



5. MOBILITY AND TRANSPORTATION

This chapter summarizes existing conditions and issues relevant to the roadway network, transit, walking and bicycling, and parking in the proposed planning area.

5.1 Street Network

Existing Street Network

Downtown Santa Rosa and the Specific Plan area are linked to the primary regional roadway network by the US 101 and State Route (SR) 12 freeways. US 101 connects Santa Rosa and Sonoma County to Mendocino County and beyond to the north, and San Francisco and beyond to the south. SR 12 connects Santa Rosa to Sebastopol to the west, and to the east connects to the cities of Sonoma and Napa, as well as Interstate 80 in Solano County. Freeway interchanges within the planning area include the Downtown-Third Street and College Avenue interchanges on US 101. Access to US 101 and SR 12 freeways is via interchanges at Brookwood Avenue-E Street and Dutton Avenue. Following are the major arterials that serve as key vehicular linkages to and within the planning area:

Major North-South Arterials

- Mendocino Avenue
- Santa Rosa Avenue
- Cleveland Avenue
- Brookwood Avenue
- B Street
- E Street
- Dutton Avenue

Major East-West Arterials

- College Avenue
- Third Street
- Fourth Street
- Ninth Street
- Sonoma Avenue
- Sebastopol Road
- Maple Avenue

US 101 bisects the planning area. The primary corridor connecting the east and west sides of the Planning area is Third Street, which as noted above has an interchange at US 101. Secondary east-west connections crossing US 101 include Ninth Street and Sixth Street. To the west of US 101, a continuous north-south surface street corridor is formed by the combination of Cleveland Avenue, Wilson Street, Railroad Street, and Olive Street. The east side of US 101 has a “grid” network of streets. Within the core downtown area, B Street serves as a primary north-south corridor. Other major north-south connections to areas beyond the planning area include Mendocino Avenue, which extends northward from downtown, and Santa Rosa Avenue which extends southward. On the eastern side of downtown, E Street serves as the primary north-south corridor and includes an interchange south of the Planning area at SR 12.

Vehicular access to the downtown Sonoma-Marin Area Rail Transit (SMART) commuter rail station is available at the western termini of Fourth and Fifth Streets in Railroad Square. While the SMART doesn’t manage any parking inventory at the station, the City of Santa Rosa’s manages a pick-up and drop-off zone, hourly rate parking, and long term parking within two blocks and at the Downtown Transit Mall. The downtown Transit Mall is located on Second Street between B Street and Santa Rosa Avenue and is adjacent to a parking deck. As with the SMART station, while the Transit Mall does encounter some private vehicle pick-up and drop-off activity on its periphery, it is not a major auto traffic generator., and there is currently sufficient paid public parking in the form of on-street and City of Santa Rosa managed parking lots and garages as detailed in the Santa Rosa Citywide Progressive Parking Management Strategy study from 2017.

Changes since 2007 Plan

Several significant changes to the circulation network have occurred since the 2007 Downtown Station Area Specific Plan was adopted. The most prominent change has been the reunification of Courthouse Square, reverting to the historic street pattern that existed prior to the connection of Santa Rosa Avenue to Mendocino Avenue through the center of the square. The project also re-established two local streets on the periphery of the square, Hinton and Exchange Avenues. Several additional changes made by the City were completed to accommodate the shift in traffic patterns resulting from the reunification, including conversion of Tenth Street to one-way eastbound, conversion of Fifth Street to a two-way street between B Street and Mendocino Avenue, as well as lane striping and traffic signal modifications to facilitate increased use of the B Street corridor for north-south traffic within and through downtown. Since reunification, traffic volumes on Santa Rosa Avenue south of First Street have dropped by approximately 35 percent, and volumes on Mendocino Avenue-Healdsburg Avenue south of College Avenue have dropped by approximately 20 percent. Much of this volume decrease is likely attributable to a reduction in the number of drivers attempting to bypass congestion on US 101 by using the parallel Santa Rosa Avenue-Mendocino Avenue corridors; most of these drivers were passing through downtown rather than traveling to or from downtown and are now likely remaining on the freeway.

Another substantial change to the circulation network since 2007 is the connection of Sixth Street under US 101 via a new underpass. This change improved east-west connectivity not only for drivers but also for pedestrians and bicyclists. As part of the new connection, the segment of Morgan Street between Fifth and Sixth streets was converted to one-way, and a new traffic signal was added at Davis Street/Sixth Street.

The City has also added on-street bicycle lanes or bicycle boulevards on several Planning area corridors including Third Street, Santa Rosa Avenue, B Street (southbound), Sonoma Avenue, the Sixth-Seventh Street “linkage” between Davis Street and Mendocino Avenue, Ninth Street to the west of Cleveland Avenue, Humboldt Street, the Joe Rodota trail and Prince Memorial Greenway, and Sebastopol Road to the east of the SMART tracks. In some cases, the addition of these bike lanes also involved the elimination of one or more vehicle through traffic lanes. A multi-use path along the SMART tracks from Third Street to Fourth Street and Seventh Street to College Avenue has also been added.

Also relevant to the auto circulation network, are the changes in public transit available. First, Transit service has substantially changed since 2007 as the City completed the first comprehensive re-design of its CityBus system (i.e. which proposed traffic related solutions like transit signal priority corridors) as detailed in 5.4. Additionally, SMART



Third Street looking east toward downtown from the Plaza

commuter rail service commenced operation in 2017. Several streets in the Planning area cross the SMART tracks including College Avenue, Ninth Street, Eighth Street, Seventh Street, Sixth Street, Third Street, and Sebastopol Road. All crossings include railroad crossing gates, warning bells, lights, pedestrian enhancements, and design treatments that preclude drivers from maneuvering around lowered gate arms. Because Santa Rosa is a designated “quiet zone,” engineers only sound the train horn at crossings when they observe a potential safety concern. Based on the current SMART schedule, gates are typically activated three to four times each during the a.m. and p.m. peak hours, with northbound and southbound trains serving the Railroad Square station within several minutes of one another.

5.2 Traffic Conditions

Existing Traffic Volumes

Intersection and roadway segment traffic counts were obtained from the City for locations throughout the Planning area for the years 2017-2019, while school was in session. This data was used to estimate average daily traffic (ADT) volumes on key streets as shown in Figure 5-1.

Level of Service

The Concept of Level of Service

In transportation/traffic studies, Level of Service (LOS) has traditionally been determined for vehicle traffic at intersections and on roadway segments based on vehicle delays and speeds. LOS is intended to be a mechanism for communicating the performance of a transportation facility in a non-technical manner, using the results of detailed transportation analyses. Letter-based categories ranging from LOS A to LOS F are used to capture the performance of a facility. With respect to automobile facilities, LOS A represents conditions in which drivers



Fourth Street at Mendocino Avenue after the reunification of Courthouse Square



Sixth Street underpass completed in 2013

encounter minimal delays, whereas LOS F represents congested conditions in which drivers encounter substantial delay and difficulty

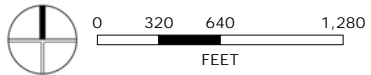
Figure 5.1 Existing Average Daily Traffic Volumes

Legend

xx,xxx Existing Average Daily Traffic Volume

--- SMART Rail

--- Undercrossing



Source: Quest, 2019; City of Santa Rosa, 2018; Page & Turnbull, 2019; Dyett & Bhatia, 2019

progressing. The use of LOS has been applied to automobile facilities for many years.

It is important to distinguish that an automobile facility operating at LOS A may be undesirable as it may be characterized as having excessive capacity that can adversely affect other travel modes (through unnecessarily wide pedestrian crossing distances and promotion of inappropriately-high speeds, for instance). Further, achieving a high automobile LOS can result in disproportionately high construction and maintenance costs. In many cases, automobile operation in the LOS D to LOS E range during peak hours in built-out urban areas may reflect a reasonable balance among its influences on other travel modes, auto mobility, and cost of constructing and maintaining the facility itself. Some communities have also chosen to accept automobile LOS F operation or eliminate consideration of LOS altogether in areas where non-auto modes are prioritized, such as in downtown and/or transit-oriented areas including downtown Santa Rosa.

Standards

Policy T-D-1 of the Santa Rosa General Plan states that the City will maintain a Level of Service (LOS) D or better along all major corridors, though exceptions to meeting this standard are allowed downtown. Of the four analyzed roadway corridors, the two segments of Third Street and the length of B Street would be considered downtown and not subject to the LOS D standard. Because the College Avenue corridor runs along the boundary of (versus within) downtown, as does a portion of the Dutton Avenue corridor, for the purposes of this evaluation the LOS D standard is applied on these streets.

Methodology

The roadway segment Level of Service methodology found in Chapter 17, "Urban Street Segments," of the Highway Capacity Manual, Transportation Research Board, 2010, is the basis of the automobile LOS analysis. This method does not address the capacity of a facility, but rather determines a LOS based on the calculated percentage of the

street's base free-flow speed. In essence, congestion occurs as traffic volumes increase, and the overall travel speed is reduced due to increased delay. Therefore, the slower the speed, the lower that speed is as a percentage of free-flow speed, and the lower the Level of Service. Corridor levels of service were assessed using the software applications Synchro and Simtraffic. Synchro is used to analyze operation at each of the signalized intersections along a segment, which is where most delay is encountered. Simtraffic is an extension of Synchro that simulates vehicle progression along a corridor, considering the operation of individual signals as well as influences such as interactions among signals, queue spillback, and merging activity. The average of ten randomly-seeded Simtraffic runs was used to determine average travel speeds along the study corridors. Note that the average travel speeds include the time drivers spend both moving and while stopped; in other words, they truly represent an average rather than an actual moving speed maintained by drivers along the entire length of the segment.

Traffic volumes obtained within the past two years were used for the analysis, as was existing signal timing and phasing parameters obtained from the City. Roads chosen for analysis are major arterials that both provide primary access to the Specific Plan area, would be most likely to be affected by future growth, and were also analyzed in the original DSASP and its EIR. Traffic volume data for Santa Rosa Avenue was collected after preparation of this Existing Conditions Report but will be added to the DSASP Update EIR. Traffic volumes within the downtown area are generally higher during the weekday afternoon commute than in the morning, and traffic congestion more apparent, so the evaluation focuses on conditions during the p.m. peak hour.

Existing Traffic Conditions

Under existing conditions, all the study segments are operating acceptably at LOS D or better. A summary of the roadway segment level of service calculations is shown in Table 5-1.

Vehicles Miles Traveled (VMT)

Background

A common indicator used to quantify the amount of motor vehicle use is Vehicle Miles Traveled, or VMT. VMT represents the total number of miles driven per day by persons traveling to and from a defined area. Many factors affect VMT, including the average distance residents commute to work, school, and shopping, as well as the proportion of trips that are made by non-automobile modes. Areas that have a diverse land use mix and facilities for non-automobile modes, including transit, tend to generate lower VMT than auto-oriented suburban areas where land uses are typically segregated. Further, cities and regions where the jobs/housing ratio is balanced generate a lower VMT than areas where most residents commute long distances to work.

In California, the use of VMT instead of LOS as a metric to assess transportation-related environmental impacts has been adopted as part of recent updates to the California Environmental Quality Act (CEQA). Jurisdictions must complete the switch from LOS to VMT in their environmental documents by July 1, 2020. Cities and Counties may establish their own VMT-based environmental significance thresholds; while Santa Rosa has not yet adopted metrics, many jurisdictions that have are using a “per capita” VMT metric, with a project having a less than significant environmental effect if its per capita VMT is projected to be 15 percent or more below the city-wide or regional average. From an environmental perspective, development that generates less per capita VMT reflects less auto usage, and correspondingly, lower fuel consumption and production of greenhouse gas emissions. Areas with a diversity of land uses, densities, walking and bicycling networks, and proximity to transit generate less VMT than, for instance, low-density suburban residential developments or isolated suburban office complexes.

Table 5-1: Existing Peak Hour Roadway Segment Levels of Service

<i>Roadway Segment Direction</i>	<i>Free-Flow Speed (mph)</i>	<i>Calculated Average Speed (mph)</i>	<i>Percent Free-Flow Speed</i>	<i>Auto Level of Service (LOS)</i>
College Ave – Dutton Ave to Brookwood Ave <i>Eastbound</i> <i>Westbound</i>	35	16	46%	D
	35	16	46%	D
B St — Healdsburg Ave to First Street <i>Northbound</i> <i>Southbound</i>	25	14	56%	C
	25	12	48%	D
Third St — Dutton Ave to B St <i>Eastbound</i> <i>Westbound</i>	30	15	50%	D
	30	14	47%	D
Third St — B St to Brookwood Ave <i>Eastbound</i> <i>Westbound</i>	25	12	48%	D
	25	11	44%	D
Dutton Ave — Santa Rosa Creek to Sebastopol Rd <i>Northbound</i> <i>Southbound</i>	30	16	53%	C
	30	14	47%	D

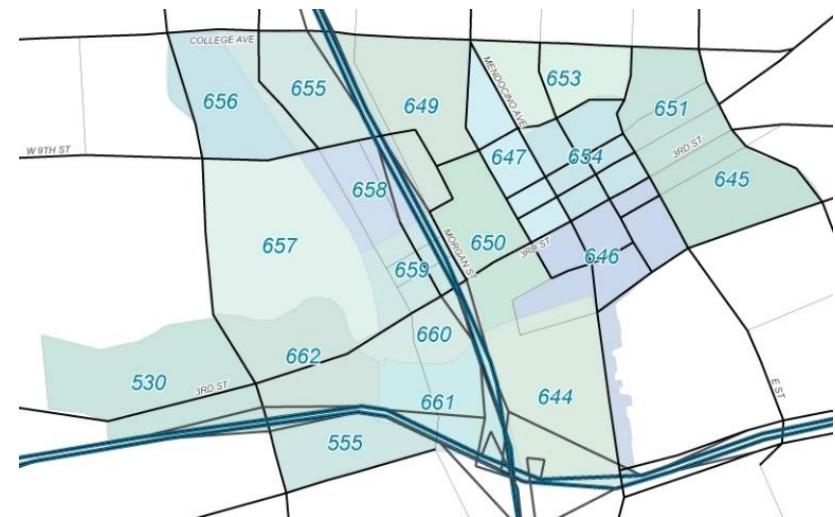
VMT and Proximity to Transit

The recently-adopted CEQA Guidelines Section 15064.3(b)(1) addresses the potential VMT impacts associated with land use projects in transit-oriented areas, indicating that “Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact.” Public Resources Code 21064.3 defines a “major transit stop” as a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods. Public Resources Code 21155(b) defines a “high-quality transit corridor” as an existing corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.

Based on this guidance, the Santa Rosa Downtown Specific Plan contains two major transit stops within its boundaries, including the SMART station in Railroad Square and the downtown Transit Mall. Additionally, the following CityBus transit routes operate at 15-minute headways:

- Route 1, Mendocino Avenue/Coddington Mall – operates every 15 minutes along the B Street corridor to the north of the downtown transit mall
- Routes 2/2B, Sebastopol Road – operates every 15 minutes between the downtown transit mall and Sebastopol Road, including connecting segments of Third Street, Railroad Street, and Olive Street
- Route 3, Santa Rosa Avenue and Route 5, Petaluma Hill Road – these combined routes operate every 15 minutes on the Santa Rosa Avenue corridor to the south of the downtown transit mall

The areas within the planning area boundaries that are within one-half mile walking distance of these major transit facilities are shown in Figure 5-2. Available walking routes include public streets and pathways, and distances are measured along the actual walking route rather than a simple radius around major transit stops. This approach helps to take account the “barrier” effects created by US 101 as well as the longer walking distances created by areas with larger block sizes. Based on the adopted CEQA guidelines, VMT impacts associated with development in these areas can be presumed to be less-than-significant. Most of the Planning area is included; outliers include the far northeast and southeast corners of the area near Brookwood Avenue, a portion of the West End neighborhood, the Maxwell Court neighborhood, and the Imwalle Gardens area on West Third Street.



SCTA Travel Demand Model Network and Traffic Analysis Zones (TAZ) in Specific Plan Area

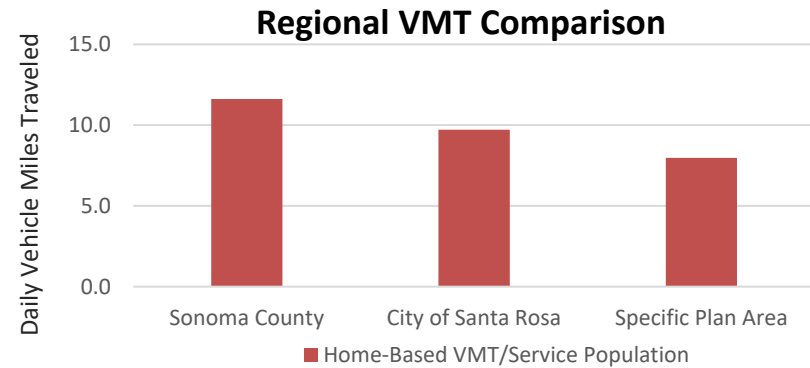
Modeling VMT

Sophisticated travel demand models are often used, where available, to produce VMT estimates. The travel demand model operated by the Sonoma County Transportation Authority (SCTA) can produce VMT estimates and was used for the purposes of this analysis. SCTA’s model outputs VMT data at the traffic analysis zone (“TAZ”) level; in the Planning area, these TAZ’s typically span several blocks. The model estimates the VMT associated with the aggregate land uses in each TAZ and can distinguish trips that are home-based. Currently, the model does not isolate VMT data by land use or differentiate subtleties such as whether a home-based work trip originated at a residence or ended at a job within the TAZ, but SCTA is currently investigating methods to extract this more detailed data from the model.

The Downtown Santa Rosa Station Area Plan includes a diverse group of land uses, encompassing the largest downtown district in Sonoma County with large employment, retail, and hospitality functions, as well as a mix of residential types ranging from single-family homes to medium density multifamily housing. Given this diverse land use mix and the current capabilities of the SCTA travel demand model, it was determined that assessing home-based VMT per “service population” would be the most appropriate metric. The service population consists of the sum of the residential population plus the number of employees working in the area.

Existing Specific Plan Area VMT

Approximately 325,800 daily miles of vehicle travel are associated with the existing land uses within the planning area boundaries. Approximately 140,100 of these daily miles are home-based, meaning that one end of the trip begins or ends at home. The corresponding home-based VMT per service population is 7.98 miles per person. This is approximately 31 percent lower than the countywide average and 18 percent lower than the citywide average.

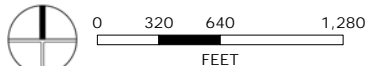
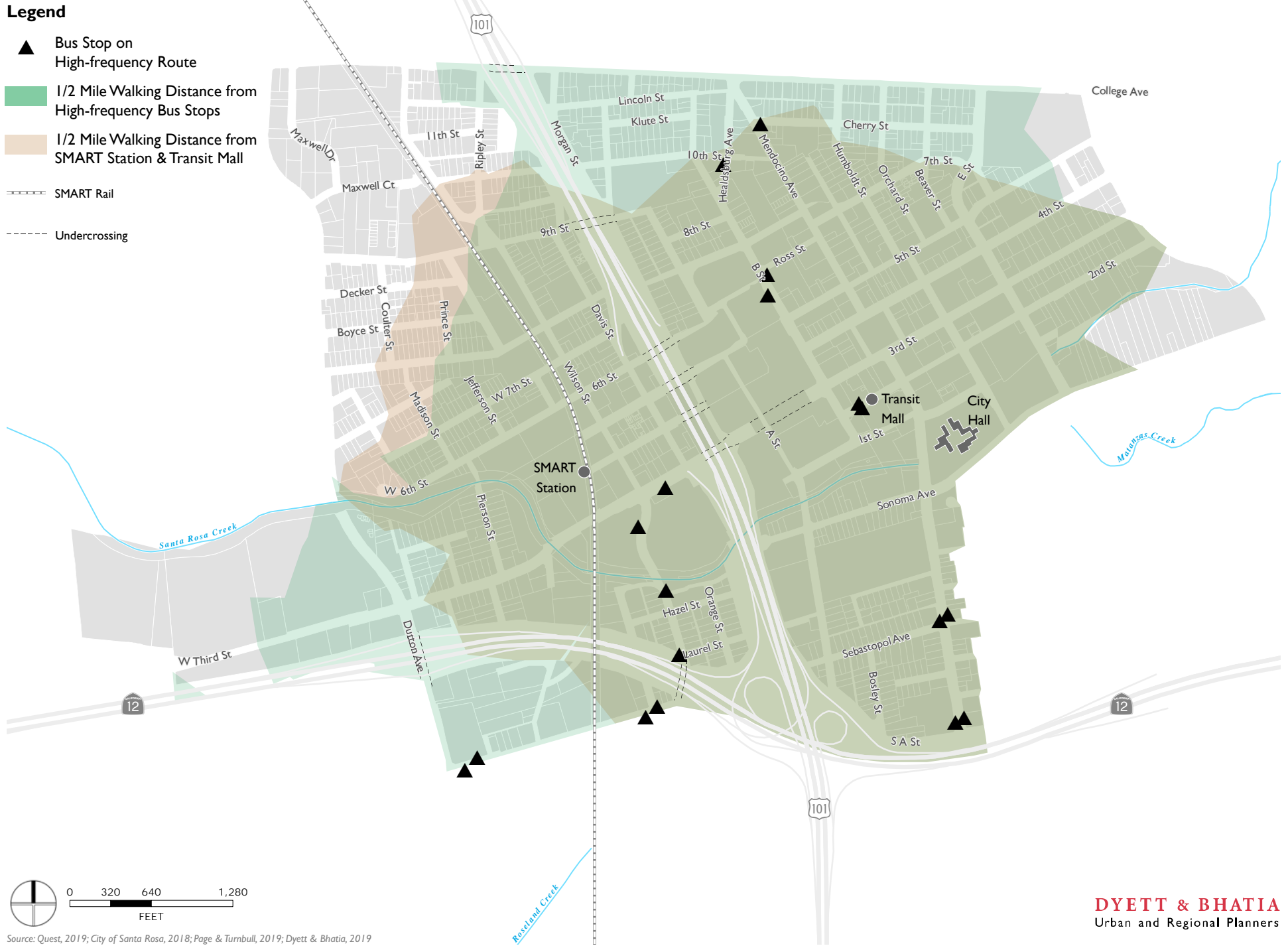


The regional VMT estimates produced by the SCTA model are summarized in Table 5-2.

Table 5.2: Vehicle Miles Traveled				
Geographic Area	VMT (Total)	VMT (Home Based)	Service Population	Home-Based VMT/Service Population
Sonoma County	10,872,200	7,828,000	673,750	11.62
City of Santa Rosa	3,721,100	2,307,100	237,388	9.72
Downtown Station Area Specific Plan	325,800	140,100	17,561	7.98
<i>Compared to Countywide</i>				-31%
<i>Compared to Citywide</i>				-18%

Note: VMT expressed in miles (mi); Service Population = population + employment

Figure 5.2 Areas Within One-Half Mile of High-Quality Transit



Source: Quest, 2019; City of Santa Rosa, 2018; Page & Turnbull, 2019; Dyett & Bhatia, 2019

5.3 Street Network Opportunities

The auto circulation network within the planning area is largely built out, and most future development will connect directly to existing public streets. Following are several locations where new streets may be built, and opportunities may exist to modify existing streets. These potential street network opportunities are shown in Figure 5-3.

New Streets

The 2007 Downtown Station Area Specific Plan identifies several potential new streets. These include an extension of Roberts Avenue under SR 12 to Sebastopol Road, a new north-south street between Third and Sixth Streets serving the property immediately west of the SMART station, a new local street in the Imwalle Gardens area on West Third Street, an extension of Donahue Street from West Ninth Street to Maxwell Court, and re-establishing a connection of Fourth Street between Morgan Street and B Street (bisecting the existing Santa Rosa Plaza mall). The Roberts Avenue extension was included in the 2007 Specific Plan, depicted as realigning to run alongside the SMART path and railroad tracks through an existing freeway underpass. Since that time, the City has identified another option which would extend Roberts Avenue more directly through a new freeway underpass, connecting to Sebastopol Road at the existing intersection of Timothy Road.



Mendocino Avenue looking north from Courthouse Square

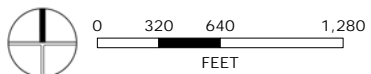
Opportunity: Mendocino Avenue

Within the planning area, the reunification of Courthouse Square has resulted in a shift in traffic volumes from the Mendocino Avenue corridor to the B Street corridor, particularly in the northbound direction. Because of this change, there is potential opportunity to reconsider the function and configuration of Mendocino Avenue to the north of Courthouse Square, between Tenth and Fourth Streets. This segment currently has two northbound lanes and one southbound lane but based on the decrease in traffic volumes may only need one through lane in each direction. There may be potential to remove one vehicle travel lane on the street, reallocating the street width to provide on street bike lane(s), wider sidewalks, landscaped medians, and/or reconfigured parking.

Figure 5.3 Street Network Opportunities

Legend

- - - New Streets Identified in 2007 Plan
- Potential Opportunity to Reallocate Lanes
- Roundabout Opportunity
- SMART Rail
- Undercrossing



Source: Quest, 2019; City of Santa Rosa, 2018; Page & Turnbull, 2019; Dyett & Bhatia, 2019

Opportunity: E Street

There may also be opportunity to reexamine the function and allocation of lanes on E Street between College Avenue and Sonoma Avenue. The corridor currently has two travel lanes in each direction with no center turn lane and is identified as having future on-street bicycle lanes in the City's Bicycle and Pedestrian Master Plan. The section between College Avenue and Seventh Street also runs along the frontage of Santa Rosa Junior High School. Two lanes of traffic in each direction are unneeded to support existing traffic volumes, particularly to the north of Fourth Street, though it will also be necessary to consider the potential future traffic volumes anticipated to occur upon buildout of the Specific Plan as part of the planning process. It should be noted that CityBus operates on E Street with two routes; one operates between Third and Fourth connecting downtown with Montgomery Village and another route service the Middle School during bell times, any changes on E St.



E Street along Santa Rosa Junior High School Frontage

5.4 Transit

Downtown Santa Rosa and the Specific Plan area are served by a variety of transit operators (SMART, Santa Rosa CityBus, Sonoma County Transit, Golden Gate Transit and Mendocino Transit, Greyhound), providing connections to and from local routes and regional destinations. Employment is densely concentrated in downtown Santa Rosa, making the planning area a major commute destination and transit hub for Sonoma County. The planning area includes a transit mall for bus connections, and the SMART Downtown Santa Rosa Station.

Existing Services

CityBus Service

The City of Santa Rosa provides the most rides for local fixed-route bus service and demand-responsive paratransit service in Sonoma County. Total system-wide ridership was approximately 2.2 million in FY 2015-16 and decreased to approximately 1.8 million in FY 2018-19 with approximately 6000 rides per weekday. Ridership on CityBus is within the top ten transit providers in the Bay Area. In total, there are 14 routes, 12 of which operate seven days a week. With the completion of the Reimagining CityBus Plan, Phase I implementation in 2017, CityBus now has three corridors (4 routes) operating 15-minute frequency during weekdays, 6 routes operation on 30-minute frequency and a remaining 4 route operating on 60-minute headways. Most routes begin service between 6:00 a.m. and 7:00 a.m. Monday – Saturday, and finish service between 7:30 p.m. and 8:30 p.m. On Sundays, service is truncated, with routes starting after 10:00 a.m., and ending before 5:15 p.m.¹

¹<https://srcity.org/DocumentCenter/View/10821/Final-Report-PDF?bidId=>

The system is oriented around five main transfer centers, with nearly all routes stopping at the main Transit Mall in downtown, radiating out towards the city's neighborhoods and residential areas.

The Santa Rosa Transit Mall is the busiest Transit Hub in the North Bay served by five operators and provides an affordable, accessible and sustainable connection to jobs, education, shopping and recreation for the region. The Transit Mall went through a significant renovations in 2012.

Unlimited Ridership Programs

CityBus has worked to remove barriers to using transit by expanding fare free programs. Santa Rosa Junior College students started using a Student Transportation Fee (STF) passed in spring 2017 to enter into an unlimited transit ridership program with the transit providers within Sonoma County (Sonoma County Transit, Petaluma and Santa Rosa CityBus). CityBus started tracking the SRJC ridership in September 2017. Ridership averaged about 10,000 rides per month for the first semester of the program and as of Spring 2019 average ridership per month is over 15,000 per month.

Additional Unlimited ridership programs are in place for Veterans (average 3000 rides per month) and people living with disabilities that are eligible for paratransit (average 4000 rides per month).

The City is looking into expanding Unlimited Ridership programs employers, developments, business districts, residence and other interested entities.

Technology

The transportation sector is being significantly altered by the technology sector. Perhaps the most significant technology improvement for transit has been access to route planning and real-time bus arrival information. CityBus' contractor AVAIL publishes a GTFS (General Transit Feed Specification) feed specification that allows application developers to

pick it up and provide route planning and realtime information on the CityBus Routes. Currently, CityBus provides this realtime information via text, voice, MyStop app or at your desktop. Additionally, this feed is consumed by MTC's 511.org, Google and the Transit App. This information is available for most transit systems throughout the Bay Area, so for traveling regionally these services can provide access to the needed information from the convenience of a rider's phone.

Paratransit

The City of Santa Rosa offers next-day ADA Paratransit transportation service seven days a week to those who are unable (temporarily or permanently) to use Santa Rosa CityBus due to a disability or health related condition. Ridership on paratransit was approximately 44,000 in FY 2015-16 and decreased to approximately 35,000 in FY 2018-19 with approximately 125 rides per weekday. This service is provided within three-quarters ($\frac{3}{4}$) of a mile from existing CityBus routes as part of the requirements of the Americans with Disabilities Act (ADA). Paratransit eligible riders can rider the fixed-route CityBus for zero costs, a program to both save money for riders and the City and also promote independent living for persons living with a disability.

The service is shared-ride public transportation that is available for all trip purposes (including shopping, higher education, medical appointments, and work). The City of Santa Rosa takes pride in providing high quality, safe, reliable and courteous transportation service.

Deviated-fixed route

CityBus operates a deviated-fixed route in a cost sharing arrangement with the Oakmont Village Association. This service provides services to the Oakmont Community and the general public by picking up within Oakmont $\frac{3}{4}$ from the route and providing one trip per day to a food shopping destination.

CityBus managed a free shuttle connecting the downtown SMART station with Santa Rosa garages and Old Courthouse Square from

December 2017 to November 2018,² It was discontinued due to low ridership.

Reimagining CityBus

Between March 2015 and August 2016, the City of Santa Rosa completed a comprehensive re-design of its CityBus system, called Reimagining CityBus. Reimagining CityBus included over 100 public outreach events, meeting and stakeholder consultations, with riders and residents directly helping to shaping the final design. The City's Transit Planning Team presented the community with a blank slate and gave residents an opportunity to share what they wanted to see in the new CityBus system. The result of Reimagining CityBus is a new transit system for Santa Rosa that features: 15-minute service in high-ridership corridor, more direct routes, more 2-way service to help reduce transit travel time and a bus system more convenient and useful for riders. The Santa Rosa City Council was actively involved in developing the new bus system and adopted the Final Plan in August 2016.

The new bus system is essentially a roadmap for creating a modern transit system to meet the current and future needs of Santa Rosans. The redesigned bus system is organized into two phases - Phase One was launched in May 2017, and Phase Two which includes features such as improved rapid bus using transit signal priority corridors, improved late night and weekend service, will be incorporated as funding becomes available for these transit system improvements and growth through 2025.

The Reimagining CityBus Final Report detailed the design approach and guidelines that will drive route changes into the future. Including route types (rapid, trunk, local or circulators) designations and service design principles (frequency, direct, bi-directional, anchor points, spacing between routes and final connectivity. These approaches are further flushed out in the goals, objects, performance measures and service

standards detailed in the Short-Range Transit Plan (SRTP) pursuant to the Metropolitan Transportation Commissions requirement to periodically evaluate serve and detail a ten years' service, capital and financial plan.

Phase I of Reimagining was the most significant change in transit service that the City of Santa Rosa has seen since transit service started in 1958. To implement the new bus system CityBus renumbered all the bus routes (low numbers for frequent routes on high ridership corridors, and high numbers for routes with lower frequency and ridership), developed a new system map that included all the regional transit service, developed all new schedules for each route, redesigned bus stop signs with information on accessing real-time bus arrival information at each stop, and reviewed all bus stops and pedestrian facilities to improve pedestrian access. The most significant change made with Reimagining Phase I was the 15-minute frequency on Mendocino Ave., Sebastopol Rd and Santa Rosa Ave. Overall ridership has remained steady even through the major service change.

Regional Transit Service and Connections

The Santa Rosa Transit Mall is the busiest Transit Hub in the North Bay. With over 3000 trips departing the Transit Mall each week (751,500 trips per year). In addition to local CityBus fixed route service, Downtown Santa Rosa is served by four regional bus transit providers (Sonoma County Transit, Golden Gate Transit and Mendocino Transit, Greyhound), and one regional commuter rail (SMART). These services are summarized below in Table 5-3. Local and regional routes serving Downtown Santa Rosa are illustrated in Figure 5-4. Together, these services provide regional connections to other cities in Sonoma County, Marin County, Mendocino County, San Francisco and Contra Costa County. Sonoma County Transit provides direct services to the following towns in the county Cloverdale, Healdsburg, Windsor, Guerneville, Sebastopol, Cotati, Rohnert Park, Petaluma and Sonoma. Sonoma

² <https://www.pressdemocrat.com/news/9001130-181/santa-rosa-to-end-free>

County Transit ends their routes at the County Center in North Santa Rosa which provides additional transit coverage on Mendocino Avenue and Santa Rosa Avenue.

The MTC as the transportation planning, financing and coordinating agency for the nine-county San Francisco Bay Area plays a significant role in coordinating regional transit services, including the Clipper Program, the Regional Eligibility Database for paratransit services, and wayfinding programs.

CityBus engages in significant coordination efforts with Sonoma County Transit, Petaluma Transit, Golden Gate Transit and SMART through monthly meetings at Sonoma County Transportation Authority (SCTA). SCTA recently conducted a Transit Sonoma County Transit Integration and Efficiency Study (TIES) looking at the communication, coordination, collaboration and consolidation possibilities between CityBus, Sonoma County Transit and Petaluma.

SMART

The SMART train line was completed in 2017 and provides direct connections between Santa Rosa and San Rafael, with service to Larkspur starting in late 2019. Since SMART launched service on Aug. 25, 2017, it has carried nearly 1.4 million passengers. In Santa Rosa there are two stations: The Downtown Station, the city's main SMART train station in Railroad Square which is within the Downtown Station Area and the North Station on Guerneville Rd. According to a 2018 ridership survey, the Downtown Station ranks in the top three destination stations, with 13 percent of riders alighting on weekdays, and 18 percent alighting on weekends.³ SMART operates with 30-minute headways during

weekday a.m. and p.m. peak hours, and one-hour headways on weekends.

CityBus service provides ten (10) buses per hour serving the Downtown SMART Station on weekdays. There are three bus stops near the Downtown train station, all accessible via a pedestrian path next to the tracks. The City is currently piloting a Commuter Parking Permit that offers a 50% discount on monthly permits in Garage 12 (555 1st St) for commuters using SMART or any other transit service. CityBus had piloted a free shuttle connecting the downtown SMART station with Santa Rosa garages and Old Courthouse Square from December 2017 to November 2018,⁴ It was discontinued due to low ridership.

Regional Fare

The Bay Area has a regional fare payment system called Clipper. Clipper is the all-in-one transit card for the Bay Area. Passengers can add value to their card and ride any transit system in the Bay Area (seniors, youth and persons with disabilities all received discounts on all transit systems with this card). With Clipper riders received a discount when transferring between SMART, CityBus, Golden Gate Transit and Sonoma County transit

Transit Demand

Population and employment density are the two primary factors that influence transit demand throughout Santa Rosa and help to determine the frequency of transit service that is warranted in a given area. Figure 5-5 presents the citywide composite transit propensity index that was created as part of the 2016 Reimagining CityBus analysis prior to the current route changes. The shading represents the conceptual level of

³ SMART Rail and Pathway Project. First Year in Review 2018.
<https://sonomamarintrain.org/sites/default/files/Board/COC%20Documents/Board%20Workshop%20-%20Part%201.pdf>

⁴ <https://www.pressdemocrat.com/news/9001130-181/santa-rosa-to-end-free>

transit service that could be supported by the population and employment density in each block today. The highest employment and population densities are clustered in the Downtown Station Area, indicating that these blocks already present enough transit demand to support service every 10 to 15 minutes. With the implementation of the Reimagining Phase I, CityBus started providing 15-minute frequency within this area in 2017. In the future, as population and employment density increase in the planning area, the capacity to support higher-frequency transit will continue to grow.

Pedestrian and Bicycle Network

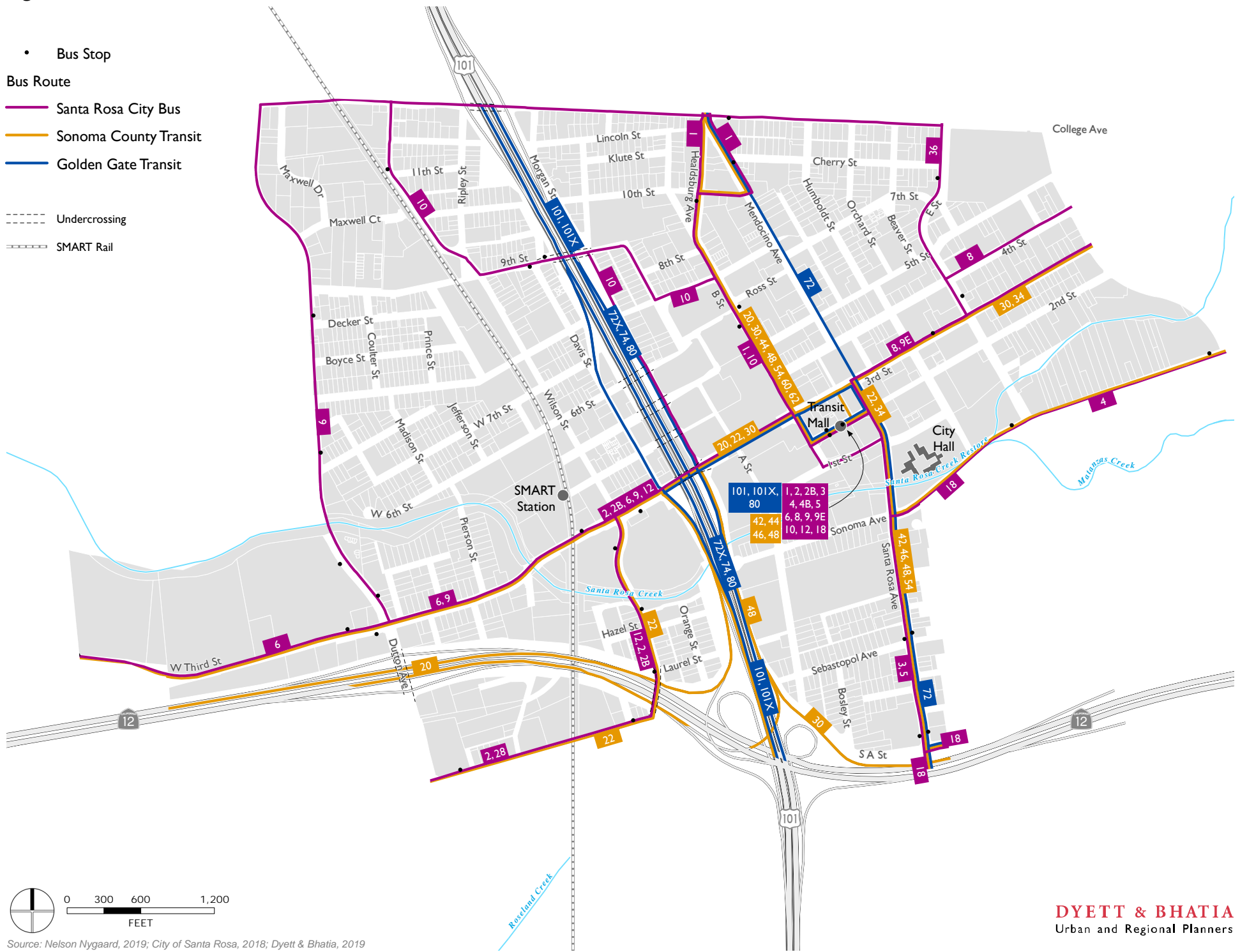
Pedestrian Network

Nearly every person is a pedestrian at some point during their day, as all trips transition to walking near their ends, whether we are dropped off, ride a bicycle, drive a car or take transit. The downtown planning area is an inviting environment for people walking and connecting to other modes. The street network includes a robust network of streets with sidewalks and, pedestrian paths such as Comstock Mall and the Prince Memorial Greenway Trail, providing consistent pedestrian connectivity throughout the planning area.

However, there are also elements of the existing street and highway network that present barriers to pedestrian access. Highways US-101 and California State Highway 12 limit the street grid connectivity and require pedestrians to travel across via under- and over-passes in some locations. Both connect to the local street network via ramps, where pedestrian crossings are restricted to minimize pedestrian conflict and vehicle delay at intersections.

Figure 5.4 Transit Network

- Bus Stop
- Bus Route
 - Santa Rosa City Bus
 - Sonoma County Transit
 - Golden Gate Transit
- Undercrossing
- SMART Rail



Source: Nelson Nygaard, 2019; City of Santa Rosa, 2018; Dyett & Bhatia, 2019

Figure 5-5: Composite Transit Demand Index Map
 (City Bus Analysis 2016)

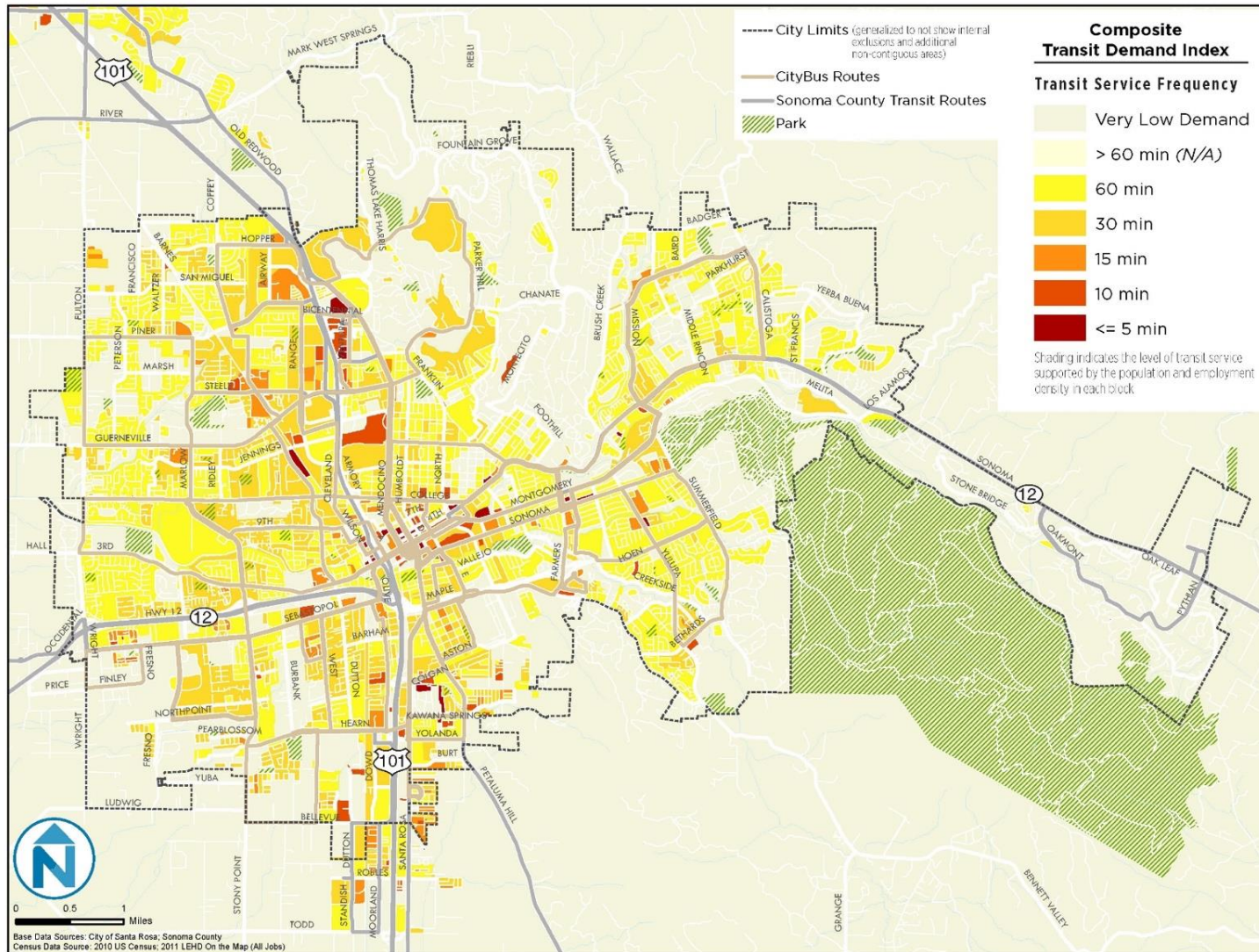


Image source: Reimagining City Bus Final Report, Nelson\Nygaard 2016

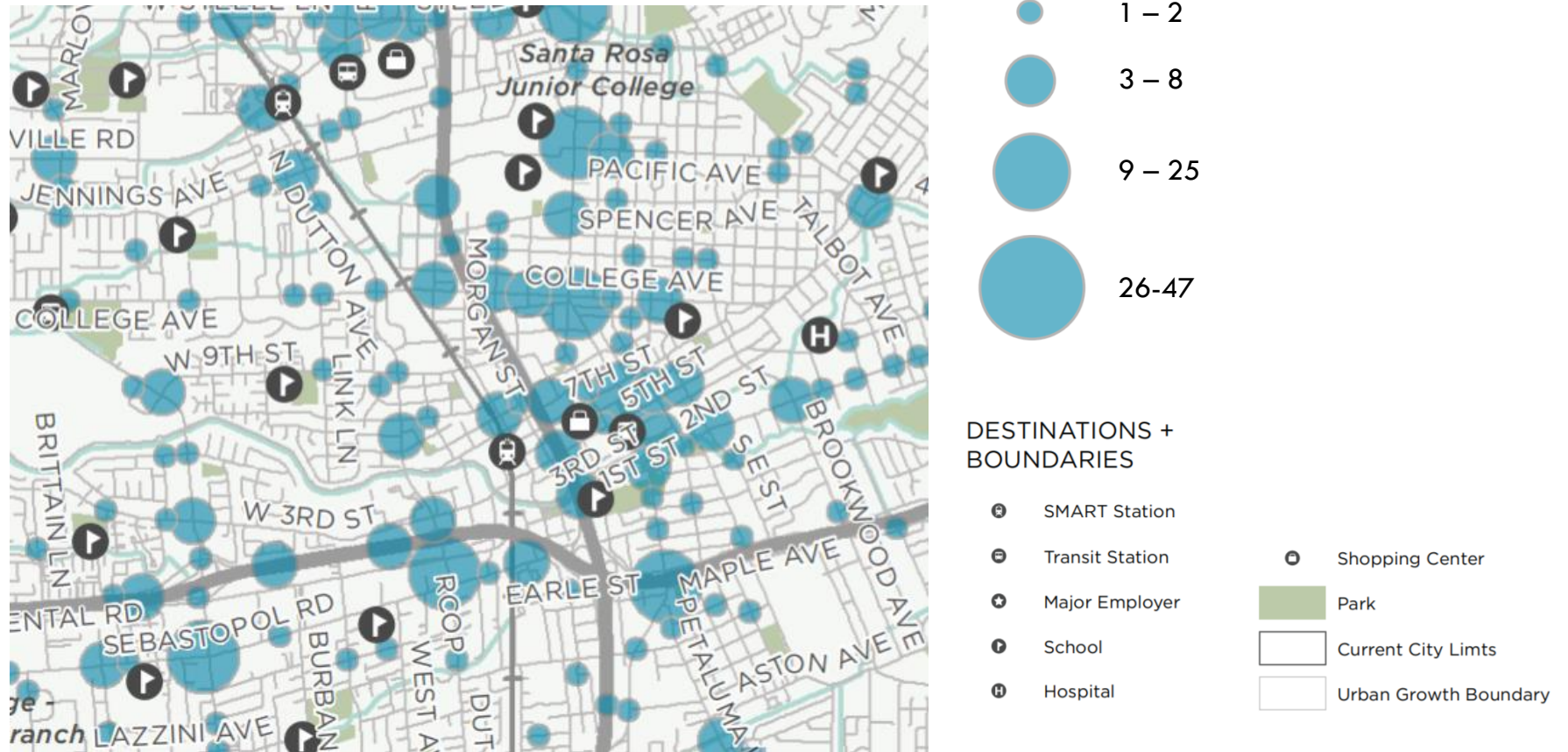
A few downtown intersections have unmarked crosswalks, which tends to prioritize vehicle operations over pedestrian access. In addition to the intersections serving highway ramp connections, many of the local streets surrounding the Santa Rosa Plaza Mall include marked crossings on one or two legs of the intersection but require pedestrians to take circuitous routes in order to cross in an unmarked location. Though the intersection at Sixth Street and A Street is designed to address sight visibility, a pedestrian walking on the south sidewalk on Sixth Street, approaching A Street from Morgan Street, and plans to cross Sixth Street to travel north on A Street, they must either cross to the north side at Morgan Street, prior to reaching A Street, or travel an additional block east along Santa Rosa Plaza and connect via B Street and Seventh Street.

The SMART path also has a gap and missing crosswalks between Santa Rosa Creek and Sixth Street. Pedestrians traveling north-south along the SMART path in this area must detour half a block east to the Wilson Street-Railroad Street corridor. This missing pathway link will be constructed in the future on the west side of the SMART tracks, and at Third Street there is a planned SMART Trail crossing that is the closest Santa Rosa CityBus stop serving the SMART station.

Missing sidewalks increase pedestrian exposure to vehicle traffic, and thereby increase the risk of collisions with vehicles. Bicycle and pedestrian-involved collisions from the Statewide Integrated Traffic Records System (SWITRS) database are presented below in Figure 5-6 and Figure 5-7, respectively. At least one pedestrian death and several other pedestrian and bicycle involved collisions occurred downtown between 2017 and 2017, with clusters at the busiest intersections. These records reinforce the idea that people are walking and biking on streets throughout the city, and especially in the downtown area, even where there are gaps in the pedestrian network (a more detailed collision analysis is presented in the *Bicycle and Pedestrian Master Plan Update 2018*).

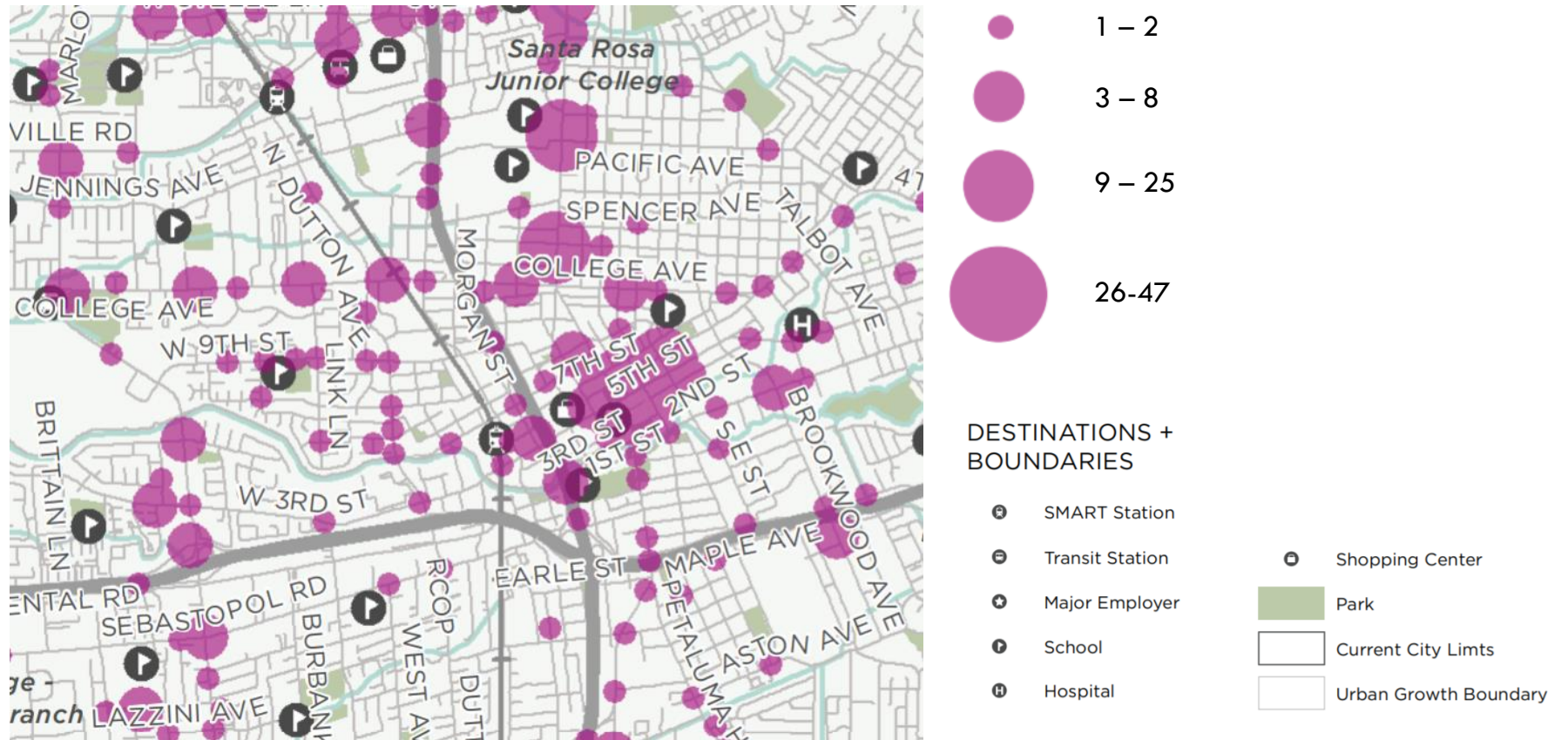
Table 5-3: Regional Transit Service by Agency and Route		
Regional Transit Agency	Route	Areas Served
Greyhound	-	Santa Rosa to San Francisco, Ukiah, Willits, Arkata, and others
Golden Gate Transit	72/72x	Santa Rosa to San Francisco with intermediate stops
	101/101x	Santa Rosa to San Francisco with intermediate stops
Sonoma County Transit	20	Russian River Area, Forestville, Sebastopol, Santa Rosa
	22	Sebastopol, Santa Rosa
	30	Santa Rosa, Sonoma Valley
	42	Santa Rosa, Industry West Business Park
	44	Petaluma JC, SSU, Santa Rosa
	46	Santa Rosa, Sonoma State University
	48	Petaluma, Rohnert Park, Cotati, Santa Rosa
	60	Cloverdale, Healdsburg, Windsor, Santa Rosa
Mendocino Transit Authority	65	Ft. Bragg to Willits, Ukiah and Santa Rosa
	95	South Mendocino Coast to Santa Rosa
SMART — Initial Operating Segment	-	Sonoma County Airport, North Santa Rosa, Downtown Santa Rosa, Rohnert Park, Cotati, Petaluma, Novato, San Rafael, Larkspur (Planned), Windsor (Planned), Healdsburg (Planned), Cloverdale (Planned)

Figure 1-6: Bicycle-Involved Collisions, September 2007 – August 2017



Source: SWTRIS 2007-2017, City of Santa Rosa, 2018.

Figure 2-7: Pedestrian-Involved Collisions, September 2007-
 August 2017



Source: SWTRS 2007-2017, City of Santa Rosa, 2018.

Despite the gaps and barriers scattered throughout the planning area, the local street grid does provide a pedestrian scale network with manageable crossing distances at most intersections, and a high density of activated space at the ground floor level. Together, these make the planning area an appealing place to travel by foot, and to connect to Downtown destinations via other modes of transportation. Primary east-west pedestrian connections include Third Street, Fourth Street, Fifth Street, and Sixth Street. Primary north-south pedestrian connections include the SMART Trail (existing and planned), Wilson Street, Morgan Street, and Santa Rosa Avenue. Opportunities to improve pedestrian connectivity throughout the planning area should focus on enhancing the pedestrian experience on these streets, and supporting comfortable crossings that minimize pedestrian exposure to vehicle traffic.

Planned Pedestrian Improvements

The City's *Bicycle and Pedestrian Master Plan Update 2018* was adopted in March 2019 and identifies priority projects to improve the citywide pedestrian network. The Master Plan Update provides a priority list of recommended facility improvements, including sidewalk extensions and pathways on corridors where they are likely to serve the largest volume of pedestrians or, address an identified priority community concern, or otherwise have a significant impact. Within the downtown area, the plan calls for: sidewalk extensions along Third Street, Wilson Street, Brookwood Avenue, and Pierson Street; a proposed sidewalk on Brookwood Avenue between College Avenue and Fifth Street; gap closures on the SMART Trail between Third Street and the Santa Rosa Creek, and along the Santa Rosa Creek Trail from Santa Rosa Avenue to Brookwood Avenue; and further study of Brookwood Avenue between Second Street and Sonoma Avenue, and College Avenue between Mendocino Avenue and Glenn Street. Preferred crossing enhancement

locations were identified at 15 downtown intersection locations, and a trail bridge is called for at the east end of the Santa Rosa Creek Trail.⁵

Bicycle Network

Santa Rosa has significant assets to support walking and bicycling as transportation – gentle topography, temperate conditions year-round, significant off-street infrastructure connected to beautiful open spaces, a strong culture of biking and walking for recreational trips, and a vibrant downtown that would be a short and easy walk or bike ride away from many Santa Rosa residents with the right infrastructure.

The existing and planned bicycle routes and mixed-use trails are illustrated in Figure 5-8.

According to the adopted *Draft Bicycle and Pedestrian Master Plan Update (2018)*, bicycling and walking mode shares have remained steady in Santa Rosa over the last five years, with bicycle commute trips hovering between 1 percent and 1.3 percent between 2012 and 2016. Bicycle volume counts conducted in 2018 on the SMART Trail at Ninth Street and Sebastopol Avenue report an average of 53 daily bicyclists on this trail, with highest use on weekdays during the peak commute periods (7 a.m. to 10 a.m. and 3 p.m. to 6 p.m.). Six of the top ten bicycle volume intersections in Santa Rosa are in or along the boundary of the downtown planning area: Stony Point Road and the Santa Rosa Creek Trail; Humboldt Street and College Avenue; Sonoma Avenue and Brookwood Avenue; Santa Rosa Avenue and Second Street; and the Joe Rodota Trail at Dutton Ave at the Prince Memorial Greenway and Dutton Avenue.⁶

⁵ <https://srcity.org/2711/Bicycle-and-Pedestrian-Master-Plan>

⁶ <https://srcity.org/2711/Bicycle-and-Pedestrian-Master-Plan>

Figure 5.8 Existing and Planned Bicycle Routes and Mixed Use Trails



While the street grid and presence of trails could be conducive to a greater share of local trips by bicycle, the existing bicycle facilities do not provide a low-stress network that is inviting and comfortable to a wide range of potential users. A low-stress network minimizes exposure to potential vehicle conflicts, especially where vehicles travel at significantly higher speeds than bicycles, or on streets with high vehicle volumes. In other words, streets with low vehicle volumes traveling at low speeds, or streets with a greater degree of separation between vehicles and bicycle facilities are considered low-stress, and streets with little separation, a significant vehicle-bicycle speed differential, and high vehicle volumes are considered high-stress.

The *Bicycle and Pedestrian Master Plan Update* identified an index of bicyclist level of traffic stress for all streets citywide based on vehicle speed, vehicle volume, and bicycle facility types. Street segment receive the following scores: 1 for lowest stress/comfortable for all ages and abilities; 2 for low-medium stress/comfortable for an average adult; 3 for medium-high stress/comfortable for confident adults; and 4 for high stress/comfortable only for the fearless bicyclists. Within the downtown planning area, most of the primary east-west and north-south connector streets are identified as medium-high or high stress, and all arterials citywide are considered medium-high or high stress.⁷

In 2016, bike parking investment strategies at each rail station in Sonoma County were developed to support bike improvements leading to Santa Rosa's rail stations and set the stage for increasing the share of SMART riders who access the stations by bike. Together with a more robust network of low-stress bicycle facilities, these investments could make commuting and other local trips by bicycle more appealing and comfortable for a wide range of Downtown Santa Rosa's residents, workers and visitors.

Planned Bicycle Improvements

The City's Bicycle and Pedestrian Master Plan Update (2018) identifies a priority list of recommended facility improvements, including nearly 130 miles of new bicycle facilities designed to respond to the street context with buffers and physical barriers where additional separation from vehicles is called for. The plan proposes new bicycle facilities throughout the downtown street grid, including shared paths, standard bike lanes, buffered bike lanes, designated bike routes sharing vehicle right of way, designated bicycle boulevards, and separated bikeways. These fill gaps in the existing network, and establish new connections to create a robust bicycle network spanning most of the continuous north-south and east-west downtown streets. The plan also calls for additional study on a few key corridors that require additional analysis and outreach, including: Fourth Street Corridor, from D Street in Downtown to Farmers Lane; parts of Collage Avenue; Brookwood Avenue; and connections to areas north of Downtown via the SMART Trail.⁸

⁷ <https://srcity.org/2711/Bicycle-and-Pedestrian-Master-Plan>

⁸ <https://srcity.org/2711/Bicycle-and-Pedestrian-Master-Plan>

5.5 Parking

Existing Parking

As Santa Rosa has grown, so too have parking-related issues. While a 2015 analysis showed that the city has enough parking spots available in and near its downtown core to satisfy demand, the choicest spots on the main streets are often at capacity, leading to spillover parking in nearby residential neighborhoods alongside added congestion caused by double parking and drivers circling the block looking for an open curbside space. A 2016 survey of area residents and visitors found that 50 percent of them would be more likely to visit downtown if parking there was more convenient.

At this time, parking supply in Railroad Square meets the current demand. However, an influx of commuters and additional development around the Downtown Santa Rosa-Railroad Square SMART station may compound these issues. If SMART ridership meets or exceeds the 2025 ridership forecasts and expected development of new retail and housing in Railroad Square continues, parking demand could increase and strain the existing on-street parking supply in the immediate area.

After a detailed analysis of parking supply and demand in the Courthouse Square and Railroad Square neighborhoods was completed in 2016, the City instituted new parking management practices to ensure that both off-street and on-street parking are more effectively utilized throughout downtown. Under the recommended demand-responsive model, the price of parking fees is based on demand, and new rates were introduced in January 2018 to support this approach. Areas of high demand are 50 percent more expensive than those a few blocks away, with the aim of

achieving 85percent parking occupancy at peak periods.⁹ People can now pay for parking using the Passport Parking mobile app.

A fully demand-responsive parking management system would also eliminate or significantly lessen parking time limits, relying on pricing to incentivize parking turnover, rather than time limits. This approach may require more significant price differences at high- and low-demand locations during peak periods to ensure that at least a few spots are always available at prime locations for visitors and customers, while employees and all-day commuters utilize lower cost all-day parking rates at nearby off-street lots and garages.

In addition to managing on-street and high demand parking, there are opportunities to better utilize the existing off-street parking supply in the planning area, which includes a very large volume of garage parking spaces at the Santa Rosa Plaza Mall, which are under private ownership.

Planned Parking Updates

After implementing the parking policy and pricing updates in January 2018, additional parking management opportunities and policy changes are being considered. To serve the Railroad Square SMART Station, a strategic curb management approach will continue to evolve as necessary in response to new transit station pickup and drop-off activity and paratransit bus service needs, and existing visitor center and retail customer parking. The City Council is also discussing the possibility of reducing parking requirements for downtown development, where multimodal access and strategic transportation demand management policies would support a reduced vehicle mode share and lower demand for dedicated parking facilities in new developments.

⁹ <https://www.srcity.org/2591/Downtown-Parking>

5.6 Key Findings and Planning Considerations

Street Network

- The reunification of Courthouse Square has resulted in a shift in traffic volumes away from Mendocino Avenue (between Tenth and Fourth Streets) and Santa Rosa Avenue (south of First Street), which have seen a 20 percent and 35 percent decrease respectively. Decreased volumes represent opportunities for road diets to remove one vehicle travel lane and reallocate the street width to provide on street bike lane(s), wider sidewalks, landscaped medians, and/or reconfigured parking.
- The 2007 Plan and subsequent efforts by the City identified the possibility for new streets at the following locations that should be explored further through the planning process: new street connecting Third and Sixth Streets through the SMART site; Donahue Street extension to Maxwell Court; re-connection of Fourth Street through the Santa Rosa Plaza Mall; Roberts Avenue extension under SR 12; new local street through vacant parcel adjacent to Imwalle Gardens.

Transit

- The Santa Rosa Transit Mall is the busiest Transit Hub in the North Bay. With over 3000 trips departing the Transit Mall each week (751,500 trips per year) provided by 5 different agencies providing local, county wide and Bay Area service. The Downtown SMART Station is linked to the Transit Mall via 10 buses an hour traveling from downtown to the SMART Station.
- The City of Santa Rosa completed a comprehensive planning process and re-design of its CityBus system, called Reimagining CityBus. The result of Reimagining CityBus was a Phase I

implementation in May 2017 that features: 15-minute service in high-ridership corridor, more direct routes, more 2-way service to help reduce transit travel time and a bus system more convenient and useful for riders. The redesigned bus system is organized into two phases - Phase One and Phase Two which includes features such as improved rapid bus using transit signal priority corridors, improved late night and weekend service. This plan is essentially a roadmap for creating a modern transit system to meet the current and future needs of Santa Rosans through 2025.

Bicycle and Pedestrian Network

- The relatively flat terrain of the planning area and the existing street grid create an inviting pedestrian environment; however, the freeways represent significant physical barriers to pedestrian connectivity and missing and unmarked crosswalks (principally at Sixth/A Street and Seventh/Third Street) present navigational challenges and safety concerns to address. 24-hour connectivity through the mall is also an impediment to connectivity.
- The existing street grid and the presence of trails through the planning area are assets that can incentivize bicycle trips; however, key connections through the planning area do not currently offer “low stress” routes for cyclists due to lack of buffering and separation from vehicles traveling at higher speeds.

Parking

- Today, finding an on-street parking space on the most visited blocks of downtown Santa Rosa is a challenge at peak periods. The demand is highest on streets immediately adjacent to Courthouse Square and Railroad Square during peak periods on weekdays and on the weekend. However, the City operates five garages and nine surface parking lots in the downtown area, providing nearly 3,300 off-street parking spots. While occupancy is high in some lots, many spaces in parking garages remain available even during peak demand periods.

- If SMART ridership meets or exceeds the 2025 ridership forecasts and expected development of new retail and housing in Railroad Square continues, parking demand could strain the existing on- and off-street public parking supply in the immediate Railroad Square area. However, there are opportunities to better utilize the existing private off-street parking supply in the planning area, which includes a very large volume of garage parking spaces at the Santa Rosa Plaza Mall.
- The convenience and cost of parking affects the competitiveness of downtown Santa Rosa in comparison to other Sonoma County downtowns. To successfully attract residents and visitors, Santa Rosa will need to offer high-quality attractions and convenient parking options that make it worth the trip.