

Vision Sonora



Creating a More Vibrant Community

Vision Sonora
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Vision Sonora

Existing Conditions Summary



Welcome to Historic
SONORA



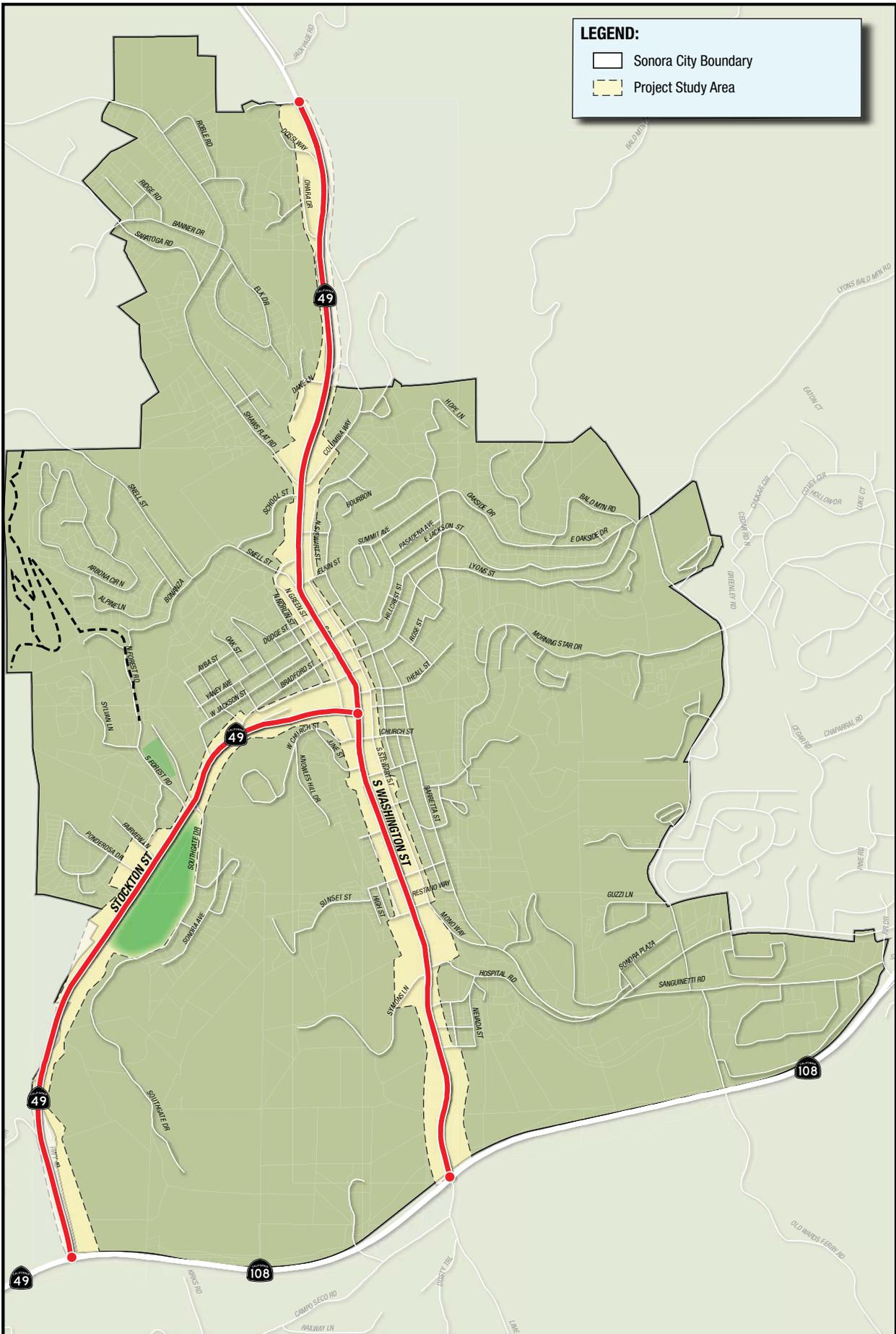
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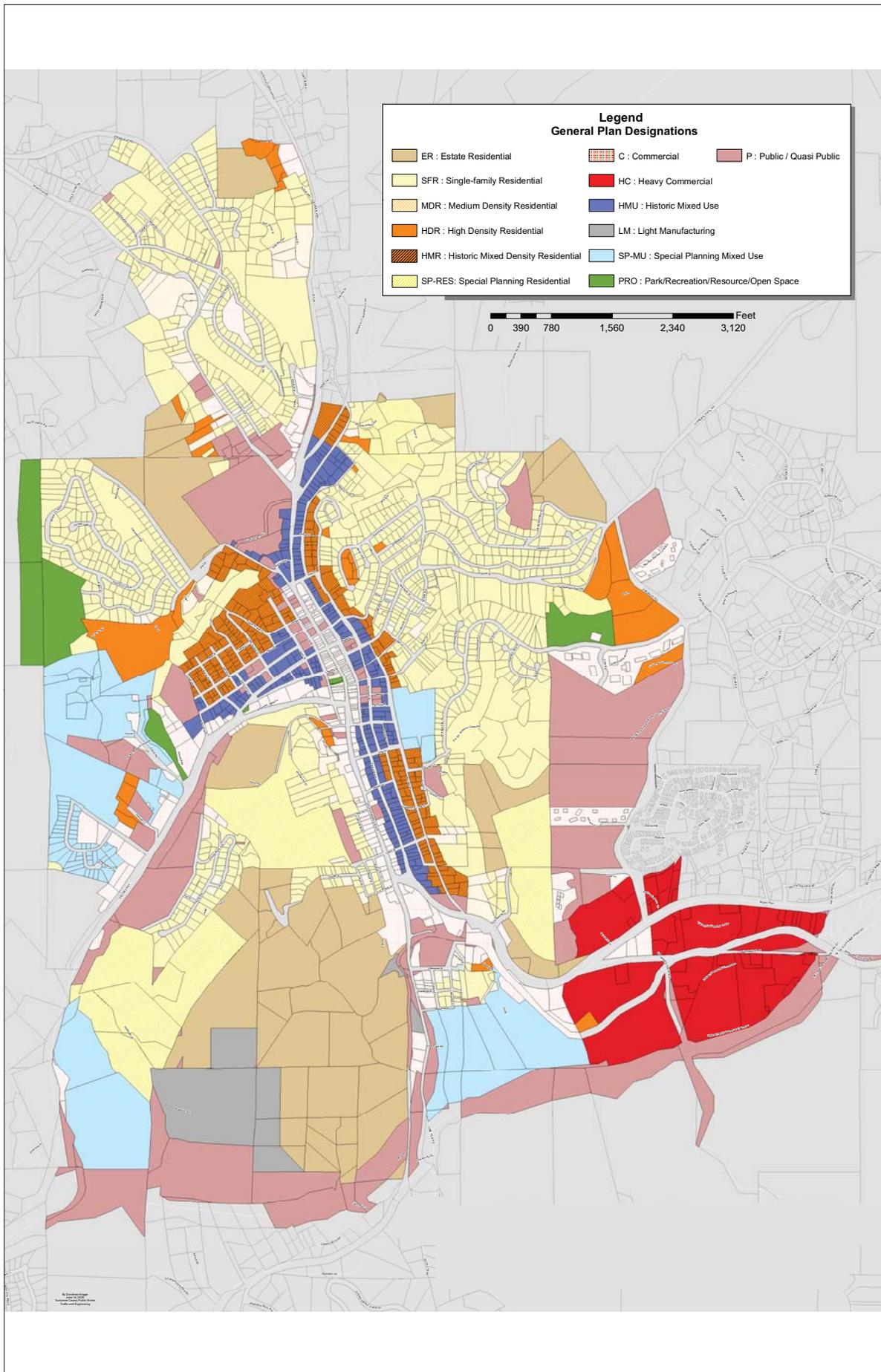


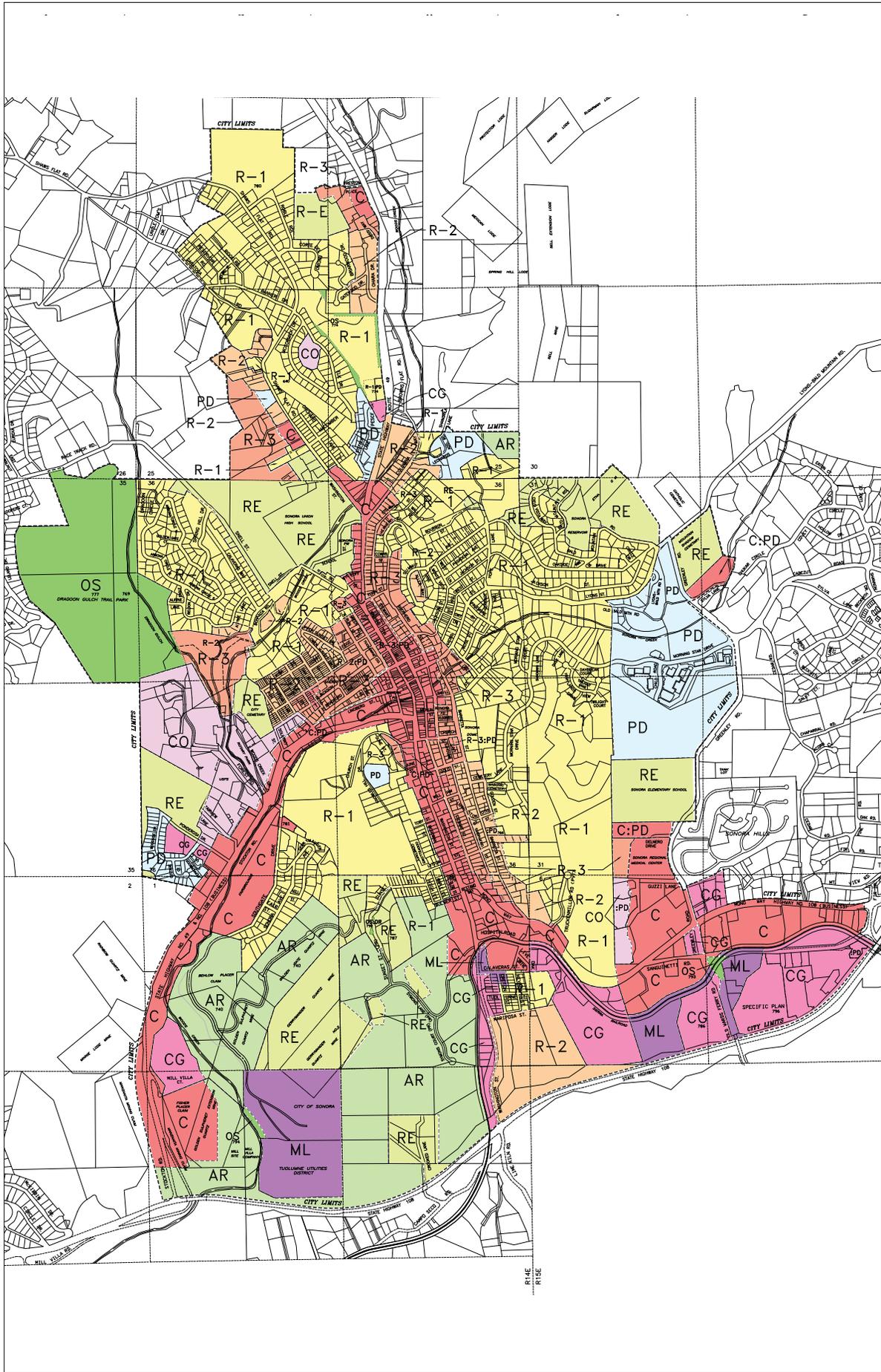
Introduction

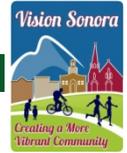
The purpose of Vision Sonora is to provide strategies and implementation tools necessary to revitalize the local economy, promote unique historic character and improve the quality of life for both residents and visitors in the City of Sonora. The purpose of this memorandum is to summarize the existing conditions, including urban design, historic, economic and transportation (vehicles, pedestrians, bicyclists and parking) elements.

The project study limits for Vision Sonora follow the alignment of SR 49 from SR 108 to Preston Place and S. Washington Street from SR 108 to SR 49. **Figure 1, Project Study Limits** demonstrates the project study limits. **Figure 2, General Plan Land Use Designations** and **Figure 3, Zoning Map** demonstrate the existing land uses and zoning in the City of Sonora.









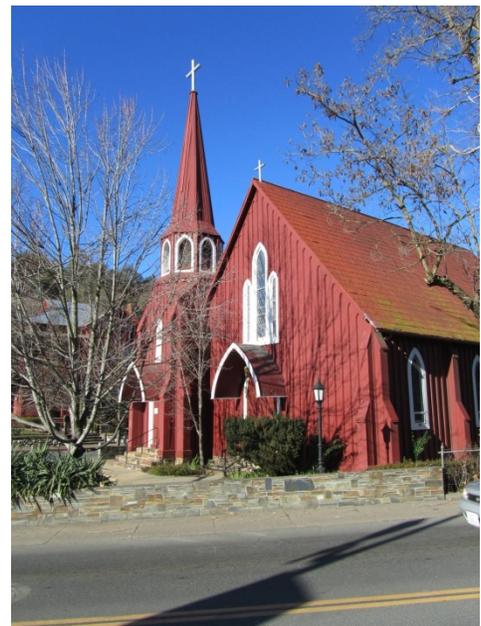
Urban Design

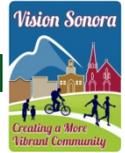


Sonora is a small, rural community with a historic downtown core along SR 49 (Washington Street) and S. Washington Street. Sonora's rich Gold Country heritage as the "Queen of the Southern Mines" is exemplified through historic architecture, hilly topography, and continued importance in facilitating the transportation of the logging industry. Existing buildings and streets within the downtown area are pedestrian-scaled and a majority of shops and services are within walking distance. Sonora promotes the arts through gallery strolls, live theater, and a variety of events. This creates an attractive environment for locals and visitors alike.

Some of the County's top major employers are in Sonora, including Sonora Regional Medical Center, County of Tuolumne and Wal-Mart. Local destinations include the Mother Lode Fairgrounds, Dragoon Gultch Trail, Tuolumne County Courthouse, the Red Church (Saint James Historic Church), Sonora High School, as well as a variety of businesses located in the commercial core along SR 49 (Washington Street).

Sonora is regionally located in the Sierra Foothills with access to several national parks, including Stanislaus National Forest and Yosemite National Park and several state parks, including Railtown 1897 State Historic Park and Columbia State Park. Opportunities for hiking, mountain biking, camping, golf and many other outdoor activities are accessible within short travel distances.





Historic

Sonora, the 10th oldest city in California and the County seat of Tuolumne County was founded as a mining town, during the California Gold Rush, and incorporated in 1851.

The following are places within the City of Sonora listed on the National Register of Historic Places:

- Cady House – 72 N. Norlin Street
- City Hotel – 145 S. Washington Street
- Sugg House – 37 Theall Street
- Tuolumne County Courthouse – 41 W. Yaney Avenue
- Courthouse Square
- Tuolumne County Jail – 156 W. Bradford Avenue

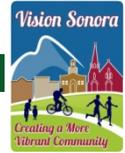
Within the Vision Sonora project limits one (1) landmark is included on the California Historical Landmarks. St. James Anglican Church (No. 139), also known as the Red Church, named after the California Redwood was built in 1859. It is the oldest Episcopal Church building in the state. It is located at the intersection of SR 49 (Washington Street) and Snell Street.

There are many other locations in the City of Sonora that represent the City's unique history, including the following:

- Coffill Park
- Opera Hall
- Sonora Fire Museum
- Prospector Park
- Grigsby Park
- Dragoon Gulch Trail
- Shay Engine #3
- Morgan Mansion
- Bradford Building
- Wells Fargo Building
- City Hotel
- Sonora Inn
- Gunn House
- Tuolumne County Museum
- Tuolumne County Veterans Museum



Additional information on historic landmarks and places in Tuolumne County are located in **Appendix A**.



Economic

In recent years, Tuolumne County has experienced modest population growth, with an overall increase of 1.6% from the years 2000 to 2010 at is anticipated to experience similar growth patterns until the year 2050. The City of Sonora grew faster than the County from the years 2000 to 2010. Based on anticipated growth in Tuolumne County, an estimate was prepared of projected new housing units in Sonora through the year 2050 and is included in **Table 1, Housing Projections**.

Table 1: City of Sonora Housing Projections

| Year | Sonora Population | Sonora Growth | Housing Units | Cumulative Housing Units |
|------|-------------------|---------------|---------------|--------------------------|
| 2010 | 4894 | 471 | 251 | 251 |
| 2020 | 5237 | 343 | 183 | 434 |
| 2030 | 5603 | 367 | 196 | 630 |
| 2040 | 5995 | 392 | 209 | 840 |
| 2050 | 6415 | 420 | 224 | 1064 |

Source: U.S. Census, California Department of Finance, Demographic Research Unit

The County will experience approximately 4,500 new jobs, including office, retail and other sectors, through the year 2040. Based on an average 300 SF per employee, the County is anticipated to have approximately 1.3 million square feet of new demand through the year 2040. It is anticipated that Sonora will continue to experience a similar or greater demand than the County. **Table 2, Estimated New Countywide Employment Space Requirements** demonstrates the anticipated cumulative increase in new employment space.

Table 2: Estimated New Countywide Employment Space Requirements

| Year | Office, Retail, Services, Employment | Increase | SF Per Employee | Increase | Cumulative |
|------|--------------------------------------|----------|-----------------|----------|------------|
| 2010 | 13,910 | 0 | 300 | -- | -- |
| 2020 | 15,730 | 1,820 | 300 | 546,000 | 546,000 |
| 2030 | 17,020 | 1,290 | 300 | 387,000 | 933,000 |
| 2040 | 18,400 | 1,380 | 300 | 414,000 | 1,347,000 |

Source: U.S. Census, California Department of Finance, Demographic Research Unit

A memorandum with additional information on the Tuolumne County demographic trends is included in **Appendix B**.



Existing Year 2012 Traffic Operations

ROADWAY NETWORK

Within the City of Sonora, there is a network of state routes, local roadways, existing trails and transit services. The primary north-south corridors are SR 49, “Golden Chain Highway” named after the 1849 California gold rush, and S. Washington Street providing access through the City’s Historic District. SR 108 serves as the regions primary east-west, arterial south of the City. Downtown Sonora consists of an existing grid network with local roadways running north-south and east-west. Green Street and Stewart Street run north-south, parallel to SR 49 / S. Washington. Restano Way, Church Street, Bradford Street, Snell Street and Shaws Flat Road serve as the major east-west local roadways. Southgate Drive provides access to Mother Lode Fairgrounds and the Tuolumne Utilities District’s sewer treatment ponds.

Figure 1, Project Study Limits demonstrates the project study limits.

The following describes the primary north-south and east-west roadways within the Vision Sonora project limits. Under existing conditions, there are no bike facilities provided within the project limits. Roadway functional classification is in accordance with the Sonora General Plan 2020 Appendix 2B.

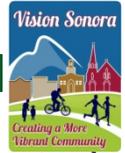
SR 49 consists of a north-south, two-lane arterial, running from the City of Sonora limits in the north to the intersection of SR 49 (Stockton Street) and SR 108 in the south. A two-way, left-turn lane is provided on SR 49 (Stockton Street) from approximately 1400’ south of Ponderosa Lane to approximately 1000’ south of S. Washington Street, except at intersections. Existing pedestrian accommodations are provided along portions of SR 49, primarily on SR 49 from Shaws Flat Road to Southgate Drive. SR 49 and SR 108 are the only state facilities within the project limits. The posted speed limit on SR 49 within the project limits ranges from 25 MPH to 45 MPH.

S. Washington Street consists of a north-south, two-lane local collector, intersecting with SR 49 (Stockton Street) in the north and SR 108 in the south. Existing pedestrian accommodations are provided along S. Washington Street from SR 49 (Stockton Street) to Hospital Road. The posted speed limit on S. Washington Street within the project limits ranges from 25 MPH to 35 MPH.

SR 108 just south of the City, serves as the primary east-west, two-lane arterial intersecting SR 49 (Stockton Street) in the west and S. Washington in the east. No pedestrian or bicycle accommodations are provided on SR 108; however there are existing full width shoulders. SR 49 and SR 108 are the only state facilities within the project limits.

Green Street consists of a north-south, two-lane local roadway, intersecting Snell Street in the north and Church Lane in the south. Sidewalk is provided on Green Street from Dodge Street to Linoberg Street and from SR 49 (Stockton Street) to Church Street.

Stewart Street is a north-south, two-lane local roadway, intersecting Elkin Street in the north and Restano Way in the south. Sidewalk is provided on Stewart Street from Elkin Street to Restano Way.



Restano Way is an east-west, two-lane local roadway, approximately 200' long, with the signalized intersection of S. Washington Street and Restano Way and Mono Way and Restano Way on the west and east ends, respectively. Sidewalks are provided on Restano Way.

Church Street consists of an east-west, two-lane local roadway, from Green Street to Baretta Street. Sidewalk is provided on Church Street from Green Street to Shepherd Street.

Bradford Street consists of an east-west, two-lane local roadway, intersecting SR 49 (Stockton Street) west of the SR 49 (Stockton Street) and S. Washington intersection and Shepherd Street in the east. Sidewalk is provided on Bradford Street from Seco Street to Shepherd Street.

Snell Street consists of an east-west, two-lane local roadway, at the north of downtown Sonora. Sidewalk is provided on Snell Street within the project limits.

Shaws Flat Road consists of a north-south, two-lane local collector, north of downtown Sonora. Shaw Flats Road intersects SR 49 (Washington Street) in close proximity to Sonora High School. Sidewalk is provided on Shaws Flat Road within the project limits.

Southgate Drive consists of a north-south, two-lane local roadway, providing access to the Tuolumne Utilities District's sewer treatment ponds to the south of the Mother Lode Fairgrounds.

Greenley Road consists of a north-south, two-lane local collector, running east of the project limits from the intersecting Sanguinetti Road and Lyons Street.

TRAFFIC VOLUMES

Historical California Department of Transportation (Caltrans) traffic data was obtained for SR 49 within the project limits on SR 49 (Stockton Street) north of the intersection of SR 49 (Stockton Street) and SR 108 and SR 49 (Washington Street) north of the SR 49 (Washington Street) and Dodge Street intersection from the years 1995 to 2012. **Figure 4, Historical Caltrans Traffic Data on SR 49** demonstrates the traffic trends on the two (2) SR 49 roadway segments from the years 1995 to 2012.

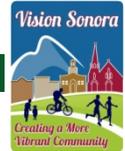
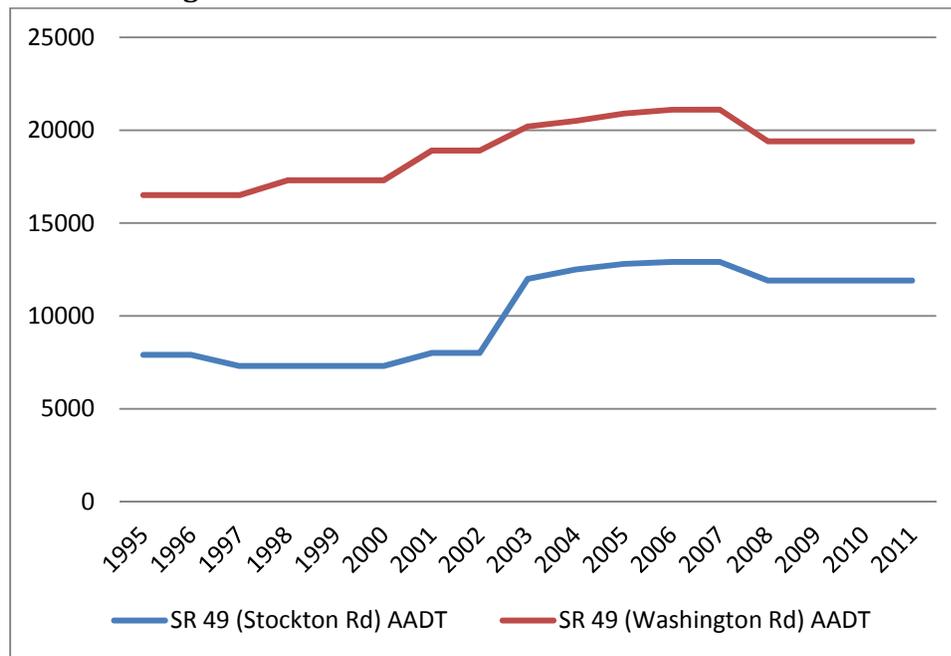


Figure 4: Historical Caltrans Traffic Data on SR 49



As demonstrated in the graph, traffic on SR 49 has declined slightly from 2007 to 2011. In 2011, the annual average daily traffic (AADT) was 11,900 and 19,400 on SR 49 (Stockton Road) and SR 49 (Washington Road), respectively.

Average daily traffic (ADT) volumes were obtained on Thursday, November 1, 2012 at the following locations.

- S. Washington Street between Gold Street and William Street
- SR 49 (Washington Street) between Linoberg Street and Bradford Street
- SR 49 (Washington Street) north of Steffen Lane
- SR 49 (Stockton Street) between Bradford Street and S. Washington Street
- SR 49 (Stockton Street) between SR 108 and Ponderosa Drive
- Greenley Road between Delnero Drive and Cabezut Road

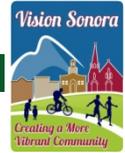
Four (4) days of ADT was collected on S. Washington Street between Highway 108 and Tuolumne Street. The data was collected from Thursday, November 1, 2012 to Sunday, November 4, 2012.

Data collection was performed at the eleven (11) project intersections on Thursday, November 1, 2012 from 6:30 AM to 8:30 AM and 2 PM to 6 PM, including four (4) signalized intersections and seven (7) unsignalized intersections. The following are the four (4) signalized intersections investigated:

- S. Washington Street & SR 108
- S. Washington Street & Restano Way
- Restano Way & Mono Way
- S. Washington Street & SR 49 (Stockton Street)

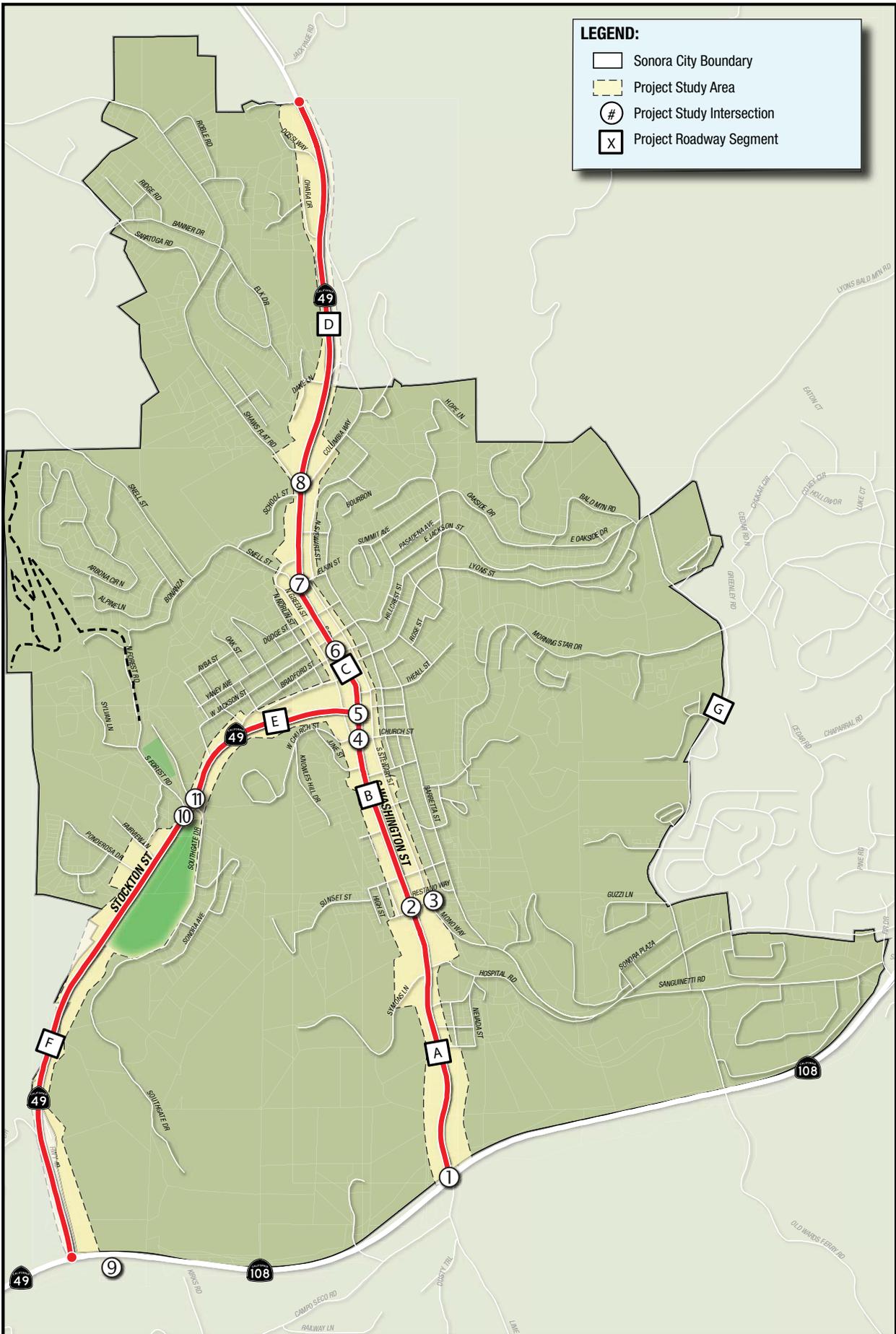
In addition, the following seven (7) stop-controlled, unsignalized intersections were investigated:

- S. Washington Street & Church Street



- SR 49 (Washington Street) & Bradford Street
- SR 49 (Washington Street) & Snell Street
- SR 49 (Washington Street) & Shaws Flat Road
- SR 49 (Stockton Street) & SR 108
- SR 49 (Stockton Street) & Forest Road
- SR 49 (Stockton Street) & Southgate Drive

Figure 5, Data Collection demonstrates the tube and intersection data collected within the project limits.





ROADWAY SEGMENTS OPERATION

The methodologies outlined in the *Highway Capacity Manual (HCM) 2010* were used to perform planning level analysis of roadway levels of services (LOS). The LOS concept uses a grading scale of “LOS A” through “LOS F” with “LOS A” representing free flowing conditions and “LOS F” representing forced flow conditions. Street segment LOS are based upon planning level threshold volumes as provided in **Table 3, HCM Level of Service (LOS) Criteria for Roadway Segments**.

Table 3: HCM Level of Service (LOS) Criteria for Roadway Segments

| Functional Roadway Classification Type | Maximum Two-Way Average Daily Traffic (ADT) Volume-Carrying Capacity for each LOS Designation | | | | |
|---|---|--------|--------|--------|--------|
| | LOS A | LOS B | LOS C | LOS D | LOS E |
| 6-Lane Divided Arterial (w/ left-turn lane) | 32,000 | 38,000 | 43,000 | 49,000 | 54,000 |
| 4-Lane Expressway | 18,000 | 27,000 | 36,000 | 45,000 | 50,000 |
| 4-Lane Divided Arterial (w/ left-turn lane) | 22,000 | 25,000 | 29,000 | 32,500 | 36,000 |
| 4-Lane Undivided Arterial (w/ left-turn lane) | 16,000 | 19,000 | 22,000 | 24,000 | 27,000 |
| 2-Lane Arterial (w/ left-turn lane) | 11,000 | 12,500 | 14,500 | 16,000 | 18,000 |
| 2-Lane Collector | 6,000 | 7,500 | 9,000 | 10,500 | 12,000 |
| 2-Lane Local | 1,200 | 1,400 | 1,600 | 1,800 | 2,000 |

Source: Highway Capacity Manual, 2000

- The above threshold volumes for preliminary planning purposes only. If available, the results of detailed level of service analyses will typically have priority over the levels of service derived from this table. In that case this table can be used by the analyses for providing additional considerations for recommending the appropriate general roadway type for the specific condition being analyzed.
- All above facilities assume a 60%/40% peak hour directional split, with the peak hour representing approximately 10% of the Average Daily Traffic (ADT).
- Based on *Highway Capacity Manual*, Transportation Research Board, 2000.
- Freeway thresholds are consistent with conditions utilizing a .95 peak hour factor, with 2% trucks and slightly over a one-mile average interchange spacing.
- Expressways are consistent with the average of a multi-lane highway (with no signals) and Class 1 arterial (with an average signal spacing of 0.8 signals per mile and 0.45 G/C ratio).
- Arterial thresholds are consistent with the average Class 1 and Class 2 arterials with an assumed signal density of two signals per mile. This assumes a divided arterial with left-turn lanes. Thresholds for four-lane undivided arterials assume approximately two-thirds the capacity of a four-lane divided arterial due to the impedance in traffic flow resulting from left-turning vehicles waiting in the inside through lane, thus significantly reducing the capacity of the roadway.
- Rural highways are generally consistent with the *2000 Highway Capacity Manual* rural highway, assuming 8% trucks, 4% RV's, 20% no-passing, and level terrain. The greatest difference is that it assumes a maximum capacity (upper end of LOS E) of 25,000 rather than 28,000 calculated using the new *Highway Capacity Manual*.
- Two-lane collectors assume approximately three-fourths of the capacity of a two-lane arterial with left-turn lane. This is based on the assumption that left-turn channelization is not provided on a two-lane collector.
- Local street level service thresholds are based upon “Neighborhood Traffic Related Quality-of-Life Considerations” which assumes a standard suburban neighborhood, 40-foot roadway width and 25 mile per hour speed limit with normal speed violation rates.

Table 4 demonstrates the ADT, LOS, posted speed limit and 85th percentile speed observed on Thursday, November 1, 2012 at the seven (7) tube locations.

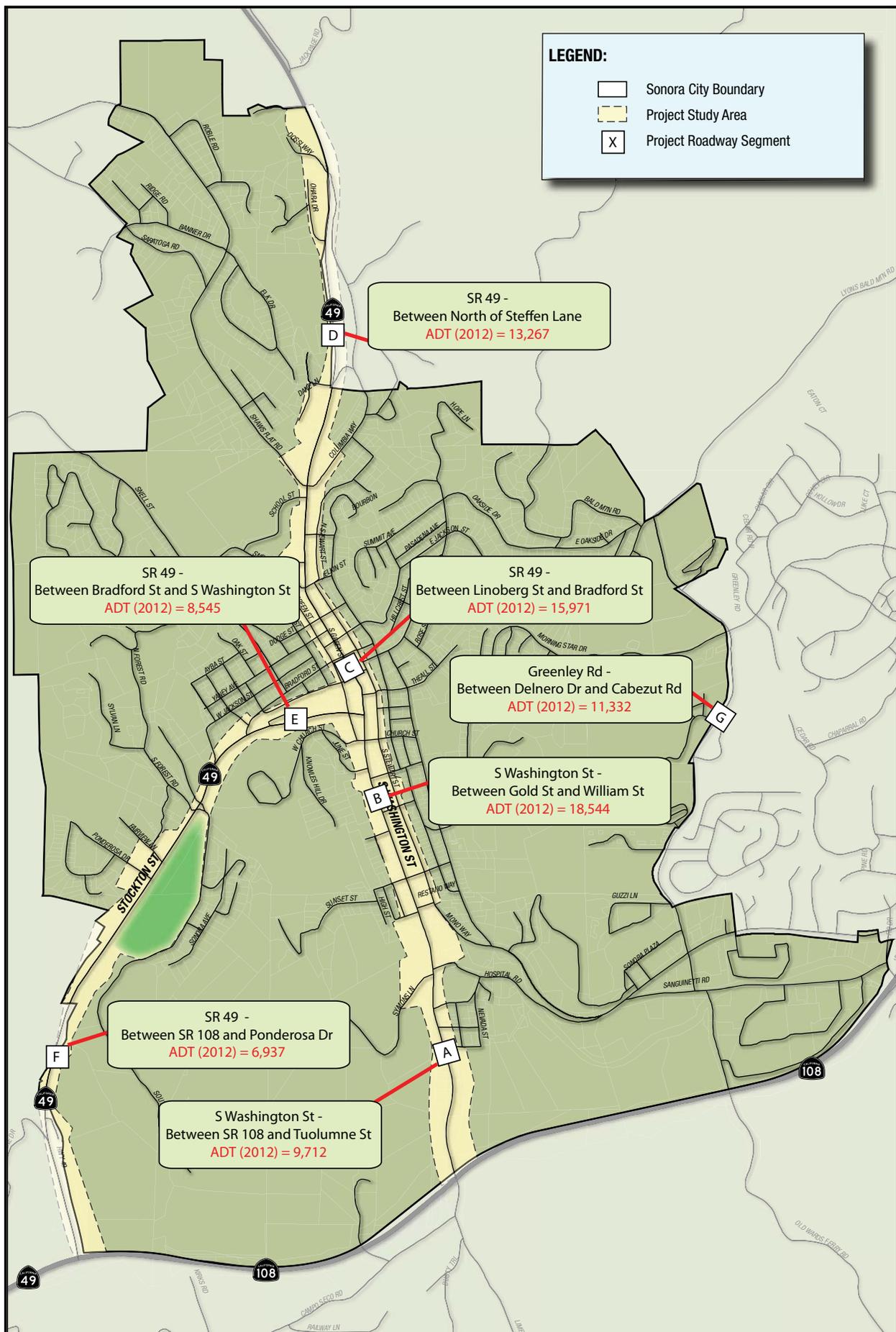


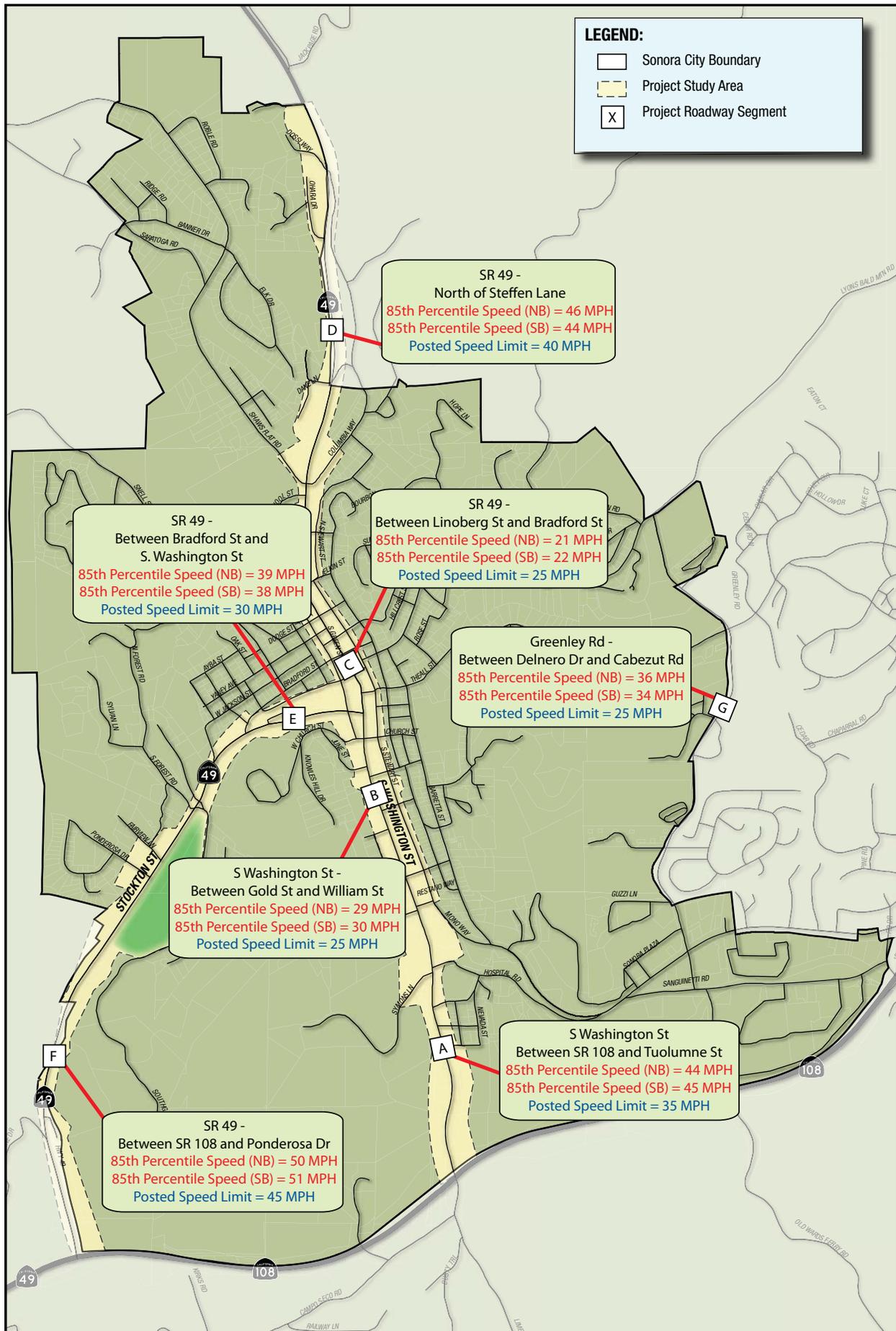
Table 4: Existing Average Daily Traffic (ADT), Level of Service (LOS) and Speed (MPH)

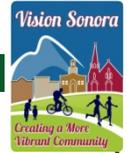
| Roadway | Segment | Roadway Class. | LOS Threshold | Observed ADT | Observed LOS | Posted Speed Limit | Observed 85 th Percentile Speed | |
|---------------------------|--|------------------------|---------------|--------------|--------------|--------------------|--|--------|
| | | | | | | | NB | SB |
| S. Washington Street | Between Highway 108 and Tuolumne Street | 2-Local Collector | LOS C | 9,712 | LOS D | 35 MPH | 44 MPH | 45 MPH |
| S. Washington Street | Between Gold Street and William Street | 2-Local Collector | LOS C | 18,544 | LOS F | 25 MPH | 29 MPH | 30 MPH |
| SR 49 (Washington Street) | Between Linoberg Street and Bradford Street | 2-Lane Arterial | LOS C/D | 15,971 | LOS D | 25 MPH | 21 MPH | 22 MPH |
| SR 49 (Washington Street) | North of Steffen Lane | 2-Lane Arterial | LOS C/D | 13,267 | LOS C | 40 MPH | 46 MPH | 44 MPH |
| SR 49 (Stockton Street) | Between Bradford Street and S. Washington Street | 2-Lane Arterial | LOS C/D | 8,545 | LOS A | 30 MPH | 39 MPH | 38 MPH |
| SR 49 (Stockton Street) | Between SR 108 and Ponderosa Drive | 2-Lane Arterial | LOS C/D | 6,937 | LOS A | 45 MPH | 50 MPH | 51 MPH |
| Greenley Road | Between Delnero Drive and Cabezut Road | 2-Lane Local Collector | LOS C | 11,332 | LOS E | 25 MPH | 36 MPH | 34 MPH |

Highlighted below LOS threshold.

The roadway functional classifications listed in **Table 4** are in accordance with the Sonora General Plan 2020; however SR 49 (Washington Street) between Linoberg Street and Bradford Street has similar operation to a 2-lane collector, due to the surrounding downtown land uses. Assuming SR 49 (Washington Street) between Linoberg Street and Bradford Street operates as a 2-lane collector would result in the roadway segment operating at a LOS F, under existing conditions. **Figure 6, Existing Average Daily Traffic Volumes** and **Figure 7, Existing Speed Data** demonstrate the ADT and speed data collected at each roadway segment location.







As demonstrated in **Table 4** and **Figure 6**, three (3) roadway segments operate with unacceptable LOS, under existing conditions, including the following:

- S. Washington Street between Highway 108 and Tuolumne Street
- S. Washington Street between Gold Street and William Street
- Greenley Road between Delnero Drive and Cabezut Road

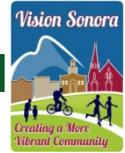
The 85th percentile speeds on S. Washington and SR 49 are 4 – 10 MPH greater than the posted speed limits, except for on SR 49 (Washington Street) between Linoberg Street and Bradford Street. On this roadway segment the 85th percentile speed is 4 MPH and 3 MPH less than the posted speed limit in the northbound and southbound direction, respectively. The 85th percentile speed on Greenley Road is 11 MPH and 9 MPH higher than the posted speed limit in the northbound and southbound direction, respectively.

To determine the variation in traffic patterns between a typical weekday and weekend day, four (4) days of ADT data was collected on S. Washington Street between Highway 108 and Tuolumne Street. **Table 5, Average Daily Traffic (ADT) and Speed** demonstrates the average daily traffic (ADT) observed on Thursday, November 1, 2012 to Sunday, November 4, 2012 on S. Washington Street between Highway 108 and Tuolumne Street.

Table 5: Average Daily Traffic (ADT) and Speed

| Roadway | Segment | Observed ADT | | | |
|----------------------|---|--------------------|------------------|------------------|------------------|
| | | Thurs (11/1/12) | Fri (11/2/12) | Sat (11/3/12) | Sun (11/4/12) |
| S. Washington Street | Between Highway 108 and Tuolumne Street | 9,712 | 9,900 | 7,388 | 6,168 |

The observed ADT on S. Washington Street between Highway 108 and Tuolumne Street suggests approximately 30% less traffic in the City of Sonora on a weekend compared to a typical weekday.



INTERSECTIONS OPERATION

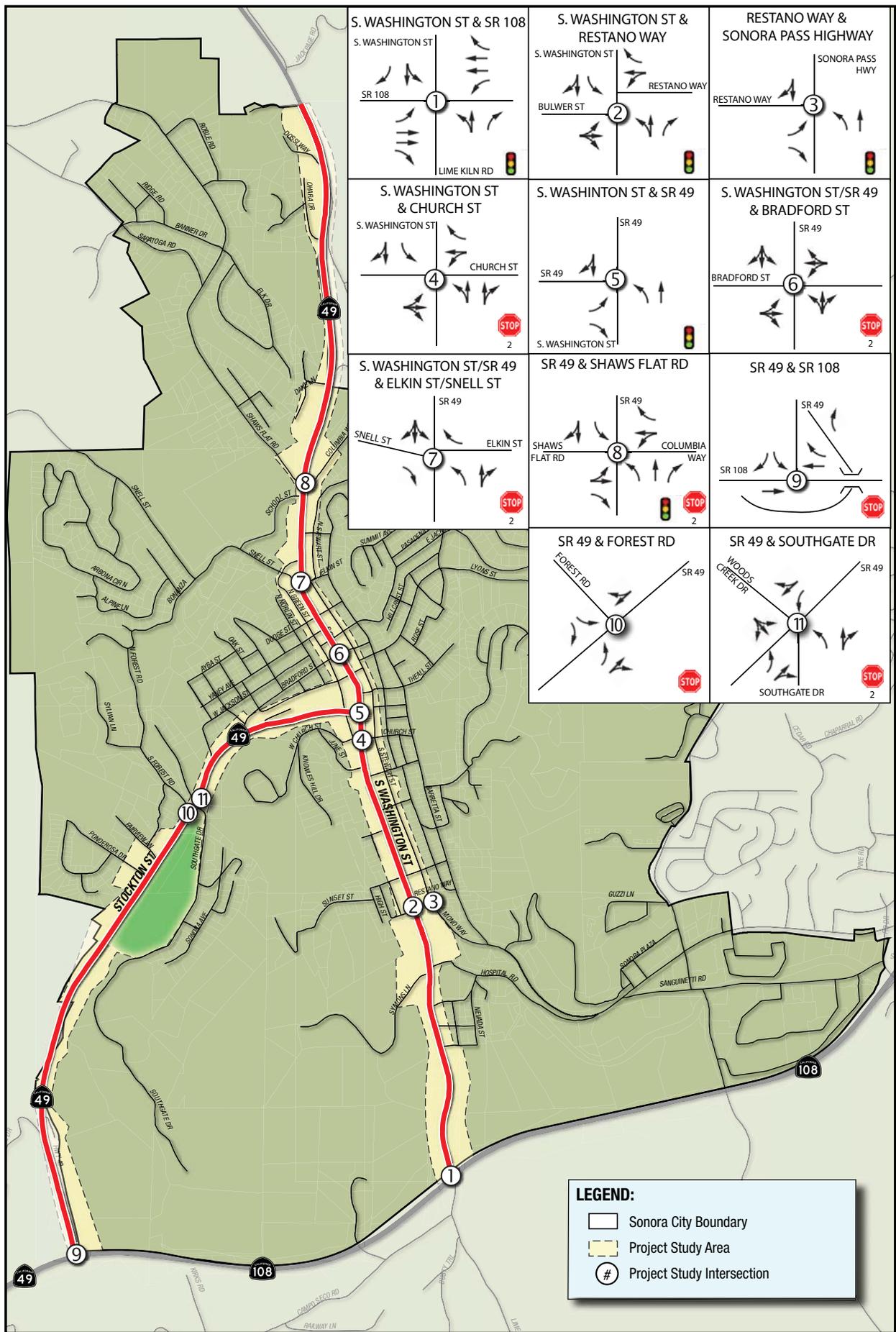
Data collection was performed at the eleven (11) project intersections on Thursday, November 1, 2012 from 6:30 AM to 8:30 AM and 2 PM to 6 PM, including four (4) signalized intersections and seven (7) unsignalized intersections. The following are the four (4) signalized intersections investigated:

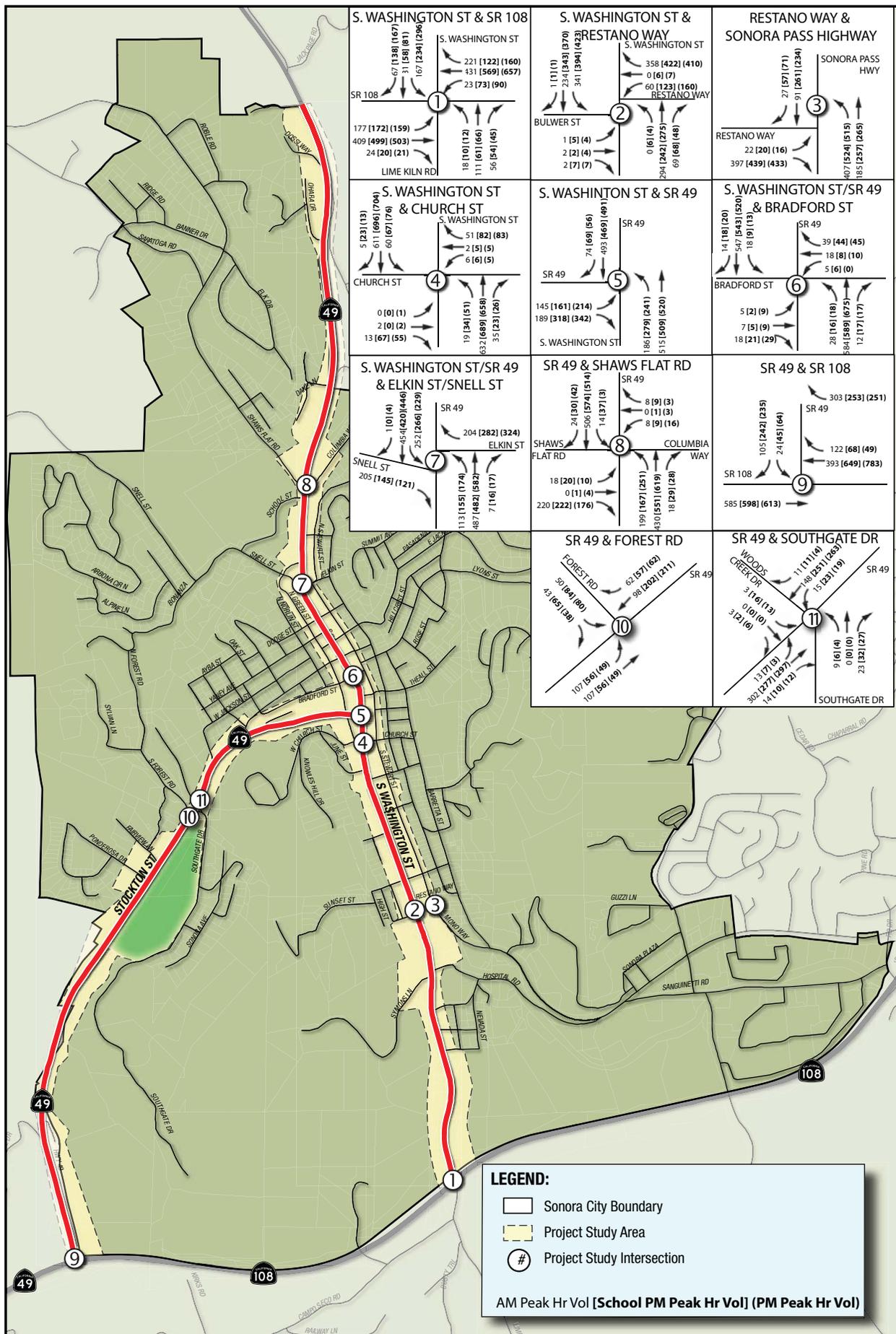
- S. Washington Street & SR 108
- S. Washington Street & Restano Way
- Restano Way & Mono Way
- S. Washington Street & SR 49

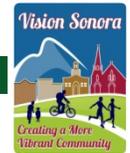
In addition, the following seven (7) stop-controlled, unsignalized intersections were investigated:

- S. Washington Street & Church Street
- S. Washington / SR 49 & Bradford Street
- S. Washington / SR 49 & Snell Street
- SR 49 & Shaws Flat Road
- SR 49 & SR 108
- SR 49 & Forest Road
- SR 49 & Southgate Drive

Figure 8, Existing Lane Configuration and **Figure 9, Existing Year 2012 Traffic Volumes** demonstrate the existing lane configuration and traffic volumes at the project signalized and unsignalized intersections.







Intersection traffic flow operations are evaluated using a level of service (LOS) concept. Intersections are rated based on a grading scale of “LOS A” through “LOS F” with “LOS A” representing free flowing conditions and “LOS F” representing oversaturated where traffic flows exceed design capacity, resulting in long queues and delays.

For signalized intersections, the delay a motorist experiences that can be attributed to the presence of a traffic signal or opposing traffic is analyzed. The level of service of vehicle movements is determined by computing the weighted average of the average control delay for all lane groups based on the amount of volume within each lane group.

For one and two-way stop controlled intersections, the operating efficiency of vehicle movements that must yield to through movements are analyzed. The level of service of vehicle movements on the controlled approaches is based on the distribution of gaps in the major street traffic stream and on driver judgment in selecting gaps. The 2000 HCM calculations the level of service of the minor street approaches. Using this data, an overall intersection level of service was calculated. Both are reported in this study because traffic on the minor street approaches has the lowest priority of right-of-way at the intersection and is the most critical in terms of delay. Generally, an LOS operation on the side street approach is the threshold that warrants improvements.

Table 6 shows the relationship between vehicle delay and level of service for signalized and unsignalized intersections.

Table 6: HCM Level of Service (LOS) Criteria for Signalized and Unsignalized Intersections

| Level of Service | Description | Control Delay (Sec/Vehicle) | |
|------------------|--|-----------------------------|--------------|
| | | Signalized | Unsignalized |
| A | Intersections operating at LOS A contain no congestion. The intersection operates with very little delay. | 0 – 10 | 0 – 10 |
| B | Intersections operating at LOS B contain very little congestion. The intersection operates with minimal delay. | >10 – 20 | >10 – 15 |
| C | Intersections operating at LOS C contain little congestion. The intersection operates with some delay. | >20 – 35 | >15 – 25 |
| D | Intersections operating at LOS D contain some congestion. The intersection operates with longer delays. | >35 – 55 | >25 – 35 |
| E | Intersections operating at LOS E border on being congested. | >55 – 80 | >35 – 50 |
| F | Intersections operating at LOS F contain congestion. | >80 | >50 |

Source: Highway Capacity Manual, 2000

Due to the intersection of S. Washington Street and SR 49 (Stockton Street) experiencing a high percentage of truck traffic and being located in Sonora’s downtown core, the existing saturation



flow rates were investigated. Existing saturation flow rate data was obtained during both the AM and PM peak hours on SR 49 (Washington Street) southbound and S. Washington Street northbound through movement at the intersection. Based on the average observed saturation flow rates, a saturation flow rate of 1100 was used for both SR 49 (Washington Street) southbound and S. Washington Street northbound.

Synchro analysis was performed for the AM, School PM and PM peak hours to determine the intersection operation of the project intersections. Observed saturation flow rates were applied to the intersection of S. Washington Street and SR 49 (Stockton Street) to properly reflect the existing intersection operation.

Table 7, Existing Year 2012 Intersection HCM Level of Service (LOS) demonstrates the existing LOS and delay for the eleven (11) project intersections.

Table 7: Existing Year 2012 Intersection HCM Level of Service (LOS)

| Intersection | Traffic Control | LOS Threshold | | LOS (delay) | | |
|---|-----------------|---------------|---------|--------------|---------------------|--------------|
| | | | | AM Peak Hour | School PM Peak Hour | PM Peak Hour |
| S. Washington Street & SR 108 | Signalized | C/D | Overall | C (34.9) | D (36.8) | D (44.0) |
| S. Washington Street & Restano Way | Signalized | C | Overall | D (35.6) | C (32.7) | D (37.2) |
| Restano Way & Mono Way | Signalized | C | Overall | B (16.4) | C (26.1) | C (28.7) |
| S. Washington Street & Church Street | Unsignalized | C | WB | C (19.2) | C (23.5) | D (28.7) |
| | | | Overall | A (1.6) | A (3.0) | A (3.6) |
| S. Washington Street & SR 49 | Signalized | C/D | Overall | E (60.1) | E (58.3) | F (114.5) |
| S. Washington / SR 49 & Bradford Street | Unsignalized | C/D | EB / WB | D (27.7) | C (21.2) | D (29.9) |
| | | | Overall | A (3.0) | A (2.1) | A (2.8) |
| S. Washington / SR 49 & Snell Street | Unsignalized | C/D | WB | C (20.7) | C (20.8) | E (35.4) |
| | | | Overall | A (8.3) | A (7.6) | A (10.0) |
| SR 49 & Shaws Flat Road | Unsignalized | C/D | WB | F (95.2) | F (155.0) | F (325.1) |
| | | | Overall | A (7.5) | A (8.0) | A (8.9) |
| SR 49 & SR 108 | Unsignalized | C/D | SB | C (15.0) | D (34.4) | F (60.4) |
| | | | Overall | A (1.9) | A (6.5) | B (10.9) |
| SR 49 & Forest Road | Unsignalized | C/D | EB | B (13.3) | C (15.4) | B (11.9) |
| | | | Overall | A (3.4) | A (3.9) | A (2.8) |
| SR 49 & Southgate Drive | Unsignalized | C/D | EB | B (12.4) | C (16.6) | C (16.0) |
| | | | Overall | A (1.2) | A (1.7) | A (1.5) |
| Highlighted below LOS threshold. | | | | | | |

The following intersections and approaches are anticipated to operate at an unacceptable LOS, under existing conditions:



- S. Washington Street and Restano Way – AM and PM peak
- S. Washington and Church Street SB approach – PM peak
- S. Washington Street and SR 49 (Stockton Street) - AM, School PM and PM peak hours
- SR 49 (Washington Street) and Snell Street WB approach – PM peak hour
- SR 49 (Washington Street) and Shaws Flat Road WB approach - AM, School PM and PM peak hours
- SR 49 and SR 108 SB approach – PM peak hour

HCM output of the existing conditions intersection operation is included in **Appendix C**.

SIGNAL WARRANT

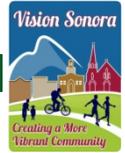
The stop-controlled, intersection of SR 49 (Washington Street) and Shaws Flat Road WB approach operates at an unacceptable LOS, during the AM, School PM and PM peak hours. A signal warrant using California MUTCD 2012 Edition was performed, using year 2012 traffic volumes to determine if a signal is warranted under existing conditions. Based on the data collected Warrants 2, 3, 4, 6 and 9 could be performed.

Table 8, SR 49 (Washington Street) and Shaws Flat Road Traffic Signal Warrant Summary summarizes the traffic signal warrant results at the intersection, using year 2012 traffic volumes.

Table 8: SR 49 (Washington Street) and Shaws Flat Road Traffic Signal Warrant Summary

| MUTCD Warrant | Warrant Met |
|---|-------------|
| Warrant 2: Four-Hour Vehicular Volume | Yes |
| Warrant 3: Peak Hour | Yes |
| Warrant 4: Pedestrian Volume | No |
| Warrant 6: Coordinated Signal System | Yes |
| Warrant 9: Intersection Near a Grade Crossing | No |

Using year 2012 traffic volumes, the intersection of SR 49 (Washington Street) and Shaws Flat Road meets Warrants 2, 3 and 6, demonstrating a signal warrant is warranted, under existing conditions. A summary of the MUTCD warrant information is included in **Appendix D**.

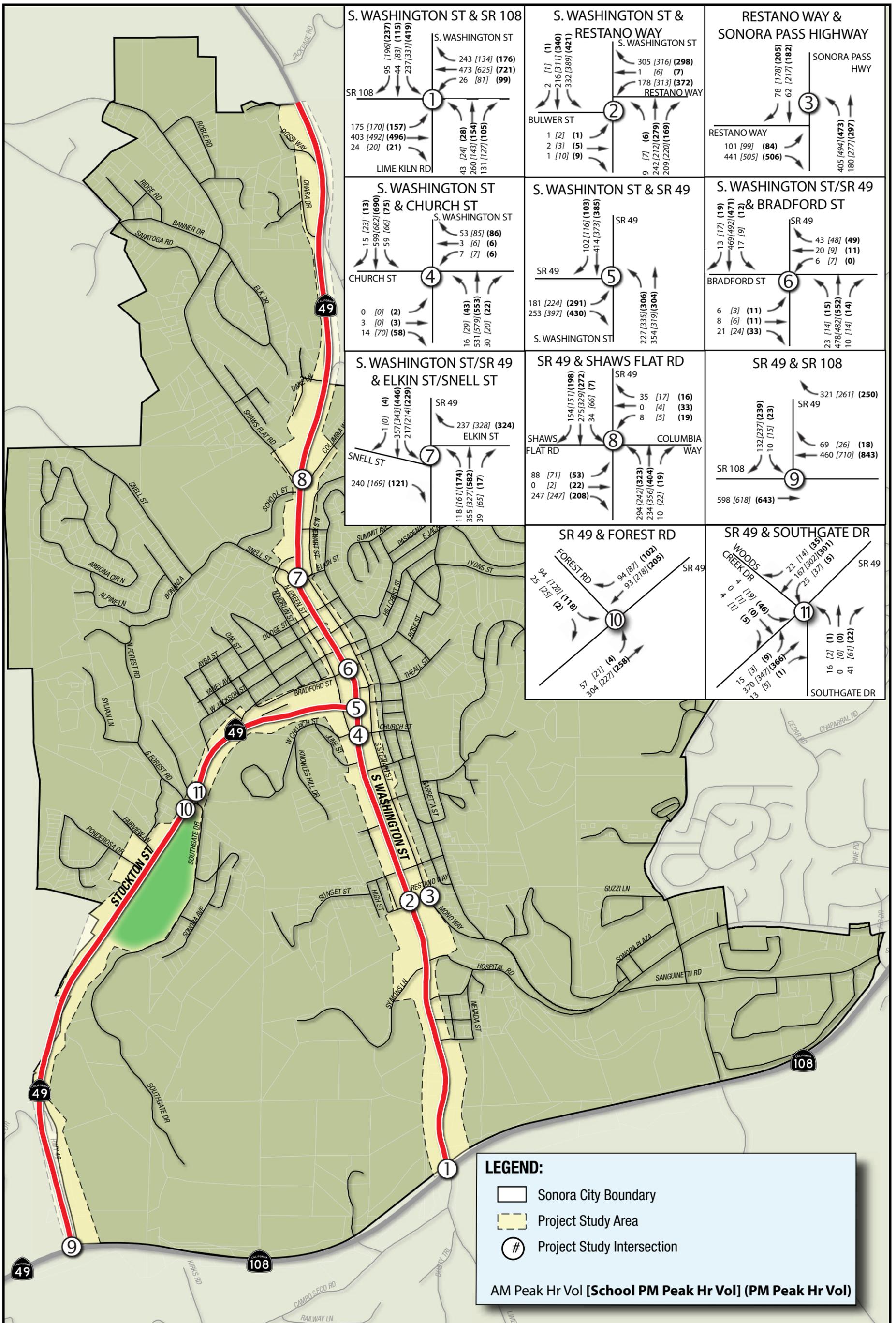


Cumulative Year 2030 Traffic Operations

This section describes the analysis results of the Cumulative Year 2030 existing conditions, including traffic volumes, roadway segment and intersection operation.

TRAFFIC VOLUMES

Year 2030 traffic volumes were obtained using the Tuolumne County Travel Demand Model. Traffic volumes from the 2030 model were post processed to reflect the more recent 2012 traffic count data. **Figure 10, Cumulative Year 2030 Traffic Volumes** demonstrates year 2030 traffic volumes at the project signalized and unsignalized intersections.





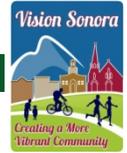
ROADWAY SEGMENTS OPERATION

Roadway segment operation for the cumulative condition roadway network was investigated, using year 2030 traffic volumes. **Table 9** demonstrates the year 2030 ADT and LOS on the seven (7) study roadway segments.

Table 9: Cumulative Average Daily Traffic (ADT) and Level of Service (LOS)

| Roadway | Segment | Roadway Class. | LOS Threshold | 2030 ADT | 2030 LOS |
|---------------------------|--|------------------------|---------------|----------|----------|
| S. Washington Street | Between Highway 108 and Tuolumne Street | 2-Local Collector | LOS C | 9,865 | LOS D |
| S. Washington Street | Between Gold Street and William Street | 2-Local Collector | LOS C | 12,666 | LOS F |
| SR 49 (Washington Street) | Between Linoberg Street and Bradford Street | 2-Lane Arterial | LOS C/D | 14,293 | LOS C |
| SR 49 (Washington Street) | North of Steffen Lane | 2-Lane Arterial | LOS C/D | 10,978 | LOS A |
| SR 49 (Stockton Street) | Between Bradford Street and S. Washington Street | 2-Lane Arterial | LOS C/D | 10,725 | LOS A |
| SR 49 (Stockton Street) | Between SR 108 and Ponderosa Drive | 2-Lane Arterial | LOS C/D | 8,582 | LOS A |
| Greenley Road | Between Delnero Drive and Cabezut Road | 2-Lane Local Collector | LOS C | 11,753 | LOS E |

The roadway functional classifications listed in **Table 4** are in accordance with the Sonora General Plan 2020; however SR 49 (Washington Street) between Linoberg Street and Bradford Street has similar operation to a 2-lane collector, due to the surrounding downtown land uses. Assuming SR 49 (Washington Street) between Linoberg Street and Bradford Street operates as a 2-lane collector would result in the roadway segment operating at a LOS F using year 2030 traffic volumes.



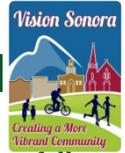
INTERSECTION OPERATIONS

Synchro analysis was performed for the AM, School PM and PM peak hours to determine the intersection operation of the project intersections. **Table 10, Cumulative Year 2030 Intersection HCM Level of Service (LOS)** demonstrates the existing LOS and delay for the eleven (11) project intersections.

Table 10: Cumulative Year 2030 Intersection HCM Level of Service (LOS)

| Intersection | Traffic Control | LOS Threshold | | LOS (delay) | | |
|---|-----------------|---------------|---------|--------------|---------------------|--------------|
| | | | | AM Peak Hour | School PM Peak Hour | PM Peak Hour |
| S. Washington Street & SR 108 | Signalized | C/D | Overall | E (57.2) | D (53.1) | E (64.8) |
| S. Washington Street & Restano Way | Signalized | C | Overall | D (41.6) | D (45.3) | D (51.9) |
| Restano Way & Mono Way | Signalized | C | Overall | C (21.4) | E (58.3) | E (61.9) |
| S. Washington Street & Church Street | Unsignalized | C | EB / WB | C (18.8) | C (20.9) | C (21.3) |
| | | | Overall | A (1.7) | A (3.0) | A (3.3) |
| S. Washington Street & SR 49 | Signalized | C/D | Overall | F (85.9) | E (71.5) | E (75.4) |
| S. Washington / SR 49 & Bradford Street | Unsignalized | C/D | EB / WB | C (22.1) | C (18.0) | C (24.4) |
| | | | Overall | A (3.0) | A (2.3) | A (2.9) |
| S. Washington / SR 49 & Snell Street | Unsignalized | C/D | WB | C (17.7) | C (17.5) | E (35.4) |
| | | | Overall | A (8.3) | A (7.5) | A (10.0) |
| SR 49 & Shaws Flat Road | Unsignalized | C/D | WB | F (>200) | F (>200) | F (>200) |
| | | | Overall | F (125.5) | F (90.7) | F (>200) |
| SR 49 & SR 108 | Unsignalized | C/D | SB | C (15.1) | E (40.1) | F (75.5) |
| | | | Overall | A (1.6) | A (6.6) | B (11.8) |
| SR 49 & Forest Road | Unsignalized | C/D | EB | B (14.3) | C (17.1) | B (11.9) |
| | | | Overall | A (3.3) | A (3.7) | A (2.3) |
| SR 49 & Southgate Drive | Unsignalized | C/D | EB | B (14.4) | C (22.8) | C (23.8) |
| | | | Overall | A (1.8) | A (2.2) | A (2.3) |

Highlighted below LOS threshold.



All of the intersections will operate at acceptable levels of services except for the following locations:

- S. Washington Street and SR 108 – AM and PM peak
- S. Washington Street and Restano Way – AM, School PM and PM peak hours
- Restano Way and Mono Way - School PM and PM peak hours
- S. Washington Street and SR 49 (Stockton Street) - AM, School PM and PM peak hours
- SR 49 (Washington Street) and Snell Street WB approach – PM peak hour
- SR 49 (Washington Street) and Shaws Flat Road WB approach - AM, School PM and PM peak hours
- SR 49 and SR 108 – School PM and PM peak

HCM output of the cumulative conditions intersection operation is included in **Appendix C**.

Bicycle and Pedestrian Facilities

Existing pedestrian facilities were investigated within the project limits. Sidewalks and crosswalks are provided throughout the downtown as demonstrated on **Figure 11, Existing Pedestrian Facilities**. Curb ramps are provided within the project limits, however further investigation should be performed to determine locations of ADA compliant curb ramps.

According to the California Manual on Uniform Traffic Control Devices (MUTCD), there are three (3) types of bicycle facilities.

- Class I Bikeway (Bike Path) – A completely separated right-of-way designation for exclusive use of bicycles and pedestrians
- Class II Bike Lanes - A restricted right-of-way designation for exclusive or semi exclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited
- Class III Bikeway (Bike Route) – Shared facilities to either provide connectivity to other bicycle facilities or to designate a preferred route through high demand corridors.

Within the project limits there are no existing bicycle facilities. However, according to the City of Sonora General Plan, there are several planned bicycle facilities. **Table 11, Planned Bicycle Facilities** demonstrates the planned bicycle facilities included in the City of Sonora General Plan. The planned bicycle facilities are included on **Figure 12, Mobility Facilities in Downtown Sonora** and **Figure 13, Mobility Facilities within the Project Limits**.



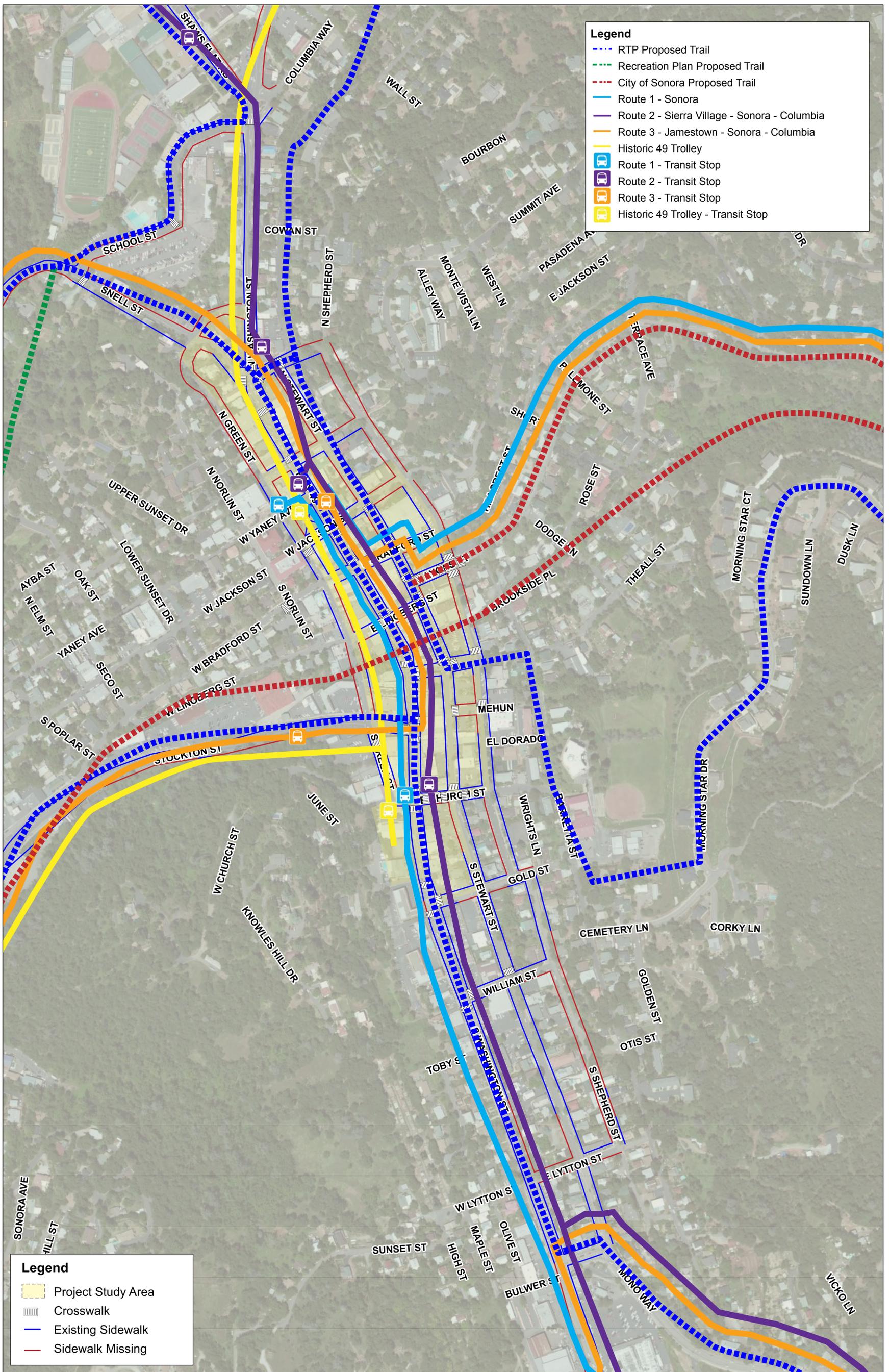
Legend

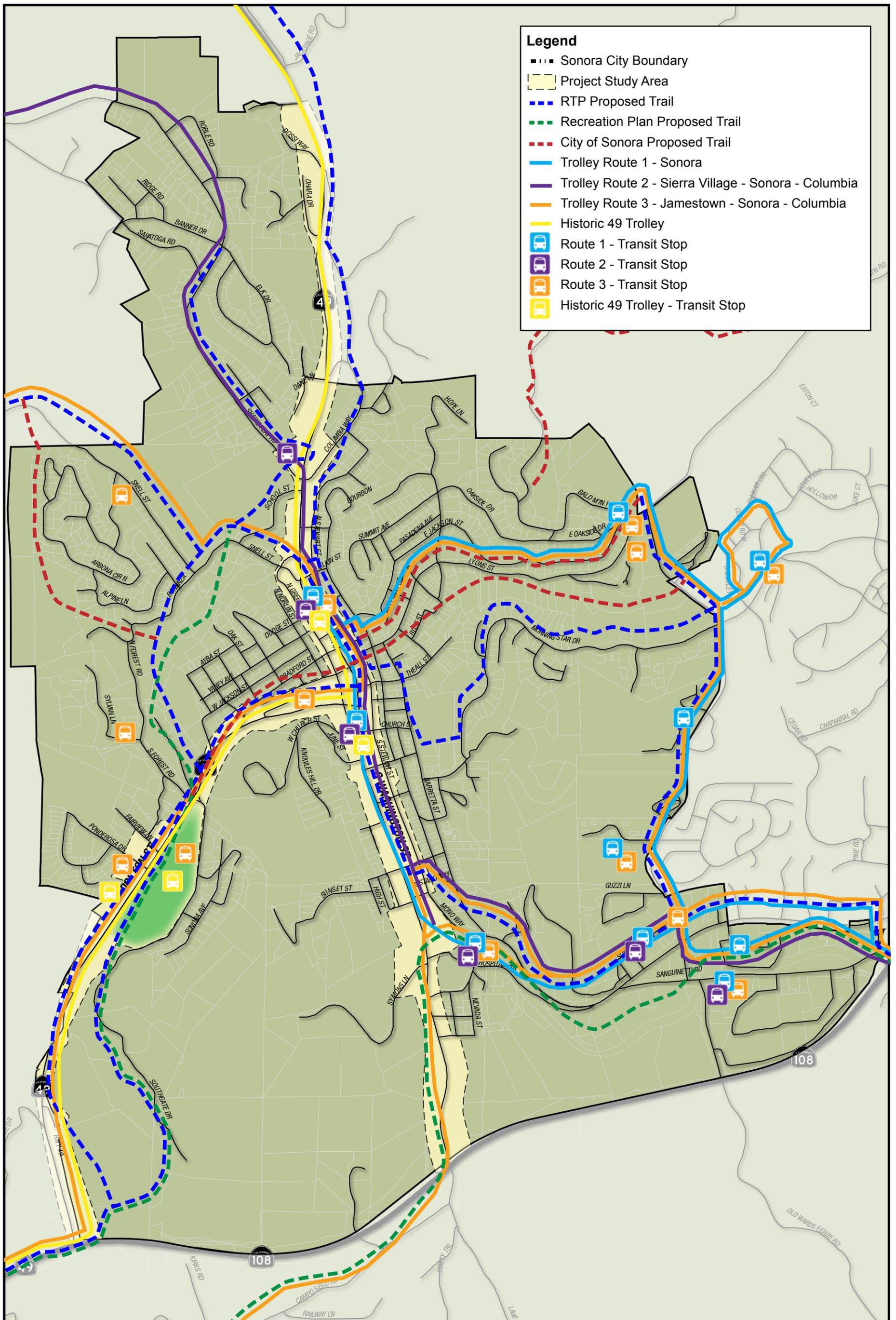
- Project Study Area
- Crosswalk
- Existing Sidewalk
- Sidewalk Missing

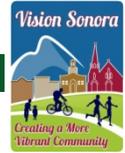


Table 11: Planned Bicycle Facilities

| Bicycle Facility Name | Facility Type | Description |
|--|-----------------|--|
| Connect City of Sonora to Columbia College | Class II or III | From Stewart Street to Columbia Way to SR 49 to Old Sonora Columbia Road to SR 49 to Parrotts Ferry Road to Sawmill Flat Road. |
| Connect Gibbs Ranch Subdivision, Rancho Sonora Subdivision and Sonora Knolls Subdivision with downtown Sonora and Sonora High School | Class I | Widen shoulders along Snell Street from SR 49 to Racetrack Road and on Racetrack Road from Snell Street to Jamestown Road. Provide multi-use trail separating non-motorized facility from motorized traffic. |
| Connect Greenley Road to the Junction Shopping Center | Class II or III | Along SR 108 (Mono Way) from Greenley Road to Loop Road and on Loop Road from SR 108 (Mono Way) to Junction Shopping Center |
| Connect Woods Creek Drive with facilities on Snell Street | Class II | From the intersection of Stockton Road and Woods Creek Drive onto Bonanza Road and on Bonanza Road to proposed facilities on Snell Street. |
| Sunrise Hills / Cabezut Extension | Class II or III | Connect Sunrise Hills / Cabezut Extension to downtown Sonora on Barretta Street, Shepherd Street and Theall Street |
| Stockton Road | Class II or III | Widen shoulders on Stockton Road from the entrance to the fairgrounds to S. Washington Street |
| Connect Banner / Elk Drive Subdivision with downtown Sonora and Sonora High School | Class I | From the Banner / Elk Drive and Shaw’s Flat Road intersection to the intersection of Shaw’s Flat Road and School Street. Provide multi-use trail separating non-motorized facility from motorized traffic. |
| Connect Sonora to Jamestown via Woods Creek | Class I | From Jamestown to Sonora along Woods Creek |
| Woods Creek Trail | Class I | Along Woods Creek Trail from Sonora High School to Woods Creek Park |
| Dragoon Gulch Park | Class I | Along Dragoon Gulch, connecting from Woods Creek Trail to Racetrack Road |
| Sonora Creek Trail | Class I | Along Sonora Creek from Greenley Road to the confluence of Sonora Creek and Woods Creek |
| Shaws Flat Ditch Trail | Class I | From the TUD Water Treatment to east of the City limits |
| Sierra Railroad Trail | Class I | Along the Sierra Railroad continues both east and west of the City limits |
| Lyons Street | Class II or III | Along Lyons Street from Shepherd Street to Greenley Road |







Transit Service

Four (4) transit lines are provided within the project limits, including the following:

- Route 1 – Sonora
- Route 2 – Sierra Village – Sonora – Columbia
- Route 3 – Jamestown – Sonora – Columbia
- Historic 49 Trolley

Transit stops within the project limits for each route consist of the following locations:

- Route 1 Sonora
 - S. Washington and Church Street
 - Courthouse Park

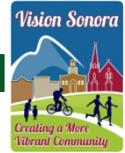
- Route 2 – Sierra Village – Sonora – Columbia
 - S. Washington and Church Street
 - Courthouse Park
 - Sonora High School

- Route 3 – Jamestown – Sonora – Columbia
 - Courthouse Park

- Historic 49 Trolley
 - SR 49 (Stockton Street) and Ponderosa Drive
 - Mother Lode Fairgrounds
 - S. Washington and Church Street
 - Courthouse Park

Figure 11, Mobility Facilities in Downtown Sonora and **Figure 12, Mobility Facilities within the Project Limits** demonstrate the existing transit facilities within the project limits.

Schedules for each route are included in **Appendix E**.



Parking

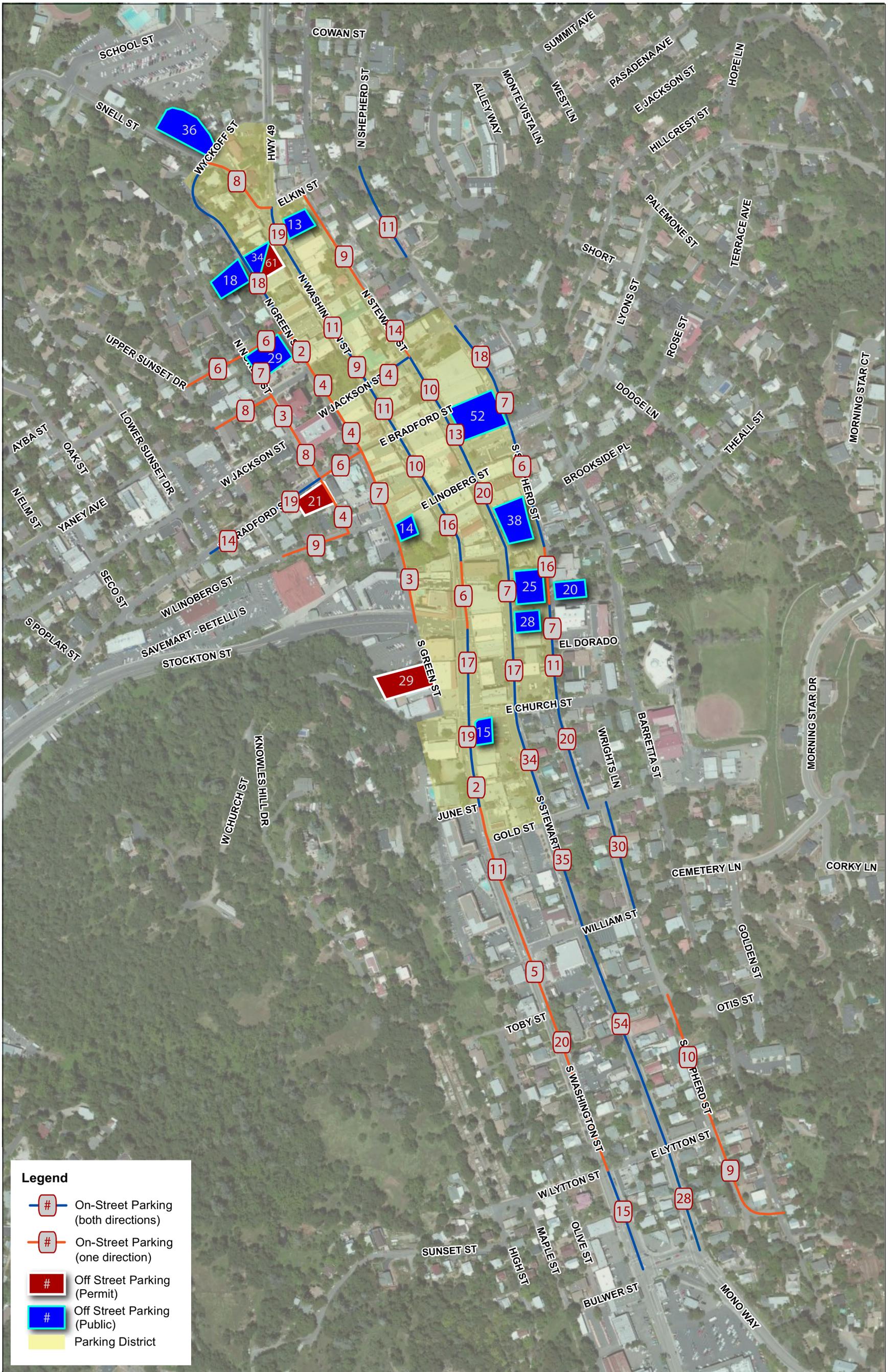
An existing parking inventory was performed on Thursday, November 6, 2012 to determine the number of spaces available and occupied in the City of Sonora. Both on-street and off-street parking within the City of Sonora Parking District was inventoried. **Figure 14, Parking Supply** demonstrates the existing on-street and off-street parking supply in downtown Sonora.

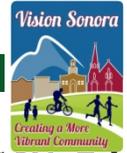
OFF-STREET PARKING

Table 12, Off-street Parking Lot Descriptions includes descriptions of the existing off-street parking lots.

Table 12: Off-street Parking Lot Descriptions

| Lot # | Parking Lot/Structure | General Plan Description | Street Access Location | Parking Spaces |
|--|-----------------------------------|--|--|----------------|
| 1 | Terizch Parking Structure | Adjacent to Sonora City Hall (3 level) | N Washington St btw. Dodge St and Elkin St , Green St btw. Dodge St and Elkin St | 95 |
| 2 | A.N. Francisco Building Structure | County building – 1 st floor public parking | Green Stret btw. Yaney Ave and Dodge St | 29 |
| 3 | Unocal Parking Lot | Fountain Lot across from Opera Hall | Church St btw. S Washington St and Stewart St | 15 |
| 4 | Senior Lounge/Fire Museum | Rother's Corner | SR 49 just south of Elkin St | 13 |
| 5 | Drabkin Parking Lot | Theall & Stewart | Theall St btw. Stewart St and Shepherd St, Shepherd St btw. Theall and Lyons St | 38 |
| 6 | Balestra Parking Lot | Stewart St, S of Mehun | Mehun St btw. Stewart St and Shepherd St | 28 |
| 7 | Green Street Parking Lot | Adjacent to Coffill Park | Green St btw. Linoberg St and Highway 49 | 14 |
| 8 | Red Church Parking Lot | Adjacent to Red Church | Snell St B btw. Wycoff St and School St | 36 |
| 9 | Shepherd Street Lot | Shepherd, North of Mehun | Shepherd St north of Mehun St | 25 |
| 10 | Coffill Parking Lot | Green Street, next to Art Center | Green St btw. Church St and Highway 49 | 29 |
| 11 | Norlin Street Parking | Corner of Bradford and Norlin Streets | Norlin St, south of Bradford | 21 |
| 12 | Oneto Parking Lot | Adjacent to bowling alley Stewart and Lyons Street | Bradford St btw. Stewart and Shepherd | 52 |
| 13 | Green Street | In back of City Hall | Green St north of Dodge St | 18 |
| 14 | Fire Station Parking Lot | Adjacent to Fire Station on Shepherd Street | Shepherd St across from Mehun St | 20 |
| Total Off-street Parking Spaces | | | | 433 |





Off-street parking occupancy was investigated from 11 AM to 2 PM and from 3 PM to 5 PM. **Table 13, Off-street Parking Occupancy**, demonstrates the off-street parking inventoried and the number of spaces available. Based off the data collected the peak parking period was determined.

Table 13: Off-street Parking Occupancy

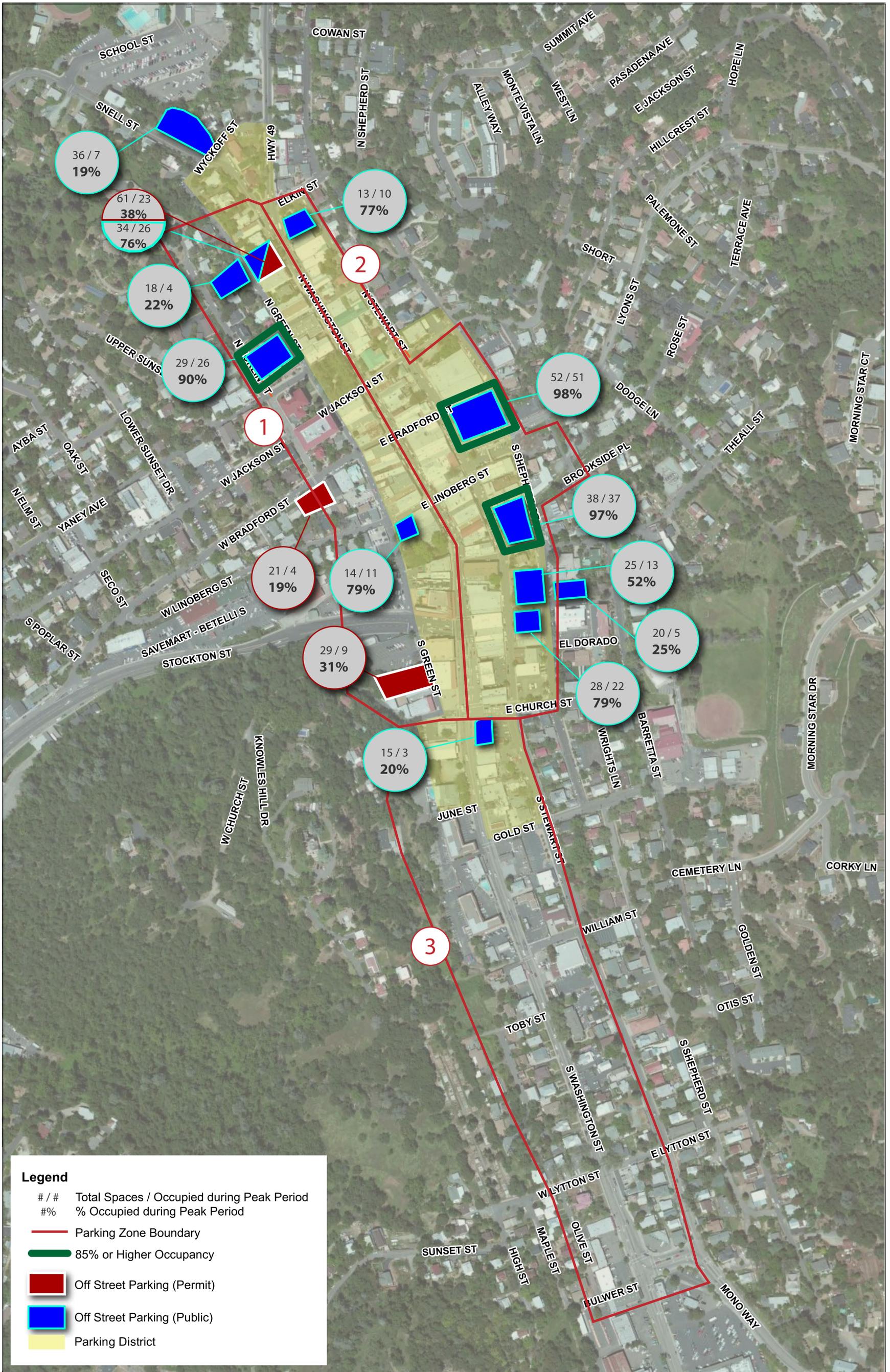
| Lot | Total Parking Spaces | Occupied Parking Spaces (#) | | | | | Max Hour (12 PM) Occupied Parking Spaces | | Notes |
|---|----------------------|-----------------------------|----------|---------|---------|---------|--|-----|-----------------------------|
| | | 11:00 AM | 12:00 PM | 1:00 PM | 3:00 PM | 4:00 PM | # | % | |
| | | LOT 1 (1 st Flr) | 34 | 27 | 26 | 25 | 23 | 19 | |
| LOT 1 (2 nd / 3 rd Flr) | 61 | 22 | 23 | 22 | 17 | 16 | 23 | 38% | Permit only on Mon. to Fri. |
| LOT 2 | 29 | 26 | 26 | 26 | 26 | 26 | 26 | 90% | |
| LOT 3 | 15 | 1 | 3 | 4 | 2 | 3 | 3 | 20% | 3 hour parking |
| LOT 4 | 13 | 11 | 10 | 9 | 9 | 9 | 10 | 77% | 2 hour parking |
| LOT 5 | 38 | 29 | 37 | 38 | 28 | 25 | 37 | 97% | |
| LOT 6 | 28 | 13 | 22 | 18 | 21 | 16 | 22 | 79% | 3 hour parking |
| LOT 7 | 14 | 13 | 11 | 9 | 13 | 13 | 11 | 79% | 3 hour parking |
| LOT 8 | 36 | 8 | 7 | 7 | 6 | 5 | 7 | 19% | |
| LOT 9 | 25 | 10 | 13 | 16 | 10 | 8 | 13 | 52% | |
| LOT 10 | 29 | 12 | 9 | 10 | 12 | 8 | 9 | 31% | Permit only on Mon. to Fri. |
| LOT 11 | 21 | 9 | 4 | 8 | 10 | 8 | 4 | 19% | Permit only on Mon. to Fri. |
| LOT 12 | 52 | 42 | 51 | 49 | 44 | 40 | 51 | 98% | |
| LOT 13 | 18 | 4 | 4 | 4 | 4 | 2 | 4 | 22% | |
| LOT 14 | 20 | 7 | 5 | 6 | 12 | 6 | 5 | 25% | |
| TOTAL | 433 | 234 | 251 | 251 | 237 | 204 | 251 | -- | |
| % | -- | 54% | 58% | 58% | 55% | 47% | 58% | -- | |

Highlighted above 85% occupancy.

The peak parking occupancy occurs from 12 PM to 1 PM with 348 occupied parking spaces, approximately 55% of the total off-street parking spaces in downtown Sonora. Lots 5, 7 and 12 are above 85% occupancy. Lots 1 (2nd / 3rd Floor), 3, 8, 10, 11, 13 and 14 have occupancy below 50%. Lots 1 (2nd / 3rd Floor), 10 and 11 are permit only from Monday to Friday. Lots 3 and 8 are on the outer portions of the high parking occupancy area. Lot 13 is located on Green Street with limited visibility.

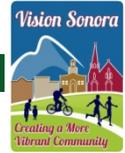


Figure 15, Parking Inventory Off-Street demonstrates the location of each off-street lot, the number of available spaces and the maximum occupied spaces.



Legend

- # / # Total Spaces / Occupied during Peak Period
- #% % Occupied during Peak Period
- Parking Zone Boundary
- 85% or Higher Occupancy
- Off Street Parking (Permit)
- Off Street Parking (Public)
- Parking District



ON-STREET PARKING

On-street parking occupancy was investigated from 11 AM to 2 PM and from 3 PM to 5 PM. **Table 14, On-street Parking Inventory**, includes a list of the roadway segments inventoried for on-street parking. Based off the data collected the peak parking period was determined.

Table 14: On-street Parking Inventory

| Street | From | To | Parking Spaces |
|---------------|---------------|-------------|----------------|
| Norlin St | Dodge St | Linoberg St | 22 |
| Green St | Snell St | Church St | 38 |
| Washington St | Elkin St | Restano St | 171 |
| Stewart St | Elkin St | Restano St | 241 |
| Shepherd St | Elkin St | Restano St | 145 |
| Dodge St | Sunset St | Green St | 12 |
| Bradford St | Sunset St | Green St | 39 |
| Linoberg St | Norlin St | Pine St | 9 |
| Jackson St | Stewart St | Shepherd St | 4 |
| Yaney St | Sunset St | Norlin St | 8 |
| Snell St | Washington St | Wycoff St | 8 |
| Total | | | 697 |

Table 15, On-street Parking Occupancy, demonstrates the on-street parking inventoried and the number of spaces available.



Table 15: On-street Parking Occupancy

| Street | Segment | Side | Total Parking Spaces | Occupied Parking Spaces (#) | | | | | Max Hour (12 PM) Occupied Parking Spaces | | Notes |
|-------------|----------------------|------|----------------------|-----------------------------|----------|---------|---------|---------|--|------|--------------------|
| | | | | 11:00 AM | 12:00 PM | 1:00 PM | 3:00 PM | 4:00 PM | # | % | |
| | | | | | | | | | | | |
| Bradford St | Norlin to Green | S | 6 | 6 | 6 | 6 | 6 | 4 | 6 | 100% | 1 Hour |
| Bradford St | Pine to Norlin | S/N | 19 | 17 | 18 | 17 | 18 | 14 | 18 | 95% | |
| Bradford St | Sunset to Pine | S/N | 14 | 8 | 12 | 11 | 10 | 8 | 12 | 86% | |
| Dodge St | Green to Norlin | S | 6 | 6 | 6 | 6 | 5 | 5 | 6 | 100% | |
| Dodge St | Norlin to Sunset | S | 6 | 6 | 6 | 5 | 6 | 6 | 6 | 100% | |
| Green St | Bradford to Jackson | E | 4 | 4 | 2 | 1 | 3 | 2 | 2 | 50% | Loading |
| Green St | Dodge to Snell | E/W | 18 | 13 | 14 | 10 | 8 | 8 | 14 | 78% | 1 space, 12 Minute |
| Green St | Jackson to Yaney | E | 4 | 4 | 4 | 3 | 4 | 2 | 4 | 100% | 2 Hour |
| Green St | Linoberg to Bradford | W | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 100% | 2 Hour |
| Green St | Stockton to Linoberg | W | 3 | 3 | 3 | 2 | 1 | 2 | 3 | 100% | |
| Green St | Yaney to Dodge | W | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 100% | 20 Minute |
| Jackson St | Sheppard to Stewart | N | 4 | 2 | 3 | 2 | 0 | 0 | 3 | 75% | |
| Linoberg St | Norlin to Pine | S | 9 | 4 | 4 | 4 | 6 | 5 | 4 | 44% | |
| Norin St. | Bradford to Linoberg | W | 4 | 1 | 3 | 2 | 2 | 1 | 3 | 75% | |
| Norin St. | Dodge to Yaney | E | 7 | 6 | 6 | 5 | 4 | 4 | 6 | 86% | 2 Hour |
| Norin St. | Jackson to Bradford | E/W | 8 | 6 | 5 | 3 | 5 | 6 | 5 | 63% | 2 Hour |
| Norin St. | Yaney to Jackson | E | 3 | 3 | 1 | 0 | 0 | 0 | 1 | 33% | Prisoner Transfer |
| Subtotal 1 | | | 124 | 98 | 102 | 84 | 86 | 76 | 102 | | |



Table 15: On-street Parking Occupancy (cont.)

| Street | Segment | Side | Total Parking Spaces | Occupied Parking Spaces (#) | | | | | Max Hour (12 PM) Occupied Parking Spaces | | Notes |
|-------------|----------------------|------|----------------------|-----------------------------|----------|---------|---------|---------|--|------|-------------------|
| | | | | 11:00 AM | 12:00 PM | 1:00 PM | 3:00 PM | 4:00 PM | # | % | |
| Sheppard St | Bradford to Lyons | E/W | 7 | 3 | 6 | 7 | 4 | 3 | 6 | 86% | |
| Sheppard St | Church to Gold | E/W | 20 | 10 | 8 | 10 | 11 | 11 | 8 | 40% | |
| Sheppard St | El Dorado to Church | E/W | 11 | 10 | 7 | 8 | 9 | 6 | 7 | 64% | 4 spaces, 3 Hour |
| Sheppard St | Elkin to Dodge | E/W | 11 | 7 | 7 | 7 | 7 | 7 | 7 | 64% | |
| Sheppard St | Gold to William | E/W | 30 | 3 | 4 | 4 | 3 | 2 | 4 | 13% | |
| Sheppard St | Jackson to Bradford | E/W | 18 | 9 | 5 | 7 | 7 | 9 | 5 | 28% | 2 spaces, Loading |
| Sheppard St | Livingston to Lytton | E | 10 | 1 | 2 | 2 | 2 | 2 | 2 | 20% | |
| Sheppard St | Lyons to Theall | E/W | 6 | 4 | 5 | 6 | 3 | 2 | 5 | 83% | 2 Hour |
| Sheppard St | Lytton to Baretta | W | 9 | 2 | 1 | 2 | 1 | 1 | 1 | 11% | |
| Sheppard St | Mehun to El Dorado | E/W | 7 | 6 | 3 | 7 | 6 | 5 | 3 | 43% | 2 spaces, 3 Hour |
| Sheppard St | Theall to Mehun | E/W | 16 | 5 | 6 | 13 | 8 | 8 | 6 | 38% | |
| Snell St | Wycoff to Washington | E | 8 | 8 | 8 | 4 | 5 | 3 | 8 | 100% | |
| Stewart St | Bradford to Jackson | E/W | 10 | 6 | 5 | 7 | 6 | 6 | 5 | 50% | 2 Hour |
| Stewart St | Church to Mehun | E/W | 17 | 9 | 10 | 12 | 15 | 10 | 10 | 59% | 2 Hour |
| Stewart St | Dodge to Elkin | E | 9 | 1 | 1 | 2 | 2 | 1 | 1 | 11% | |
| Stewart St | Gold to Church | E/W | 34 | 3 | 4 | 4 | 3 | 4 | 4 | 12% | |
| Stewart St | Jackson to Dodge | E | 14 | 5 | 3 | 2 | 0 | 1 | 3 | 21% | |
| Subtotal 2 | | | 237 | 92 | 85 | 104 | 92 | 81 | 85 | | |



Table 15: On-street Parking Occupancy (cont.)

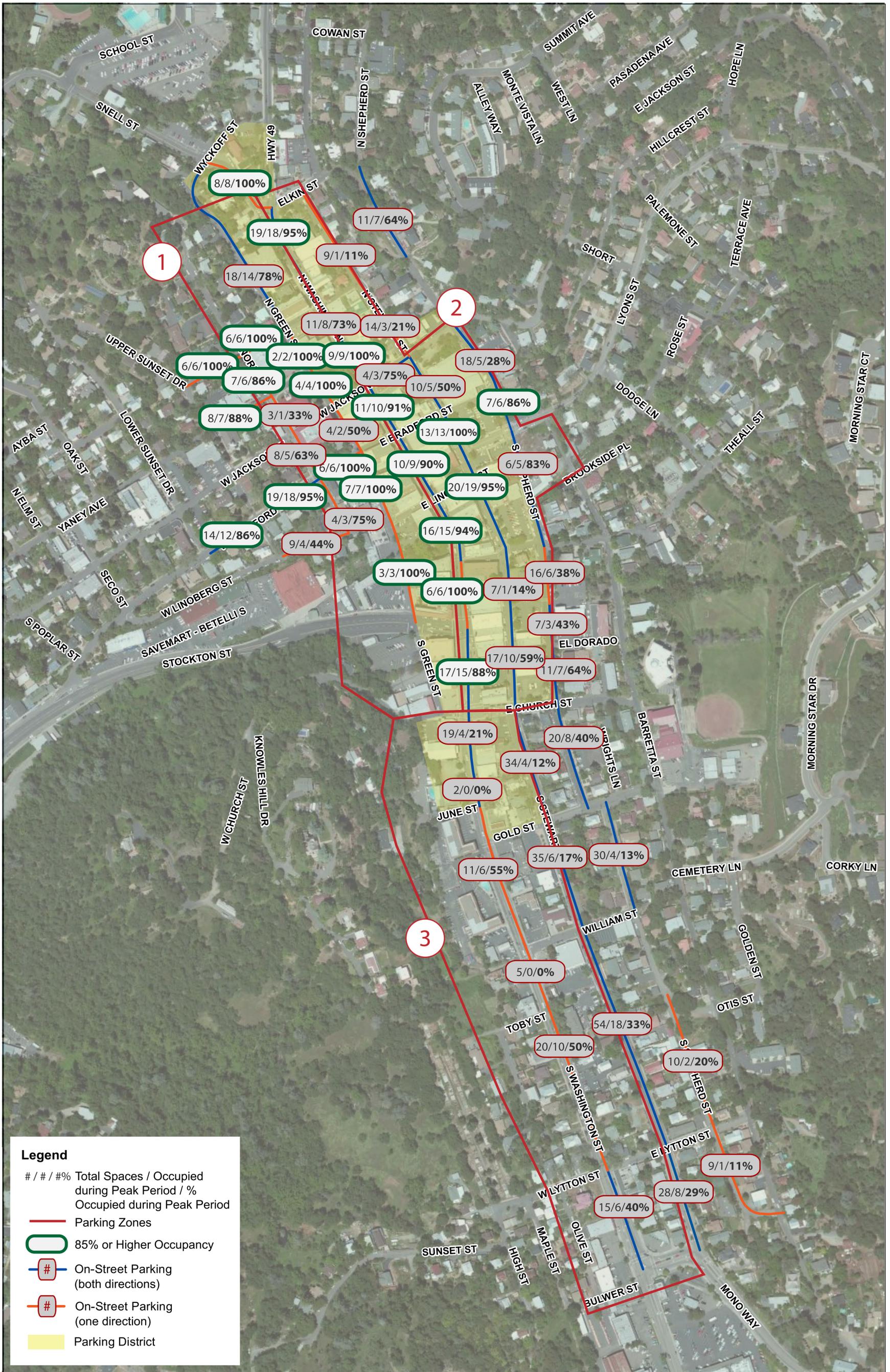
| Street | Segment | Side | Total Parking Spaces | Occupied Parking Spaces (#) | | | | | Max Hour (12 PM) Occupied Parking Spaces | | Notes |
|---------------|----------------------|------|----------------------|-----------------------------|----------------------|---------|---------|---------|--|-----|------------------|
| | | | | 11:00 AM | 12:00 PM | 1:00 PM | 3:00 PM | 4:00 PM | # | % | |
| | | | | Stewart St | Linoberg to Bradford | E/W | 13 | 12 | 13 | 7 | |
| Stewart St | Lytton to William | E/W | 54 | 18 | 18 | 16 | 17 | 15 | 18 | 33% | |
| Stewart St | Mehun to Theall | E/W | 7 | 2 | 1 | 1 | 1 | 2 | 1 | 14% | 2 Hour |
| Stewart St | Restano to Lytton | E/W | 28 | 5 | 8 | 9 | 11 | 8 | 8 | 29% | |
| Stewart St | Theall to Linoberg | E/W | 20 | 14 | 19 | 20 | 13 | 12 | 19 | 95% | 2 Hour |
| Stewart St | William to Gold | E/W | 35 | 5 | 6 | 4 | 5 | 4 | 6 | 17% | 4 spaces, 2 Hour |
| Washington St | Bradford to Linoberg | E/W | 10 | 8 | 9 | 8 | 6 | 6 | 9 | 90% | 2 Hour |
| Washington St | Church to June | E/W | 19 | 1 | 4 | 6 | 2 | 7 | 4 | 21% | 2 Hour |
| Washington St | Dodge to Yaney | E/W | 11 | 8 | 8 | 10 | 10 | 9 | 8 | 73% | 2 Hour |
| Washington St | Elkin to Dodge | E/W | 19 | 17 | 18 | 16 | 16 | 13 | 18 | 95% | 2 Hour |
| Washington St | Gold to William | E/W | 11 | 6 | 6 | 6 | 4 | 6 | 6 | 55% | 2 Hour |
| Washington St | Jackson to Bradford | E/W | 11 | 8 | 10 | 10 | 10 | 7 | 10 | 91% | 2 Hour |
| Washington St | June to Gold | W | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | 2 Hour |
| Washington St | Linoberg to Theall | E/W | 16 | 14 | 15 | 15 | 12 | 14 | 15 | 94% | 2 Hour |
| Washington St | Lytton to Restano | E/W | 15 | 5 | 6 | 7 | 2 | 3 | 6 | 40% | |
| Washington St | Stockton to Church | E/W | 17 | 10 | 15 | 15 | 12 | 13 | 15 | 88% | 2 Hour |
| Subtotal 3 | | | 288 | 133 | 156 | 150 | 133 | 128 | 156 | | |



Table15: On-street Parking Occupancy (cont.)

| Street | Segment | Side | Total Parking Spaces | Occupied Parking Spaces (#) | | | | | Max Hour (12 PM) Occupied Parking Spaces | | Notes |
|----------------------------------|--------------------|------|----------------------|-----------------------------|----------|---------|---------|---------|--|------|--------|
| | | | | 11:00 AM | 12:00 PM | 1:00 PM | 3:00 PM | 4:00 PM | # | % | |
| Washington St | Theall to Stockton | E | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 100% | 2 Hour |
| Washington St | Toby to Lytton | W | 20 | 6 | 10 | 1 | 5 | 7 | 10 | 50% | |
| Washington St | William to Toby | W | 5 | 0 | 0 | 1 | 0 | 0 | 0 | 0% | |
| Washington St | Yaney to Jackson | E/W | 9 | 8 | 9 | 9 | 8 | 5 | 9 | 100% | 2 Hour |
| Yaney Ave | Norlin to Maiden | N | 8 | 7 | 7 | 7 | 5 | 5 | 7 | 88% | |
| Subtotal 4 | | | 48 | 27 | 32 | 24 | 24 | 23 | 32 | | |
| Subtotal 1 | | | 124 | 98 | 102 | 84 | 86 | 76 | 102 | | |
| Subtotal 2 | | | 237 | 92 | 85 | 104 | 92 | 81 | 85 | | |
| Subtotal 3 | | | 288 | 133 | 156 | 150 | 133 | 128 | 156 | | |
| Subtotal 4 | | | 48 | 27 | 32 | 24 | 24 | 23 | 32 | | |
| Total | | | 697 | 350 | 375 | 362 | 335 | 308 | 375 | | |
| Percentage | | | | 50% | 54% | 52% | 48% | 44% | 54% | | |
| Highlighted above 85% occupancy. | | | | | | | | | | | |

The peak parking occupancy occurs from 12 PM to 1 PM with 375 occupied parking spaces, approximately 54% of the total on-street parking spaces in downtown Sonora. **Figure 16, Parking Inventory On-Street**, highlights the on-street parking in downtown Sonora with 85% or higher occupancy. As demonstrated on the graphic, downtown Sonora from approximately Elkin Street to Church Street and Green Street to Stewart Street experiences an occupancy of 85% or greater.





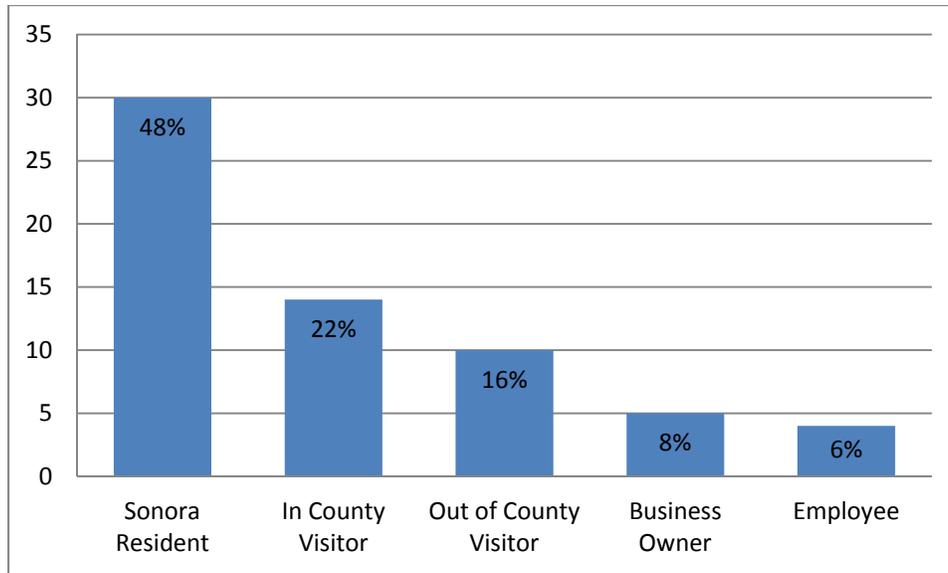
PARKING INTERCEPT SURVEYS

A parking survey was performed between Thursday, January 17, 2013 and Saturday, January 19, 2013. A total of 63 surveys were collected. **Figure 17** through **Figure 25** demonstrate the results of the survey. The survey questions included the following questions:

1. Are you a:
 - a. Sonora Resident
 - b. In county visitor
 - c. Out of county visitor
 - d. Business owner
 - e. Employee, how many times per week?
 - f. Other
2. What is the purpose of your visit to downtown?
 - a. Work
 - b. Shop
 - c. Eat
 - d. Government Services (Courthouse, County, City, etc)
 - e. Sightseeing / tourism
 - f. Other
3. How long will you park in downtown?
 - a. Less than 30 minutes
 - b. 30-60 minutes
 - c. 1-2 hours
 - d. 2-4 hours
 - e. more than 4 hours
4. Was it easy to find parking?
 - a. Yes
 - b. No
5. Would you pay for parking if it was closer and easy to find?
 - a. Yes
 - b. No
6. What do you like most about Downtown Sonora?
 - a. History
 - b. Shops
 - c. Restaurants
 - d. Small town feel / quaintness
 - e. Personal customer service
 - f. Other
7. What do you not like about Downtown:
 - a. Parking availability
 - b. Noise
 - c. Traffic congestion
 - d. Sidewalk condition
 - e. Other
8. Are you staying overnight?
 - a. Yes
 - b. No
9. Would you visit again?
 - a. Yes
 - b. No
10. Do you want to add anything else?

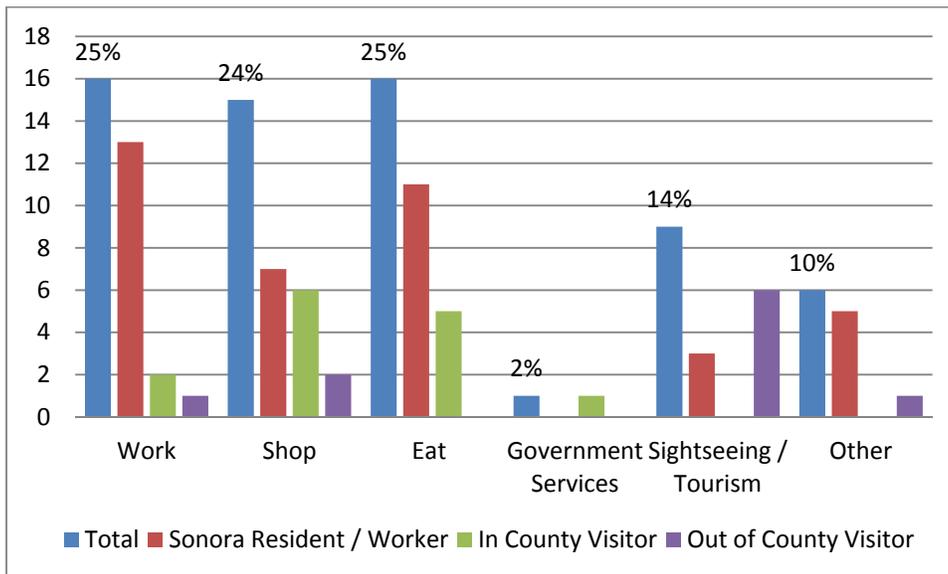


Figure 17: Question 1 - Are you a:



Most people surveyed were local, approximately 84%, living or working in Sonora or Tuolumne County. Only 16% surveyed were from outside of Tuolumne County.

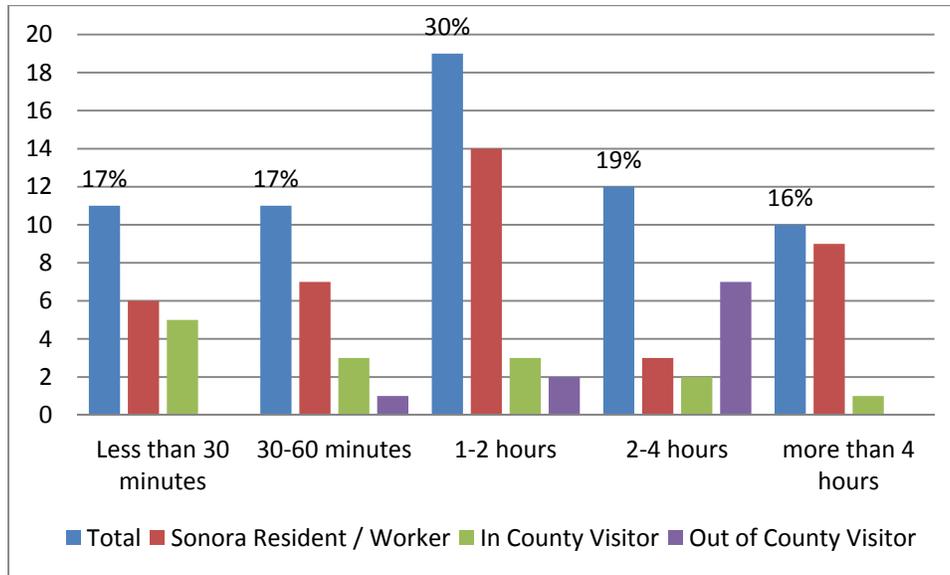
Figure 18: Question 2 - What is the purpose of your visit to downtown?



People go to downtown Sonora for a variety of activities, working and eating being the most common activities for a Sonora resident and sightseeing being the most common activity for an out of County visitor.

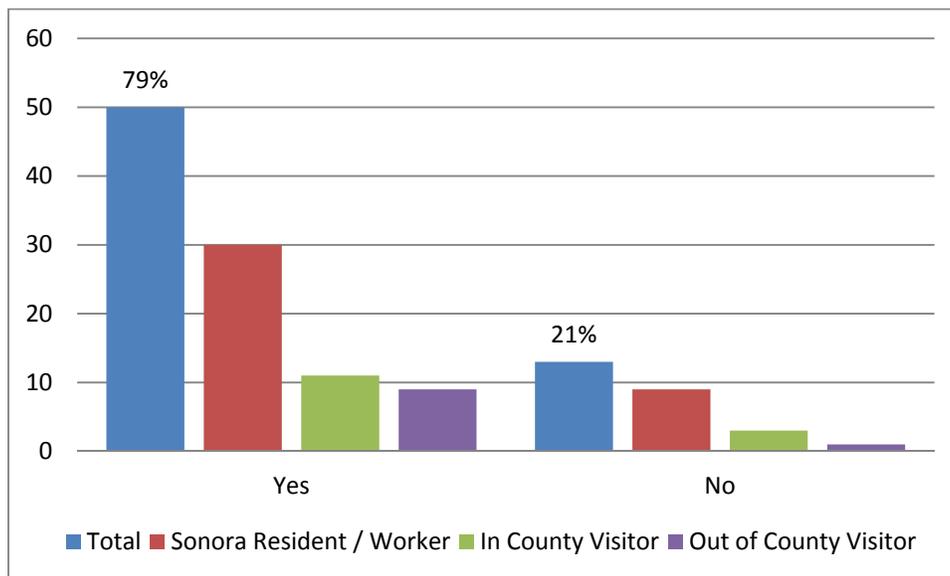


Figure 19: Question 3 – How long will you park downtown?



People surveyed park for a variable amount of time, the majority of Sonora residents parked for 1 to 2 hours and out of County visitors for 2 to 4 hours.

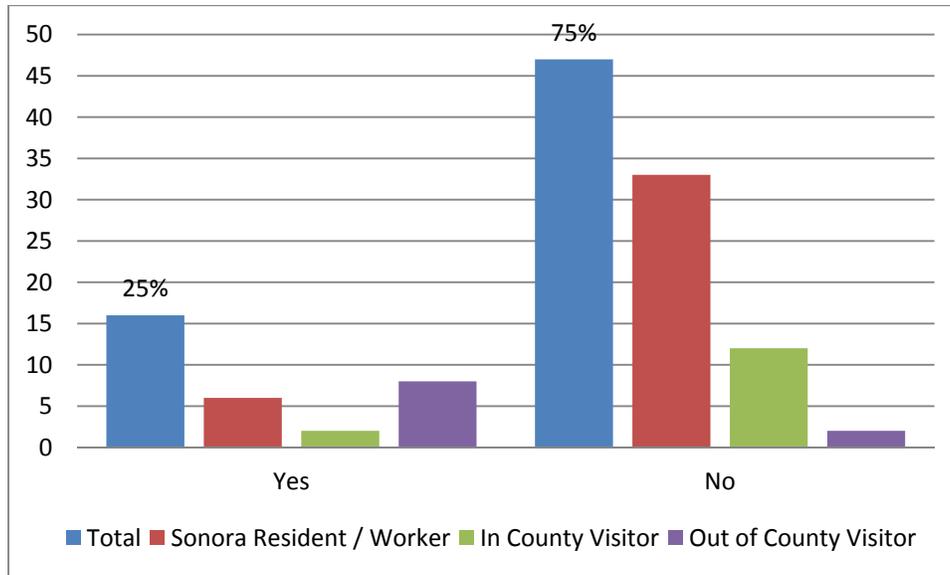
Figure 20: Question 4 – Was it easy to find parking?



Both Sonora residents and out of County visitors found parking easy to find when surveyed, 77% and 90%, respectively; however people noted that during the summer months, the tourist season, it is hard to find parking.

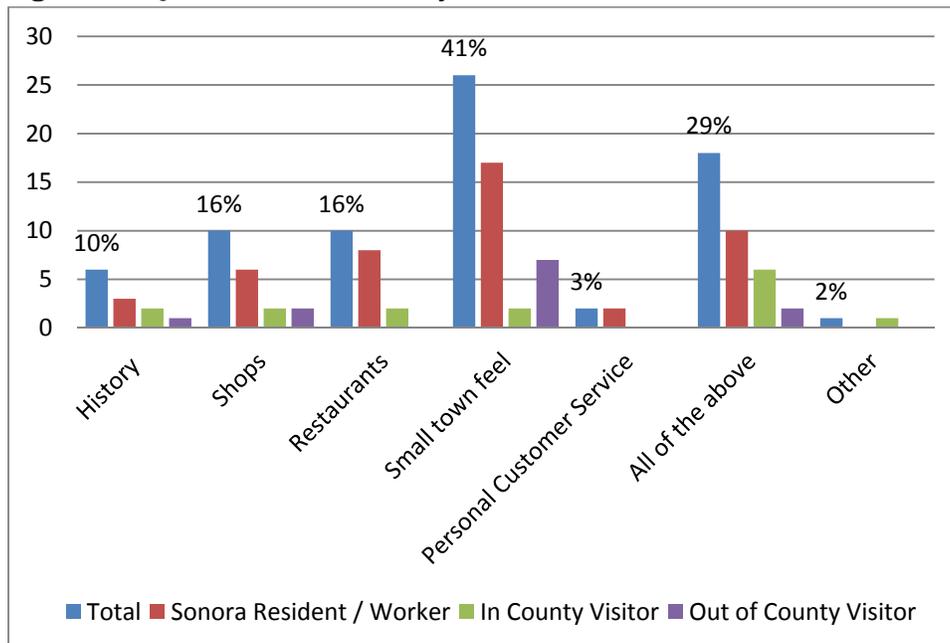


Figure 21: Question 5 – Would you pay for parking if it was close and easy to find?



Out of County visitors are most willing to pay for parking if it is close and easy to find. Eighty percent said yes, they would be willing to pay for parking as compared to only 15% of Sonora residents.

Figure 22: Question 6 – What do you like most about Downtown Sonora?

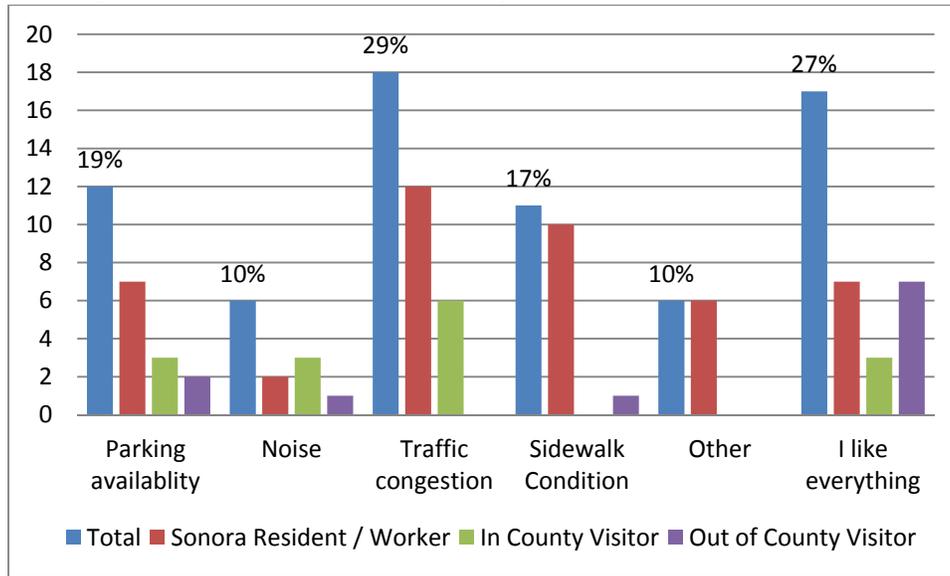


**Survey takers selected all that applied.*



When asked what they liked most about downtown Sonora, 41% said the small town feel and 29% said all of the above.

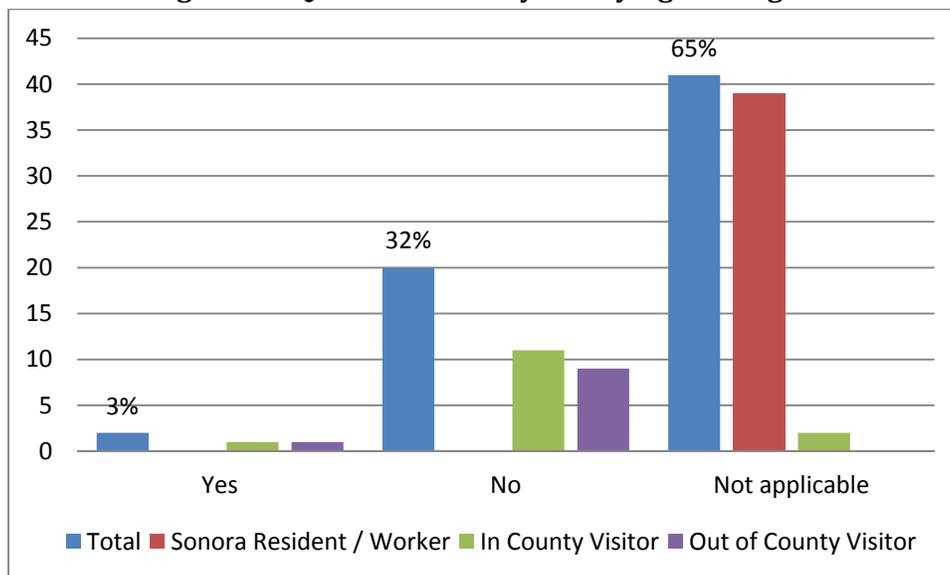
Figure 23: Question 7 - What do you not like about Downtown?



**Survey takers selected all that applied.*

Twenty-nine percent of people surveyed stated traffic congestion was what they did not like about downtown Sonora, followed by 19% saying parking availability. Twenty-seven percent said they liked everything about Sonora.

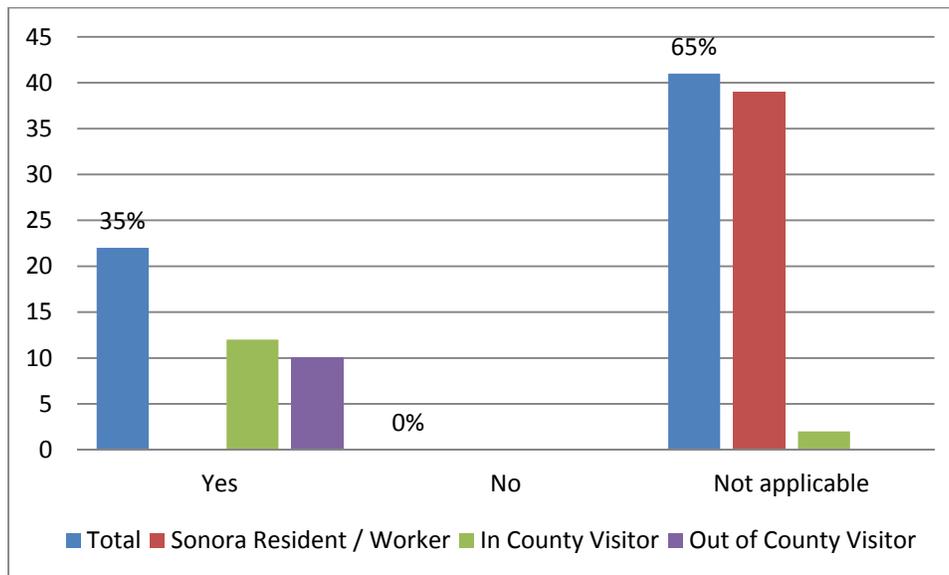
Figure 24: Question 8 - Are you staying overnight?





Forty-one of the people surveyed answered that it was not applicable if they were staying overnight, due to them being and Sonora resident or worker or an in County visitor that lived nearby. Of the remaining 22 surveyed, 10% stated they planned on stayinf overnight.

Figure 25: Question 9 – Would you visit again?



Forty-one of the people surveyed answered that it was not applicable if they were staying overnight, due to them being and Sonora resident or worker or an in County visitor that lived nearby. Of the remaining 22 surveyed, 100% stated they would visit Sonora again.

When survey participants were asked if they would like to add any additional comments, the following comments were received:

- Need more parking. During lunch it's harder to park.
- Stop accepting state and federal funding for transportation projects.
- Parking is usually difficult.
- The farmer's market is unorganized.
- More public parking.
- Sonora is a great place.
- I'm against metered parking. Parking is easy to find.
- I wish the Vision Sonora project limits were wider.
- Sonora Inn needs to be repaired.
- Sonora needs more activities and they need to be better advertised.
- Build Trader Joe's.
- SR 49 has too much traffic. Truck traffic should be prohibited.
- It's hard to park on weekends.
- Parking is harder during the tourist season.
- More music venues.
- There's dog poop on the sidewalks.
- Downtown could be more bike friendly.
- Parking is bad.
- I appreciate Sonora more with each visit.