop multi-use paths along the north end of the county that supports each of the local communities’ needs, while also protecting the expressed interests and needs of Lockwood residents.

**Goal 3: Enhance public safety.**

<b>Policy</b>	
<b>Policy 3.1</b>	Coordinate with the Storey County Fire Protection District, Storey County Sherriff’s Office, Storey County School District, Storey County Health and Community Services Department, and local social support groups to help ensure that transportation infrastructure supports mobility and maximum practical public safety in accordance with their needs.
<b>Objectives</b>	
<b>Objective 3.1-1</b>	Host annual field tours with fire, school, law enforcement, and public services departments and agencies and to assess conditions and identify needs.

<b>Policy</b>	
<b>Policy 3.2</b>	Coordinate with the Nevada Department of Transportation to correct identified safety issues on Interstate 80 interchanges, especially at the Lockwood interchange.

Policy	
<b>Policy 3.3</b>	Require area land developers to develop necessary transportation infrastructure that meets the needs of new developments.

Policy	
<b>Policy 3.4</b>	Align future arterial routes (e.g., north-south or east-west connectors) in and around the Lockwood, Highlands, and Lagomarsino areas that are aligned with and connected to Mustang Road and the Mustang-Interstate 80 interchange, and away from Canyon Way and the Lockwood-Interstate 80 interchange.

**Goal 4: Develop a partial financial plan for transportation infrastructure, growth, and maintenance.**

Policy	
<b>Policy 4.1</b>	Reconcile countywide policies with expected revenue and expenses to maintain and potentially expand and enhance infrastructure as needed.

Policy	
<b>Policy 4.2</b>	Work with local and state agencies, as well as the Tahoe-Reno Industrial Center, to develop future maintenance and development agreements focused on creating improved infrastructure.

**Goal 5: Enhance and diversify vehicular and multi-modal transportation in the Comstock area.**

Policy	
<b>Policy 5.1</b>	Continue development patterns that provide for a walkable community.
Objectives	
<b>Objective 5.1-1</b>	Encourage historically dense, mixed-use commercial and residential development in the core areas of Gold Hill, Virginia City, and the Divide.

<b>Policy</b>	
<b>Policy 5.2</b>	Acquire necessary property, rights-of-way, and easements to develop vehicular parking and multi-modal transportation systems.
<b>Objectives</b>	
<b>Objective 5.2-1</b>	Inventory vacant land adjacent to the Virginia City downtown area that may facilitate centralized vehicular parking and transit systems.
<b>Objective 5.2-2</b>	Consider opportunities to purchase appropriate vacant land to facilitate centralized vehicular parking and transit systems.

<b>Policy</b>	
<b>Policy 5.3</b>	Improve vehicular parking and multi-modal transportation systems.
<b>Objectives</b>	
<b>Objective 5.3-1</b>	Repurpose the historic Virginia City Freight Depot to facilitate train boarding and disembarking, or to develop other modal transportation systems that serve both the freight depot and visitors to other parts of Virginia City.
<b>Objective 5.3-2</b>	Repurpose parcels between the Virginia City Freight Depot and Union Street to facilitate vehicular parking, rail service, bus service, and multi-modal transportation support systems.
<b>Objective 5.3-3</b>	Widen and improve B-, D-, and E Street to increase vehicular parking and circulation capacity.

<b>Policy</b>	
<b>Policy 5.4</b>	Develop alternative transit systems between centralized transit hubs and the downtown area of Virginia City.
<b>Objectives</b>	
<b>Objective 5.4-1</b>	Develop additional transit stops at appropriate intervals to facilitate transit to and from C Street.
<b>Objective 5.4-2</b>	Develop inclinator between C Street and the Virginia City Freight Depot and other centralized transit staging areas.

Policy	
<b>Policy 5.5</b>	Support the safe and efficient movement of goods and people throughout the Comstock area.
Objectives	
<b>Objective 5.5-1</b>	Develop sidewalks and/or boardwalks and repairing curbs and gutters along “C” Street, and otherwise developing stronger pedestrian infrastructure, including safe neighborhood-to-school and community facilities infrastructure.
<b>Objective 5.5-2</b>	Improve street lighting and visibility at key roadway and pedestrian intersections.
Policy	
<b>Policy 5.6</b>	Develop cul-de-sacs or other vehicle turnarounds at dead-end streets.
Policy	
<b>Policy 5.7</b>	Coordinate with private property owners, the U.S. Bureau of Land Management and other entities to correct encroaching right-of-way conflicts.
Policy	
<b>Policy 5.8</b>	Improve the quality of the pavement or gravel surfacing of existing unimproved platted streets where residential and other development is occurring.
Policy	
<b>Policy 5.9</b>	Widen local streets where two-way traffic is challenging or impossible.
Policy	
<b>Policy 5.10</b>	Use Nevada Department of Transportation rural transit planning funds to develop a comprehensive public transit plan that supports local connectivity and tourism needs.
Policy	
<b>Policy 5.11</b>	Support Road Safety Audits and implementing suggestions on State Route 341, State Route 342, and Six Mile Canyon Road.

<b>Policy</b>	
<b>Policy 5.12</b>	Evaluate the benefits and limitations of alternative vehicle transportation circulation on C Street and in the downtown Virginia City area, including limited and no motor vehicle access on C Street, one-way traffic patterns, and bypass “loops” around C Street. The purpose of any route should focus on enhancing pedestrian walkability and local vehicle parking.

<b>Policy</b>	
<b>Policy 5.13</b>	Discourage the installation of a lighted traffic signal, and instead with the agency of jurisdiction plan for and develop a round-about, or other such traffic management device that does not detract from the historic integrity of the adjacent historic Fourth Ward School. Major improvements to this intersection should include landscaping enhancing the “south gateway” to Virginia City as supported by this master plan (see Chapter 3 – Land Use) and should be designed to accommodate safe tourist-pedestrian access to the immediate surrounding area. This policy is of particular importance at the intersections of State Route 341 Truck Route and State Route 342 adjacent to the historic Fourth Ward School museum.

<b>Policy</b>	
<b>Policy 5.14</b>	Secure local control from the Nevada Department of Transportation portions of State Route 341 (C Street) within Virginia City’s downtown area.

<b>Objectives</b>	
<b>Objective 5.14-1</b>	Work with the Nevada Department of Transportation to convey to Storey County State Route 341 right-of-way between north and south intersecting “B” Street.
<b>Objective 5.14-2</b>	Do not accept conveyance of portions of State Route 341 to Storey County until curbs, gutters, drainages, and pavement are improved to Storey County standards, or until the state provides the county sufficient funds for necessary repairs and improvements.

## Goal 6: Support the continued orderly development at McCarran and the Tahoe- Reno Industrial Center.

Policy	
<b>Policy 6.1</b>	Actively monitor traffic and congestion levels in and around the Tahoe-Reno Industrial Center.

Policy	
<b>Policy 6.2</b>	Apply for grants and other awards for a planning study in McCarran for anticipated long- term and full buildout.

Policy	
<b>Policy 6.3</b>	Promote and coordinate with regional entities to enhance van- pool and other shared commuter systems at McCarran.

Policy	
<b>Policy 6.4</b>	Plan for new infrastructure connectivity between McCarran and new planned unit developments at Painted Rock.

Policy	
<b>Policy 6.5</b>	Coordinate with the Washoe County Regional Transportation Commission; Lyon and Washoe Counties; the City of Sparks; and the Nevada Department of Transportation to model future transportation issues and develop proactive strategies to mitigate traffic impacts in and around McCarran.

Policy	
<b>Policy 6.6</b>	Encourage the Tahoe-Reno Industrial Center to examine pedestrian infrastructure, especially when models and observations confirm demand.