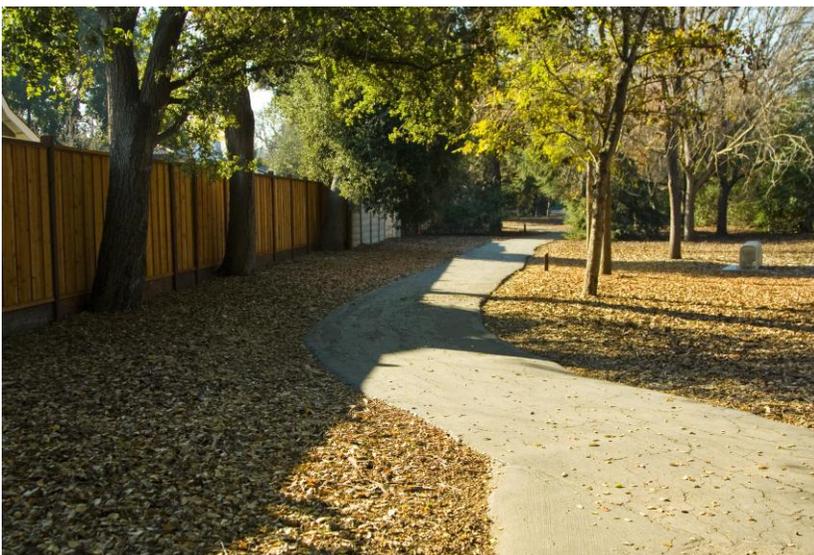


Town of Atherton General Plan ~~2019~~ 2025



CIRCULATION ELEMENT

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CIRCULATION ELEMENT

I. Purpose and Relation to Other Elements

The Circulation Element describes facilities and policies for the movement of people and goods throughout the Town. It includes a plan of roadways, in addition to facilities for pedestrian, bicycle and rail transportation. The Element plans for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, highways and rail for safe and convenient travel in a manner that is suitable to the semi-rural context of the General Plan. Users include motorists, pedestrians, bicyclists, children, persons with disabilities, movers of commercial goods, users of public transportation, and seniors. Since the Town policy seeks to preserve all streets and highways as scenic routes, this Element shall also serve as the Scenic Roadways Element of the General Plan.

The Circulation Element is most closely related to the Land Use and Housing Elements. It is particularly essential that the Circulation Element reflects and reinforces the goals and objectives set forth in the Land Use Element. Specifically, roadways and other transportation facilities must be planned and designed under the overriding principle of maintaining the Town's rural character.

II. Background Information

Major Thoroughfares and the Regional Transportation System

Atherton's circulation system has been developed within the context of the Bay Area's regional and the Peninsula's sub-regional major thoroughfare and transportation system. A system of freeways and state highways provides access to and from the Town for motorists, movers of commercial goods, cyclists, and users of public transportation. The nearby freeways of US 101 (Bayshore Freeway) and I-280 (Junipero Serra Freeway), as well as the State Highways of El Camino Real (SR 82, also known as the Grand Boulevard) and Woodside Road/Marsh Road (SR 84) provide major roadway access to Atherton. The CalTrain rail facilities provide commuter train access between San Francisco and the Santa Clara Valley as well as a thoroughfare for rail freight shipments. See "Rail Transportation" Section below for additional detail. The San Mateo County Transit District (SamTrans) provides bus service throughout San Mateo County and into portions of San Francisco and Palo Alto. The District also provides commuter shuttle services and paratransit operations. See "Bus Transportation" section below for additional detail.

Plan Bay Area 2040 is a state-mandated regional plan that aims to integrate sustainable strategies to reduce transportation-related pollution and greenhouse gas emission within the nine-counties of the San Francisco Bay Area. The plan implements a State law known as the Sustainable Communities and Climate Protection Act of 2008. The plan addresses methods of transportation, land-use, and housing. Over the next 25 years, the Bay Area is expected to grow by an estimated 2 million people and because of the projected growth and the growing economy, the Bay Area needs to provide more housing and transportation choices. The plan was adopted in July 2013 by ABAG and MTC. Development of Plan Bay Area 2040 included extensive updating of research, forecasts and investment priorities from the previous regional transportation plan, known as Transportation 2035, which was adopted in 2009. As the title implies, Transportation 2035 detailed a long-range regional transportation strategy covering the years 2010 through 2035.

Congestion Management

The City/County Association of Governments of San Mateo County (C/CAG), as the Congestion Management Agency for San Mateo County, is required by State law to prepare and adopt a **Congestion Management Program (CMP)** on a biennial basis. The purpose of the CMP is to identify strategies to respond to future transportation needs, develop procedures to alleviate and control congestion, and promote countywide solutions. The CMP is required to be consistent with the Metropolitan Transportation Commission (MTC) planning process that includes regional goals, policies, and projects for the Regional Transportation Improvement Program (RTIP). The most current San Mateo County CMP was adopted in February 2018. It includes a roadway system consisting of freeways, state highways and principal arterials that form the basic structure of the County's vehicle transportation system. In Atherton, El Camino Real (SR 82) is the only street included in the CMP roadway system. The CMP designates 16 major intersections throughout the County to have their level of service monitored; however, none of those are within Atherton. Level of Service (LOS) Standards for segments of the CMP roadway system for future operations were established in the initial years of the program (1990/91). The LOS Standard for the El Camino Real segment through Atherton (i.e. SR 84 to Glenwood Avenue) was established at LOS E. In 2017, that segment was operating at LOS B in the AM peak hour and LOS C in the PM peak hour.

The CMP also includes a Performance Element, with measures to evaluate current and future multimodal system performance for the movement of people and goods; a Trip Reduction and Travel Demand Element, designed to promote alternative transportation methods (carpools, vanpools, transit, bicycles, park-and-ride lots, etc.), improve the balance between jobs and housing, and promote other strategies to reduce traffic congestion such as flexible work hours, telecommuting, parking management programs and, possibly parking cash-out programs; a Land Use Impact Analysis Program to determine the impacts of land use decisions upon regional transportation routes and air quality; and Deficiency Plan Guidelines as a way for the cities and the County to remain in conformance with the CMP when the LOS for a CMP roadway segment or intersection deteriorates below the established standard. A five-year Capital Improvement Program is also included in the CMP.

Grand Boulevard Initiative

The **Grand Boulevard Initiative** is a collaboration of 19 cities, counties, local and regional agencies united to improve the performance, safety and aesthetics of El Camino Real, and the principles of which was supported by the Town beginning in 2008. Starting at the northern ~~Daly City~~ city limit of Daly City (where it is named Mission Street) and ending near the Diridon Caltrain Station in central San Jose (where it is named The Alameda), the initiative brings together for the first time all of the agencies having responsibility for the condition, use and performance of the street under the jurisdictional umbrella of the California Department of Transportation (CalTrans); (SR 82 is a State Highway).¹⁴

The **Grand Boulevard Greenway Concept** through Atherton is described in more detail in the Land Use Element of this General Plan and in the adopted Bike/Pedestrian Master Plan. The concept is to consider dedicated bicycle and pedestrian facilities, and transit access improvements, along the length of El Camino

¹⁴Source: DPW

Real within Atherton by repurposing a vehicle travel lane in one or both directions, where feasible. Further study is required prior to project implementation.

Complete Streets

In 2008, the California Legislature adopted the **California Complete Streets Act** which requires cities and counties at such time as they substantially amend the circulation element of their general plans, to include plans for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways for safe and convenient travel in a manner that is suitable to the rural, suburban, or urban context of the general plan. Users of streets, roads, and highways means bicyclists, children, persons with disabilities, motorists, movers of commercial goods, pedestrians, users of public transportation, and seniors.

The Atherton City Council adopted² a Complete Streets Policies [in November 2012 \(Resolution No. 12-33\)](#). Complete Streets are streets and facilities that accommodate all users including bicyclists, children, persons with disabilities, motorists, movers of commercial goods, pedestrians, users of public transportation, and seniors. The policies adopted include a commitment, where feasible, to creating and maintaining Complete Streets serving all users, to maintaining a context of sensitivity to a strong sense of place and preservation of the Town’s semi-rural character, to assure that Complete Streets are routinely addressed by all Town departments, and to consider incorporating Complete Streets infrastructure in all projects and phases. A Complete Streets policy is included in the Goals, Objectives, Policies and Actions section of this element.

A recent project that incorporated the Complete Streets concept includes the reconstruction of the Oak Grove Avenue/Middlefield Road intersection.

Bicycle/Pedestrian Master Plan

The Town’s adopted³ **Bicycle and Pedestrian Master Plan** [\(May 2015\)](#) puts forward visionary yet practical recommendations for improving travel safety and encouraging greater use of active, low-impact travel modes. The Plan builds off and contributes to the region’s bicycle priorities and local Safe Routes to School efforts and includes a detailed walkability assessment for 33 miles of Atherton roadways. It provides context-sensitive policy and design recommendations to retain and enhance the Town’s scenic character while improving the ease at which all ages and abilities can safely walk or bicycle to key destinations.

The Town of Atherton currently utilizes Caltrans’ bikeway design standards, which are organized according to a classification system within the California Highway Design Manual (HDM) defined as ‘Class I’ off-street trails; ‘Class II’ on-street, dedicated bike lanes; ‘Class III’ shared bikeways; and ‘Class IV’ separated bikeways.⁴

²Resolution No. 12-33, adopted November 28, 2012

³Adopted May 20, 2015⁴

The Atherton Bicycle and Pedestrian Master Plan identifies four key project corridors/categories to improve active transportation safety and options. These facility recommendations consist of:

1. A major overhaul to El Camino Real by (in most cases) converting the westernmost southbound travel lane to a Class I trail with landscaping, potential green infrastructure⁵ and pedestrian crossing improvements, called the Grand Boulevard Greenway, where may be feasible and appropriate.
2. A new east-west Bay-to-Ridge Greenway, including Class I trail and pathway improvements to Marsh Road/Middlefield Road/Watkins Ave, plus bicycle boulevard and greenway linkages along or adjacent to the Atherton Channel across El Camino Real to Alameda de las Pulgas.
3. Safe Routes to School: Enhanced bike lanes along the regionally important Middlefield Road, Valparaiso Avenue, and Alameda de las Pulgas corridors, as well as new bike lanes and pedestrian improvements on Selby Lane, Glenwood Ave, and Atherton Ave serving local priority connections.
4. Shared bikeway and pedestrian greenway improvements along the Countywide North/South Bicycle Boulevard (along Elena Ave and Austin Ave/Selby Lane), as well as additional shared bikeway improvements connecting to the Town Center.

Safe Routes to School Program

Safe Routes to School is an idea that has been implemented through State and Federal legislation. The concept is to increase the number of children who walk or bicycle to school by funding projects that remove the barriers that currently prevent them from doing so. Those barriers include lack of infrastructure, unsafe infrastructure, and lack of programs that promote walking and bicycling through education/encouragement programs aimed at children, parents, and the community.

Atherton supports the Safe Routes to School concept and has implemented several projects planned and designed to achieve the program's goals. The Bicycle and Pedestrian Master Plan Project list includes several projects that would increase safety, remove barriers and enhance accessibility to children who walk or bicycle to school.

Green Streets

Green streets are a companion concept to **Green Infrastructure** described in the Open Space and Conservation Element. Green streets are streets that include a stormwater management and treatment approach that may incorporate vegetation (e.g., perennials, shrubs, trees), soil, and engineered systems (e.g., permeable pavements, infiltration trenches) to slow, filter, and cleanse stormwater runoff from impervious surfaces (e.g., streets, sidewalks). Green streets are designed to capture rainwater at its source, where rain falls. Whereas, a traditional street is designed to direct stormwater runoff from impervious surfaces into storm sewer systems (gutters, drains, pipes) that discharge directly into surface waters, rivers, and streams.

Green streets are one technique for the Town to meet its water quality goals established ~~in~~ by the [San Francisco Bay Regional Water Quality Control Board's Municipal Regional Permit \(-MRP\)](#) and its Green Infrastructure Plan and should be considered during street and other improvement projects.

The Green Infrastructure Plan identifies priority green street projects based on the San Mateo Stormwater Resource Plan. Additional green street opportunities may exist with other street improvement projects such as Safe Routes to School and those identified in the Bicycle and Pedestrian Master Plan (2014).⁴

Neighborhood Traffic Management Program

The Atherton **Neighborhood Traffic Management Program** (NTMP) is a City Council--adopted⁵ policy document which provides a comprehensive, thoughtful, and systematic program to address neighborhood traffic concerns, improve pedestrian and bicycle safety, and maintain the scenic and quiet rural character of Atherton neighborhoods (adopted July 20, 2016). It is a community-based approach to reduce vehicle speeds and improve the behaviors of drivers to “calm” traffic in residential neighborhoods.

Town staff has the authority to implement various⁶ traffic control measures. The NTMP does not affect staff authority to implement necessary traffic control measures in residential neighborhoods in response to observed traffic safety concerns. The NTMP is an additional tool which-that provides a systematic framework to educate and encourage residents to participate in identifying and implementing equitable and effective neighborhood traffic solutions.

The process involves steps to identify the residents’ traffic concern(s);⁷ demonstrate neighborhood support for traffic calming measure(s);⁸ determine if the traffic concerns meet the NTMP qualifying criteria;⁹ identify (by Town staff) the most appropriate and effective improvement measure(s);¹⁰ and prioritize and implement the plan.

Transportation Demand Management

Transportation Demand Management (TDM) programs are intended to reduce vehicle trips and parking demand by promoting the use of a variety of transportation options and shifting travel mode and time of day to take advantage of available facility capacity to reduce crowding and congestion. By implementing TDM programs, municipalities and private entities can use available transportation resources more efficiently. TDM programs encourage use of carpools, vanpools, buses, public transportation and alternative transportation modes (bikes, walking) as a means of reducing single occupant vehicle trips. In Atherton, Menlo School and Sacred Heart Schools have successfully used TDM programs to substantially reduce peak hour traffic accessing their facilities.

The Town supports the C/CAG Congestion Management Program vehicle trip reduction measures for projects generating a net 100 or more peak-period trips in the Congestion Management Program network. The Town encourages other employers in Town, such as public and private schools, to incorporate TDM programs in their operations.

During the Planning Commission annual review of private school master plans, traffic congestion and flow issues should be evaluated and addressed to ensure that impacts on the circulation system are not excessive.

⁴Source: CD+A

⁵Adopted July 20, 2016⁶

Rail Transportation

Peninsula commuter rail service originated in 1863 with construction of a single-track railroad between San Francisco and San Jose by the San Francisco and San Jose Railroad. The facilities were purchased by the Southern Pacific Company in 1870 and a second track was constructed in 1904. Atherton was one of the earliest train stops on the rail corridor. Families, and later commuters, used the Atherton station for rail service to and from “The City” for over 100 years. Lloyd Park was developed for residents desiring easy access to public transportation provided by the train.

In 1988 the Santa Clara Valley Transportation Authority, the City and County of San Francisco, and the San Mateo County Transit District entered into a joint powers agreement creating the Peninsula Corridor Study Joint Powers Board (JPB) for the purposes of conducting planning studies related to the Peninsula Commute Service. The JPB bought the railroad right of way between San Francisco and San Jose from Southern Pacific in 1991. The JPB currently manages the operation of the Caltrain commute service by a private contractor.

In 2005 the JPB suspended weekday commute service at the Atherton Train Station as one measure in a multi-faceted cost-cutting effort. Weekend service at the Atherton Station ~~was subsequently terminated in November 2020 and the station was closed~~⁶. ~~The Town will continue to support rail efforts and services determined to be appropriate for the community, while preserving the single-family character of the Town.~~

Caltrain ~~completed a~~ ^{planned} ~~to “modernize”~~ ^{ation} and ~~electrify~~ ^{electrification of} the main line between San Francisco and San Jose; ~~replacing the diesel-electric locomotive power with fully electric rolling stock by 2022. Construction began on that project mid-2017 in 2024.~~

High-Speed Rail (HSR) is a project undertaken by the State of California with the objective of constructing and operating a HSR service between Los Angeles and San Francisco/Sacramento. The plan includes using the Peninsula Commute Corridor for HSR operation from San Jose to San Francisco, and possibly the addition of one or more new tracks through Atherton to accommodate HSR. The Town of Atherton has opposed the HSR Project because of its reliance on faulty data, high costs, adverse environmental effects, and impacts to the Peninsula Commute corridor. In early 2019 the California Governor reduced the scope of the HSR project, suspending the Peninsula corridor route, among other major changes.ⁱⁱⁱ⁶

There are two at-grade road crossings of the Caltrain tracks in Atherton; one at Fair Oaks Lane and the other at Watkins Avenue. ~~The Both crossings at Fair Oaks Lane is~~ ^{are} protected by a four-quadrant gate or “quad-gate¹⁰”; a mechanism on both sides of the tracks that blocks automotive traffic from both directions. This is a safety device that qualifies the crossing for quiet zone status where the train horn is not sounded before the crossing, except in emergencies. ~~The Town seeks to have the Watkins Avenue crossing improved with additional safety measures, such as quad-gates, to improve safety at the crossing and to also allow¹⁰ for quiet zone status.~~

⁶Source: Planning Dept.

¹⁰Source: DPW

Bus Transportation

The San Mateo County Transit District (SamTrans) operates fixed bus routes through Atherton, providing public bus access throughout San Mateo County and into San Francisco and Palo Alto. The principal line runs along El Camino Real, providing connecting service to Peninsula transit stations between Palo Alto and Daly City. Other lines run on Middlefield Road and Bay Road. Service is available to local elementary and high schools on schooldays.

SamTrans also operates the [Menlo Park Caltrain Marsh Road Shuttle](#) ~~which that~~ provides service ~~through Atherton along Middlefield Road and Marsh Road~~ between the Menlo Park Caltrain Station and [Marsh Road business park](#) ~~the Bohannon Industrial Park east of Atherton~~.

Emergency Operations Plan and Evacuation Routes

As described in the Community Safety Element, the Town of Atherton Police Department and the Menlo Park Fire Protection District have jointly prepared the Town of Atherton Emergency Operations Plan (EOP), which describes how the jurisdictions will manage and coordinate resources and personnel responding to emergency situations. The EOP, along with a companion document, [the Local Hazard Mitigation Plan \(LHMP\) assists with addressing natural hazards. As a participant in the San Mateo County Multi-Jurisdictional Hazard Mitigation Plan, the Town adopted an Annex to this plan that covers the specific hazards relevant to Atherton, ensuring](#) ~~the Atherton Hazard Mitigation Strategies (HMS), is the Town's Local Hazard Mitigation Plan specified in compliance with~~ the federal Disaster Mitigation Act of 2000 (P.L. 106-390). [For more information on emergency management and evacuations in Atherton, see the Emergency Management and Preparedness section of the General Plan Community Safety Element.](#)

The Town's circulation system plays a key role in emergency operations, providing access to properties and individuals as well as functioning evacuation infrastructure and routes during emergencies. ~~Potential~~ [Primary](#) emergency evacuation routes are shown on the Community Safety Diagram and are listed in a Circulation Element policy in Section IV of this element. [These roadways are considered critical to evacuation and prioritized for improvements and investments to ensure they support that function. However, it should be noted that specific evacuation routes will be identified during an emergency based on incident-specific conditions and an assessment by first responder staff that indicates the safest routes to be used.](#)

Scenic Roadways

Scenic roads are an important resource to San Mateo County and to Atherton for both aesthetic and recreational purposes. Scenic corridors can best be defined as the visual land area outside the road right of-way and generally described as the "view from the road." It is within this area that development standards are applied to retain and enhance scenic qualities and restrict unsightly use of the land. These standards may include regulations on building setbacks, signs, grading, tree removal, landscaping, and underground utility lines. The Junipero Serra Freeway (Interstate 280) is the only roadway located in the vicinity of Atherton ~~which that~~ has been designated as a scenic highway pursuant to the provisions of Section 260 et seq. of the California Streets and Highways Code. However, it is Town policy to designate all streets and highways within Town as scenic routes.

Climate Action Plan

Atherton's proposals and policies related to climate change are contained in its adopted⁷ **Climate Action Plan**.^{iv} The Town's Climate Action Plan (CAP) serves as a guiding document to identify methods that the Town and community members can implement to significantly reduce greenhouse gas (GHG) emissions. The Plan-CAP provides a comprehensive roadmap of programs that can be implemented to reduce emissions and increase sustainability. Transportation aspects of the CAP, as amended from time to time, are addressed in the Circulation Element. Energy, water and solid waste programs and policies are addressed in the Open Space and Conservation Element.

Atherton has adopted a target of reducing emissions to 15 percent below 2005 levels by 2020 and 49 percent below 2005 levels by 2030. In Atherton, approximately 44% percent of GHG emissions stem from transportation. Travel on local roads and state highways represent 80% percent and 20 percent% of on-road transportation emissions respectively. Thus, reducing transportation emissions is a critical component of the climate action strategy. Reducing emissions from the transportation sector requires addressing three constituent components: reducing the carbon intensity of fuels, increasing vehicle efficiency, and reducing vehicle miles travelled (VMT). The Town is committed to providing transportation options that are convenient, safe, and affordable.

Local Traffic Flow/Long Range Planning Solutions Study

The Town recently embarked on a study focusing on the Town's roadway network with the objective of developing short- and longer-term solutions and strategies for mitigating current cut-through and speeding traffic, which the majority of which originates outside of the Town limits.^{v8} The study included collection of background data related to traffic, pedestrian and bicycle volume counts and projections, signal timing and phasing, origin-destination studies, speed studies, future land use projects, and other similar data.

Traffic Counts Program

The Atherton Department of Public Works has a program where-in which vehicular traffic is counted from time to time³³ on minor arterial, collector, and selected local streets. The count data is available to determine current roadway usage and volume growth trends. The data is posted on the Town website.

⁷ Atherton Climate Action Plan Update. <https://climateaction.ci.atherton.ca.us/climate-action-plan> Adopted October 19, 2016

⁸ Source: Draft Local Traffic Flow/Long Range Planning Solutions Study.³³
Source: DPW

III. Roads and the Local Street Classification System

Roadways in the Town of Atherton may be divided into four classifications: highways, minor arterial streets, collector streets, and local streets. While the vast majority of Atherton’s roadways fall into the last category, each of these four categories is represented by at least one road.

Freeways and Highways: Freeways and Highways are multi-lane facilities with no fixed interruptions to traffic flow. The Town of Atherton contains no freeways; however, the Junipero Serra Freeway (Interstate 280) abuts the western edge of the incorporated Town limits. The single highway through the Town is El Camino Real (State Route 82), which provides for through traffic. El Camino Real has also been described as the “Grand Boulevard” (see ~~the previous section entitled “Grand Boulevard Initiative” above~~ section).

Minor Arterials: Minor Arterials are streets with traffic signals that primarily serve through traffic and provide access to abutting properties as a secondary function. The main role of minor arterial streets is to link residential districts to other transportation facilities and to act as emergency service and evacuation routes.

Collector Streets: These are streets that provide both land access and traffic circulation service within residential areas. Unlike minor arterials, their operation is not always dominated by traffic signals. While not as important as minor arterials, collector streets should still be designed to carry through traffic. Their function is to transfer traffic from local traffic generators (homes, schools, etc.) and local streets to minor arterials and arterials.

Local Streets: There are streets that, aside from the roadways cited above, are the remainder of Atherton’s classified roads. Such roads are used to provide access to abutting property, locations for easements, open space for light and air and a fire break between buildings. Carrying traffic is a secondary function of local streets and they should be designed to discourage through traffic.

Table C-1 ~~below~~ lists Atherton’s major streets and their classification by road type.

Table C-1: Major Streets Classified by Road Type

| Street | Road Type | From | To |
|----------------------------------|----------------|------------------|------------------|
| El Camino Real | Highway | City Limits | City Limits |
| Alameda de las Pulgas | Minor Arterial | City Limits | City Limits |
| Marsh Road | Minor Arterial | Middlefield Road | City Limits |
| Middlefield Road | Minor Arterial | City Limits | City Limits |
| Ravenswood Avenue ⁹¹ | Minor Arterial | City Limits | Middlefield |
| Valparaiso Avenue ⁴⁰² | Minor Arterial | City Limits | El Camino Real |
| Atherton Avenue | Collector | Ridgeview Drive | El Camino Real |
| Encinal Avenue | Collector | City Limits | Middlefield Road |
| Fair Oaks Lane | Collector | El Camino Real | Middlefield Road |
| Glenwood Avenue | Collector | City Limits | Middlefield |
| Oak Grove Avenue | Collector | City Limits | Middlefield |
| Ringwood Avenue | Collector | Middlefield Road | Bay Road |
| Watkins Avenue | Collector | El Camino Real | Middlefield Road |

1. Proposed change from Collector to Minor Arterial because it is designated as a Minor Arterial in the City of Menlo Park General Plan, Circulation Element and has an average daily traffic volume of 16,600 vpd or more.
2. Proposed change from Collector to Minor Arterial because it is designated as a Minor Arterial in the City of Menlo Park General Plan, Circulation Element and has an average daily traffic volume of 12,900 – 13,200 vpd.

Street Standards

The general standards for street right-of-way and improvements are listed in Table C-2 ~~below~~. Local conditions may necessitate modification of these standards where topography, building location or other conditions warrant. Detailed standards for street improvements are set forth in the Atherton Municipal Code and in this Circulation Element.

⁹¹ ~~Proposed change from Collector to Minor Arterial because it is designated as a Minor Arterial in the City of Menlo Park General Plan, Circulation Element and has an average daily traffic volume of 16,600 vpd or more.~~

⁴⁰² ~~Proposed change from Collector to Minor Arterial because it is designated as a Minor Arterial in the City of Menlo Park General Plan, Circulation Element and has an average daily traffic volume of 12,900 – 13,200 vpd.~~

Table C-2: Street Standards

| Street Category | Recommended Pavement Width | Right-of-Way Width |
|-----------------|----------------------------|--------------------|
| Minor Arterial | 32 feet ¹¹ | 60 feet |
| Collector | 24 feet | 50 feet |
| Local | 20 feet | 40 feet |
| Cul-de-Sac | 18 feet | 30 feet |

¹¹ Source: Transportation Committee

Level of Service

Transportation engineers and planners commonly use a grading system called **Level of Service (LOS)** to measure and describe the operational status of the local roadway network. LOS is a description of the quality of a roadway facility's operation, ranging from LOS A (indicating free flow traffic conditions with little or no delay) to LOS F (representing oversaturated conditions where traffic flows exceed design capacity, resulting in long queues and delays). Intersections, rather than roadway segments between intersections, are almost always the capacity controlling locations for any circulation system.

Separate standardized LOS criteria have been developed for signalized and unsignalized intersections. The criteria are presented in Tables C-3 and C-4 [below](#).

Table C-3: Signalized Intersection LOS Criteria¹²

| Level of Service | Description | Average Control Delay (Seconds Per Vehicle) |
|------------------|--|---|
| A | Operations with very low delay occurring with favorable progression and/or short cycle lengths. | ≤ 10.0 |
| B | Operations with low delay occurring with good progression and/or short cycle lengths. | 10.1 to 20.0 |
| C | Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear. | 20.1 to 35.0 |
| D | Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and/or high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable. | 35.1 to 55.0 |
| E | Operations with high delay values indicating poor progression, long cycle lengths and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay. | 55.1 to 80.0 |
| F | Operation with delays unacceptable to most drivers occurring due to oversaturation, poor progression, or very long cycle lengths. | > 80.0 |

[Source: Transportation Research Board, 2000 Highway Capacity Manual.](#)

¹¹ Source: Transportation Committee

¹² Source: Transportation Research Board, 2000 Highway Capacity Manual.

Table C-4: Unsignalized Intersection LOS Criteria¹³

| Level of Service | Description | Average Control Delay (Seconds Per Vehicle) |
|--|---|---|
| A | Little or no delays | ≤ 10.0 |
| B | Short traffic delays | 10.1 to 15.0 |
| C | Average traffic delays | 15.1 to 25.0 |
| D | Long traffic delays | 25.1 to 35.0 |
| E | Very long traffic delays | 35.1 to 50.0 |
| F | Extreme traffic delays with intersection capacity exceeded (for an all-stop), or with approach/turn movement capacity exceeded (for a side street stop-controlled intersection) | > 50.0 |
| <p><u>Source: Transportation Research Board, 2000 Highway Capacity Manual.</u></p> | | |

Atherton’s minimum acceptable intersection level of service standards are listed below:-

- Highways: LOS E (C/CAG adopted standard)
- Minor Arterials and Collectors: LOS D
- Local Streets: LOS C

LOS Thresholds of Significance under CEQA

Proposed projects are required by the California Environmental Quality Act (CEQA), to be evaluated to determine if they conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system. Such projects may be located either in Town or in another jurisdiction where the project could have an impact on Town intersections. The minimum acceptable intersection level of service standards listed above are the Town’s performance policy for the circulation system. The criteria for determining if a proposed project would create a significant adverse impact on Town intersections are described below.

A project is considered to have a potentially “significant” traffic impact if the addition of project traffic causes:

- Threshold “I” – An intersection on **minor arterial streets** or **local approaches to State-controlled signalized intersections** operating at LOS A through D to operate at an unacceptable level (LOS E or F) or have an increase of 23 seconds or greater in average vehicle delay, whichever comes first.
- Threshold “II” - An increase of more than 4 seconds to average delay to vehicles on all critical movements for intersections on **minor arterial streets** operating at LOS E or F.
- Threshold “III” - An increase of more than 4 seconds to average delay to vehicles on the most critical movements for intersections on **local approaches to State-controlled intersections** operating at LOS E or F.

¹³ Source: Transportation Research Board, 2000 Highway Capacity Manual.

- Threshold “IV” - An intersection on **collector streets** operating at LOS A through C to operate at an unacceptable level (LOS D, E or F) or have an increase of 23 seconds or greater in average vehicle delay, whichever comes first.
- Threshold “V” - An increase of more than 4 seconds to average delay to vehicles on all critical movements for intersections on **collector streets** operating at LOS D, E, or F.

Vehicle Miles Traveled

Another grading system called **vehicle miles traveled (VMT)** has been less commonly used to measure and describe the operational status of the local roadway network. While it is desirable to reduce vehicle miles traveled to help relieve congestion and improve air quality, there are currently no universally accepted VMT standards or thresholds of significance similar to the LOS standards.

Circulation Element Diagram and Bicycle/Pedestrian Master Plan Diagram

Figure C-1 ~~below~~ is the Circulation Element Diagram and Figure C-2 ~~below~~ is the adopted Bicycle/Pedestrian Master Plan Diagram.

IV. Goals, Objectives, Policies, and Actions

| | |
|-------------|---|
| Goal CIR-1: | To develop a circulation system that is compatible with the needs of various land uses planned within the Town of Atherton. |
|-------------|---|

Objective CIR-1.1: To minimize the encroachment of the circulation network on the residential and open spaces uses which prevail throughout most of the community.

Policy CIR-1.1: No street under the jurisdiction of the Town shall be more than two lanes in width (excluding turn lanes and bike lanes).

Policy CIR-1.2: No new vertical curbs or sidewalks shall be constructed, as their presence would be incongruent with existing development.

Policy CIR-1.3: Where possible within the constraints of other policies, promote the use of and implement¹⁴ Green Streets techniques and practices in order to reduce flooding, treat stormwater at its source, and to reduce stormwater pollution.^{vi}

Policy CIR-1.4: Meandering street lines shall be preserved consistent with traffic safety.

Policy CIR-1.5: A public street shall be accepted by the Town only on the condition that it has been improved in accordance with Town standards existing at the time of acceptance.

Policy CIR-1.6: Use of Town streets as thoroughfares by trucks and other large vehicles shall be carefully controlled.

¹⁴ Source: CD+A

Policy CIR-1.7: Paving for temporary on-street parking within the roadway right-of-way will be prohibited.

Policy CIR-1.8: Valley gutters or rolled curbs may be required in all new subdivisions.

Objective CIR-1.2: To preserve the streets of Atherton as scenic routes.

Policy CIR-1.9: All streets and highways in the Town of Atherton shall be preserved as scenic routes.

Policy CIR-1.10: The development of arterial streets and/or highways through the Town shall be prevented to minimize disruption of its scenic features.

Policy CIR-1.11: The intrusion of El Camino Real on the ecology of the Town shall be minimized to the greatest extent possible by:

- A. Preserving center planting on El Camino Real;
- B. Minimizing the number of lots with access onto El Camino Real;
- C. Promoting the maintenance of walls, green infrastructure⁴⁵, shrubbery and trees along the sides of El Camino Real.^{vii}

Policy CIR-1.12: For reasons discussed above the Town also seeks to minimize the number of lots with access onto Alameda de las Pulgas and Middlefield Road.

Policy CIR-1.13: On-street and visible off-street parking of vehicles and other means of transportation shall be carefully controlled.

Policy CIR-1.14: Street-lights and signs shall be kept to a minimum.

Policy CIR-1.15: Trees located in the right-of-way shall be preserved to the extent feasible consistent with traffic safety.

Policy CIR-1.16: The emergency evacuation routes established in this General Plan Element are El Camino Real, Middlefield Road, Marsh Road, Alameda de las Pulgas, Stockbridge Avenue, Atherton Avenue/Fair Oaks Lane, Valparaiso Avenue, Glenwood Avenue, Encinal Avenue, Watkins Avenue, and Ringwood Avenue.

Policy CIR-1.17: Maintain Town-owned roadways as needed to meet current standards and encourage private property owners to do the same, to the extent feasible and given the absence of other site constraints.

| | |
|-------------|---|
| Goal CIR-2: | To reduce congestion on freeways, state highways and principal arterials by participation with and support for the congestion management programs of C/CAG. |
|-------------|---|

⁴⁵ Source: CD+A

Goal CIR-3: To consider participation in the Grand Boulevard Initiative and support its efforts to improve the performance, safety and aesthetics of El Camino Real where consistent with other Atherton goals, objectives, and policies.

Goal CIR-4: To achieve a balanced, multimodal transportation network that meets the needs of all users of Atherton streets and highways for safe and convenient travel in a manner that is suitable to the semi-rural context of the general plan.

Objective CIR-4.1: To incorporate, over time and where feasible, the principles of Complete Streets in future roadway projects. Complete Streets are streets and facilities that accommodate all users including bicyclists, children, persons with disabilities, motorists, movers of commercial goods, pedestrians, users of public transportation, and seniors.

Policy CIR-4.2: Bicycle paths separating bicycles from vehicular traffic are considered desirable.

Goal CIR-5: To achieve a high quality of roadway operation on all Atherton streets.

Policy CIR-5.1: Atherton's minimum acceptable intersection level of service standards are listed below.

- Highways: LOS E (C/CAG adopted standard)
- Minor Arterials and Collectors: LOS D
- Local Streets: LOS C

Policy CIR-5.2: Limit cut-through and pass-through traffic on local streets by supporting Towns' efforts using the Neighborhood Traffic Management Program described in this Element.^{viii}

Policy CIR-5.3: During the annual review of private school master plans, the Planning Commission should evaluate and address traffic congestion and flow issues to assure that impacts on the circulation system are not excessive.

Policy CIR-5.4: The Town shall support identified short-term and long-term strategies and physical improvements addressing traffic concerns originating both outside and within the Town boundaries in order to improve circulation, smooth progression, improved operations, mobility and safety for all modes of transportation, as feasible.

Policy CIR-5.5: The Town seeks to minimize, to the greatest extent possible, the environmental impact of transit and rail facilities on the semi-rural and open space features of the community.

Policy CIR-5.6: The Town shall support the continued operation and upgrading of passenger rail service operated over the Joint Powers Board right-of-way between Gilroy and San Francisco.

Policy CIR-5.7: The Town desires to limit public bus service to minor arterials and State Highways.

Goal CIR-6: To halt the eventual use of the Peninsula Corridor by High Speed Rail.^{16,22}

Objective CIR-6.1: Implementation of a Quiet Zone within and on the Town's border areas.

Objective CIR-6.2: The Town will continue to support rail efforts and services determined to be appropriate for the community, while preserving the single-family character of the Town.

Goal CIR-7: Support the goals, policies and programs embodied in the adopted Atherton Climate Action Plan.

²¹ Source: DPW

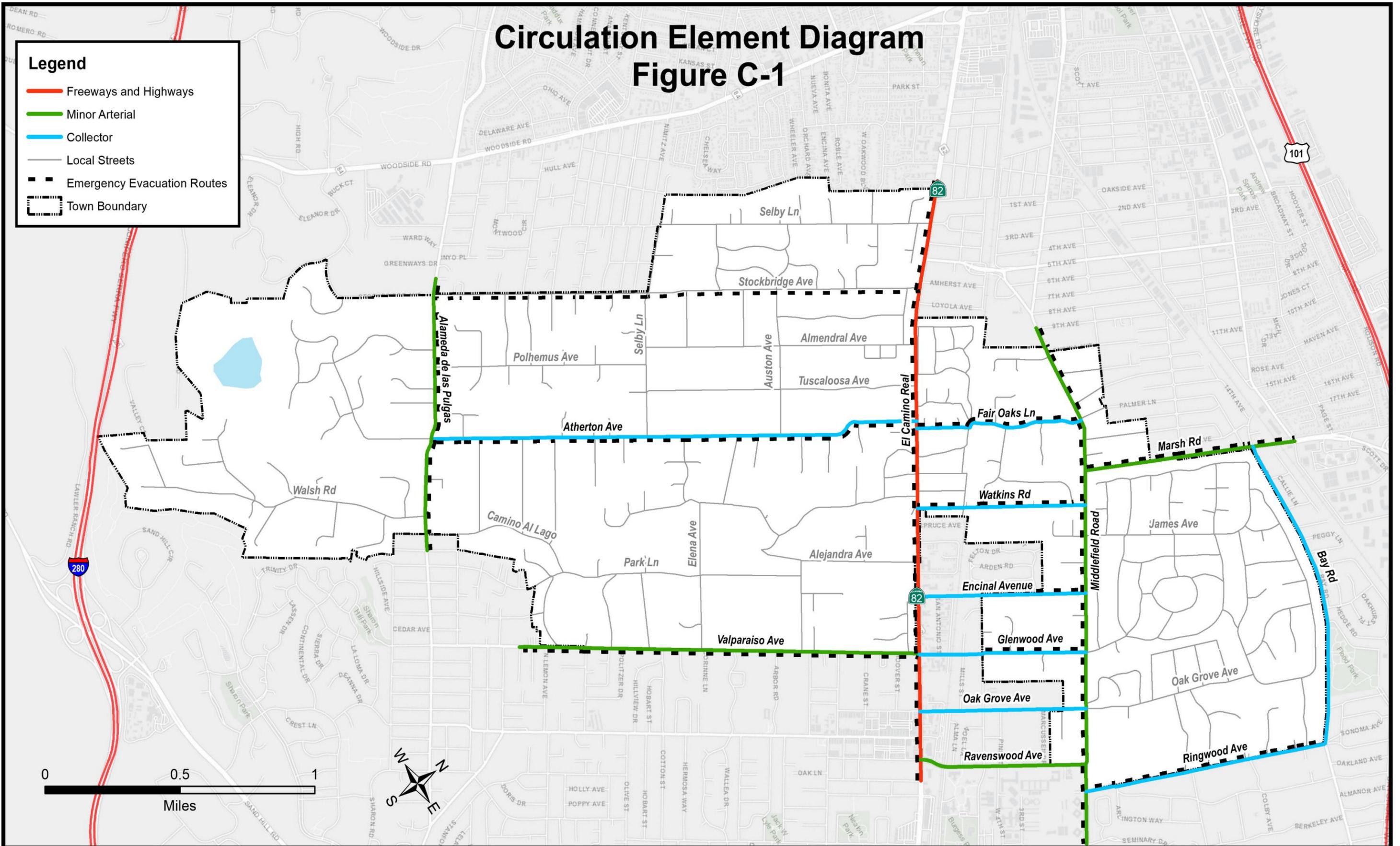
²² ~~The Goals, Objectives and Policies related to High Speed Rail are taken from City Council Resolution No. 13-08 adopted June 14, 2013.~~

¹⁶ The Goals, Objectives and Policies related to High Speed Rail are taken from City Council Resolution No. 13-08 adopted June 14, 2013.

Circulation Element Diagram Figure C-1

Legend

- Freeways and Highways
- Minor Arterial
- Collector
- Local Streets
- Emergency Evacuation Routes
- Town Boundary



V. Endnotes

ⁱ DPW.

ⁱⁱ CD+Agreen Infrastructure Plan. *Bicycle and Pedestrian Master Plan.*

ⁱⁱⁱ Planning Dept.

^{iv} Atherton Climate Action Plan Update. <https://climateaction.ci.atherton.ca.us/climate-action-plan>.

^v Draft Local Traffic Flow/Long Range Planning Solutions Study.

^{vi} CD+Agreen Infrastructure Plan.

^{vii} CD+Agreen Infrastructure Plan.

^{viii} DPW