



Millbrae Station Specific Plan

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Purpose

The purpose of the Millbrae Station Specific Plan is provide a regulating framework and broad goals for a Transit Oriented Development (TOD). The plan establishes a vision for Millbrae and provides policies, design guidelines and recommendations for development around the Millbrae Station. The Millbrae Station Specific Plan establishes a foundation to facilitate a more accessible, mixed-use and walkable transit-oriented community.

Concept & Vision

Transit Village

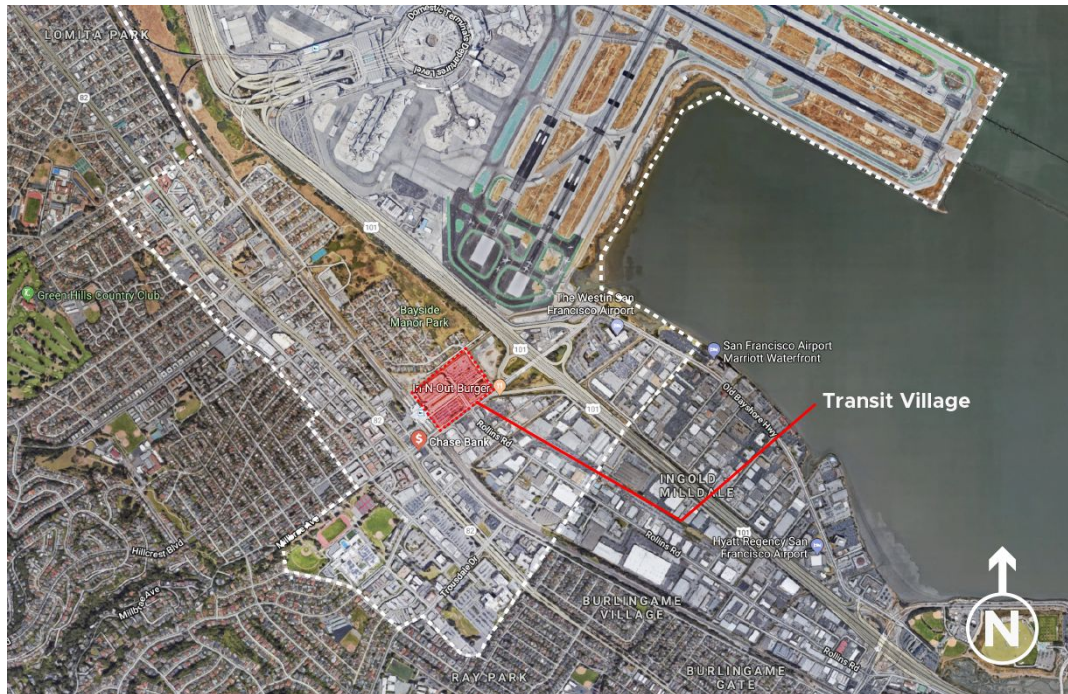


Figure 1-4: Graphic image illustrating the location of the Transit Village

The vision for Millbrae Station is to establish a transit-oriented, network hub in Millbrae. The High Speed Rail station in Millbrae is an opportunity to create a transit village that will connect activities, use and people and increase the economic activity in the city. Currently, the land use around the station area is primarily parking for automobiles, which is not using the full economic potential of the space. In order to increase the economic vitality and the social life of the spaces around the station, the existing surface level parking will be moved underground, and be replaced with ground floor retail spaces in order to unlock the full economic potential of the land around the station. The transit oriented Specific Plan for Millbrae Station is guided by the following goals:

1. Improve the public transit experience
2. Establish a more efficient and easily navigatable transit station
3. Promote economic development

1. Improve the public transit experience

In order to move people from their cars onto public transit, the overall experience of the public transportation system will need to be improved. This can be done through a series of infrastructure improvement that would make the station area safer and more welcoming for new public transit riders.

To create safe and welcoming transit waiting spaces, various amenities will be provided to keep the space interesting. This would include seating areas, sheltered bus stops, landscaping/greenery, transit waiting islands, and real-time transit information/bus schedules.

Waiting Areas

Bus Shelters

Sheltered Bus Stops will protect transit riders from the rain and provide a shaded area for them to wait on hot days.

Landscaping

Landscaping and greenery can not only improve the aesthetics of the transit waiting areas, but can also be used to capture stormwater runoff.

Station Seating

Providing seating areas for transit riders can help to ensure that the time spent waiting for a bus is a more pleasant experience.

Transit Boarding Islands

Transit boarding islands can help to improve the safety of transit riders while minimizing disruptions to bicycle service. These transit islands can also double as pedestrian islands to assist with people crossing the street.



Figure 1-5: A bus shelter and transit boarding island in San Francisco

Transit Service

Frequency

Infrequency is one of the biggest deterrents to public transit ridership. If buses do not come often enough, people must plan their schedule around public transit. In order to make public transit work for the public, frequency needs to be increased to the point where riders no longer need to plan their schedules around transit.

Intercity Buses

In order to expand the service area of the high speed rail station, the bus terminal in the Millbrae Station should accommodate for local buses as well as regional intercity buses. By introducing buses from different parts of the region, people living outside the Millbrae city area are also able to take advantage of the new High Speed Rail connection and the transit village without driving their cars.

Real-Time Transit Information

Providing real-time information boards in the transit terminal can improve the user experience by providing live feedback for people riding the buses.

2. Improve connectivity and wayfinding

The introduction of high-speed rail to this station is likely to attract people from all over the region. Due to the high levels of traffic that will likely be generated, investments in non-automobile transportation should be made to reduce the share of vehicle trips and replace them with public transit and active transportation trips.

Biking Improvements

Bicycle Network

Creating an efficient network of bicycle paths will likely increase bicycle ridership and relieve some of the traffic congestion in the area. With the new transit village, all new developments will be required to invest in new bicycle infrastructure in order to reduce the share of automobile travel around the station area.

Separated Bicycle Lanes

Bicycle safety is also very important if the station is to induce any kind of modal shift. To ensure the safety of new bicyclists, Class I separated bikeways will be implemented along Millbrae Avenue and El Camino Real. The implementation of separated bikeways will also provide for a smoother bicycle experience and will help with travel times for people traveling on bikes.

Bike Signals

Separate bike signals will also be provided within the vicinity of the station to minimize pedestrian-bicycle collisions during the busiest hours of the day.

Pedestrian Refuge Islands

Pedestrian refuge islands provide a safe place for pedestrians to wait when crossing the street or waiting for a bus. Having pedestrian islands will not only increase the safety of pedestrians, but will also increase the safety of bicyclists by reducing the number of places where pedestrian-bicycle collisions are likely to occur.

Signage

Because the Millbrae Station plans to serve many rail lines, including BART, Caltrain, and the future California High Speed Rail, wayfinding may become confusing to new transit riders. In order to make the station easy to navigate, clear signage must be implemented to ensure the seamless transition between transit modes and systems.

3. Promote Strategic Economic Development

Millbrae city demonstrates a level of specialization in accommodation and food service jobs comparative to industry in the surrounding region. Accommodation and food service

jobs consist 35.3% of total available jobs, **(Table 1-A)** compared to the 8.34% makeup **(Table 1-B)** for the larger region it inhabits; including San Francisco, San Mateo, and Santa Clara counties.

Alongside the character and condition of the street, this is reasonable justification for further study into Millbrae's economic and business makeup. In the meantime, it is significant cause for developing a specific plan that emphasizes support of local food service and accommodation jobs. This dimension of Millbrae's existing industry can be leveraged to formulate Millbrae as a distinct and memorable stop alongside other HSR developments.

Table 1-A. Millbrae Jobs by Industry Sector

Jobs by Industry Sector	Millbrae	
	2015	
	Count	Share
Agriculture, Forestry, Fishing and Hunting	0	0.0%
Mining, Quarrying, and Oil and Gas Extraction	0	0.0%
Utilities	0	0.0%
Construction	194	4.0%
Manufacturing	96	2.0%
Wholesale Trade	75	1.5%
Retail Trade	509	10.5%
Transportation and Warehousing	53	1.1%
Information	119	2.4%
Finance and Insurance	168	3.5%
Real Estate and Rental and Leasing	98	2.0%
Professional, Scientific, and Technical Services	370	7.6%
Management of Companies and Enterprises	4	0.1%
Administration & Support, Waste Management and Remediation	107	2.2%
Educational Services	448	9.2%
Health Care and Social Assistance	497	10.2%
Arts, Entertainment, and Recreation	86	1.8%
Accommodation and Food Services	1,721	35.3%

Other Services (excluding Public Administration)	243	5.0%
Public Administration	81	1.7%

Source: US Census Bureau; 2015 Longitudinal Employer-Household Dynamics; generated by Chris McCoy; using On the Map tool; <https://onthemap.ces.census.gov/>; (May 4 2018); calculations by author.

Table 1-B. Regional Jobs by Industry Sector - San Francisco, San Mateo, Santa Clara Counties

Jobs by Industry Sector	San Francisco		San Mateo		Santa Clara		Regional Total	Percent of Total
	2015		2015		2015			
	Count	Share	Count	Share	Count	Share		
Agriculture, Forestry, Fishing and Hunting	162	0.0%	1,473	0.4%	2,721	0.3%	4,356	0.23%
Mining, Quarrying, and Oil and Gas Extraction	12	0.0%	44	0.0%	244	0.0%	300	0.02%
Utilities	13,232	2.1%	1,089	0.3%	3,149	0.3%	17,470	0.90%
Construction	17,892	2.8%	20,610	5.8%	41,139	4.4%	79,641	4.12%
Manufacturing	9,405	1.5%	24,472	6.8%	152,234	16.3%	186,111	9.62%
Wholesale Trade	16,527	2.6%	11,754	3.3%	41,529	4.4%	69,810	3.61%
Retail Trade	43,609	6.8%	31,509	8.8%	78,702	8.4%	153,820	7.95%
Transportation and Warehousing	14,938	2.3%	23,258	6.5%	14,218	1.5%	52,414	2.71%
Information	36,044	5.6%	33,327	9.3%	64,734	6.9%	134,105	6.93%
Finance and Insurance	40,639	6.3%	15,636	4.4%	20,090	2.2%	76,365	3.95%
Real Estate and Rental and	12,92	2.0	6,5	1.8%	12,025	1.3%	31,477	1.63%

Leasing	2	%	30					
Professional, Scientific, and Technical Services	118,746	18.5%	51,133	14.3%	140,194	15.0%	310,073	16.03%
Management of Companies and Enterprises	24,651	3.8%	5,930	1.7%	12,816	1.4%	43,397	2.24%
Administration & Support, Waste Management and Remediation	41,333	6.4%	22,286	6.2%	58,324	6.2%	121,943	6.30%
Educational Services	50,811	7.9%	19,532	5.5%	71,729	7.7%	142,072	7.35%
Health Care and Social Assistance	64,548	10.0%	32,673	9.1%	98,564	10.6%	195,785	10.12%
Arts, Entertainment, and Recreation	13,845	2.2%	5,182	1.4%	12,980	1.4%	32,007	1.65%
Accommodation and Food Services	67,645	10.5%	29,280	8.2%	64,423	6.9%	161,348	8.34%
Other Services (excluding Public Administration)	25,675	4.0%	13,844	3.9%	22,699	2.4%	62,218	3.22%
Public Administration	29,739	4.6%	8,731	2.4%	21,051	2.3%	59,521	3.08%
						Total # of Jobs	1,934,233	100.00%

Source: US Census Bureau; 2015 Longitudinal Employer-Household Dynamics; generated by Chris McCoy; using On the Map tool; <https://onthemap.ces.census.gov/>; (May 4 2018); calculations by author.

Underground Parking

Due to Millbrae Station's close proximity to SFO, a parking structure is likely not feasible, and would pose many challenges to incoming and outgoing flights. To increase economic activity around the station area, staff recommends that existing surface parking be moved underground to provide space for small restaurant and retail establishments. This new transit village will capitalize on the high volumes of pedestrians and bicyclists that pass through the station area every day.

Curb Space

With the introduction of new retail establishments, an increase in demand for curb space is also expected due to deliveries and ridesharing services. Instead of implementing streetside parking, multifunctional curb and parking spaces should be added to provide space for drop offs of goods and people getting to and from the station using ridesharing services such as Uber and Lyft.

General Plan & Zoning Analysis

Element	Page #	Existing General Language	Discussion	Proposed
Land Use	Pg. 3-13 Goal LU1	Preserve the quality of residential neighborhoods		
Land Use	Policy LU1.1	Quality of Residential Neighborhoods Assure that all new residential development, renovation or remodelling preserves and strengthens Millbrae's residential neighborhoods by requiring projects to be in keeping with the character of the neighborhood and be harmoniously designed and integrated with the existing neighborhood.	All new residential mixed use development in the heart of millbrae will compliment existing residential neighborhoods.	N/A
Land Use	Policy LU1.2	Residential Densities Maintain the character and long-term viability of the city's residential areas by assuring that residential projects are well design and consistent with site area resources and constraints. The following guidelines shall provide a starting point for the establishing project-specific densities, as shown on the Land Use map	Character will continue to be maintained.	N/A
Land Use	Goal LU2 Page 3-14	Promote proper site planning, architectural design, and property maintenance.	N/A	N/A
Land Use	Policy LU2.4	Design and Development Review Process for Commercial and Industrial Projects Establish guidelines for all new commercial and industrial development, renovation, and remodelling projects to enhance the overall character of the city, protect the public from unwarranted nuisances and create a high-quality aesthetic in the city's commercial districts. To this end, proposed projects shall strive to achieve the following goal: <ul style="list-style-type: none"> • Achieve a high quality design in keeping with Millbrae's suburban character • Assure that the design and scale of the project is appropriate in relation to the neighborhood in which it is located, including exterior colors and materials. • Minimize the impacts of excessive noise, glare, or hazardous materials • Screen unsightly uses, including trash and loading dock areas, rooftop equipment and ventilating systems 	The suburban feel of Millbrae may inevitably have to be reinvented considering the development surrounding the high speed rail.	Proposed amendment entails achieving a very high quality of design without turning Millbrae into an urban hub.

		<ul style="list-style-type: none"> Incorporate setbacks, open space, and landscaping (including maintenance) into project design 		
Land Use	LU2.5	Historic Preservation Identify and protect sites and structures of architectural, historical, archaeological, and cultural significance, including significant trees and other plant materials. Require new development in historic areas to complement the character of nearby historic structures.	N/A	N/A
Land Use	LU2.6	Code Enforcement and Property Maintenance Preserve the quality of the environment and of the community in-general through active implementation of the community Preservation Ordinance, code enforcement and property maintenance programs. Strive to encourage voluntary compliance through face-to-face, personal interaction in the code enforcement process	N/A	N/A
Land Use	LU2.7	Civic Beautification and Public Art Establish a continuing program of civic beautification gateway or entryway enhancement tree planting, commercial area enhancement, maintenance of homes and streets, public art and other measures which will promote aesthetically desirable environment and attractive neighborhood and commercial areas. Formalize the process for the acceptance, review, and placement of public art.	Every new development in the city should be required to spend money on art.	1% of every projects' budget in Millbrae must be spent on art for the public.
Land Use	LU2.8	Planning and Zoning Ordinances Update and maintain the currency of the planning and zoning regulations, including the sign, wireless components, walls, fences, and hedges ordinances.	N/A	N/A
Land Use	LU3	Maintain a Variety of Land Uses		
Land Use	LU3.3	Land Use Designations Residential <ol style="list-style-type: none"> Very low density residential allows for single family residential development at a density of up to four units per acre. Parks and playgrounds could be allowed as conditional uses, as well as schools, child care centers and churches. Low Density residential allows for single family residential development at a density of up to eight units per acre, usually associated with single family 	In terms of high density development the current plan allows for 60 units per acre, which would typically be 6 stories. The density portion of this designation may have to be amended to promote higher density	This portion of land use designations should be amended to allow for 10 story developments for high density housing and/or hotels in Millbrae.

		<p>residences. Uses related to residential uses such as schools, churches, child care centers may be permitted.</p> <p>c. Medium Density Residential allows for duplex and triplex residential development at a density of up to seventeen units per acre. Conditional uses would include apartment buildings consistent with the density and neighborhood character. Related uses such as churches, schools, child care centers, and tot lots may be permitted.</p> <p>d. High Density Residential allows for residential development at a density of up to eighty units per acre. This density is usually associated with multi-family structures (apartments and condos) of forty units per acres but the highest density is associated with buildings up to six stories. Other uses including rooming and boarding houses, sanitariums, and rest homes. Professional offices could be allowed as a conditional use. Uses related to residential uses such as schools, churches, child care centers and tot lots may be permitted.</p> <p>Commercial</p> <p>a. General commercial includes full range of retail commercial uses including apparel and accessory stores, food stores, banks, personal and professional services.</p> <p>b. Industrial and utility areas may be used for commercial uses and a wide range of industrial, manufacturing, warehousing and automotive uses. This designation also includes facilities owned and/or operated by public utilities to serve the public with electricity, gas, water, and communications.</p> <p>Millbrae Station Area Specific Plan Area</p> <p>a. The Millbrae Station Area is designated as a special land use policy area (Policy LU3.5) The range of allowable land use types, building intensity, and other standards are contained in the Millbrae Station Area Specific Plan.</p>	development.	
Land Use	LU3.5	<p>Millbrae Station</p> <p>a. Capitalize on the opportunity presented by construction of the new Millbrae BART/Caltrain intermodal station to enhance the city's economic development and implement the Millbrae Station Area Specific Plan</p>	No changes need to be made to this portion of the document. We will continue to develop with our strongest focus being on transit	N/A

		<ul style="list-style-type: none"> b. Development surrounding the station should be of an appropriate intensity to promote the creation of a transit-oriented district, to reinforce transit ridership, and to create a vibrant activity center and gateway to the city. c. The types of uses and the treatment of development within the station area should promote an active, safe and interesting pedestrian and vehicular environment during the day and evening hours. d. New development within the station area should complement and reinforce adjacent areas such as the downtown to create a cohesive and seamless urban fabric served by major urban transportation systems. e. Within these parameters, development regulations should provide sufficient flexibility to respond to changing market conditions, and to promote the create of a mixed-use district. f. Programs should be developed to maximize off-street parking within the station area including provision of public parking, enforcement, curb painting, and signage, among others. 	oriented development in preparation for the high speed rail.	
Land Use	LU3.6	<p>Mixed Residential/Commercial Projects</p> <p>Encourage affordable housing production by allowing mixed residential / commercial projects. As appropriate, the city will encourage mixed use projects in areas designated for commercial use, with residential, office and / or live/work uses located above first-floor retail uses, with the residential portion of mixed use projects to be built at maximum allowed density to reduce trips to, and from and within the city. Proposed mixed use projects should:</p> <ul style="list-style-type: none"> a. Provide commercial uses for residents of the project in which the establishment is located and for the adjacent residences. b. Limit commercial uses to the ground floor of a multi-story residential building or to single-story buildings. c. Limit commercial uses to those that are compatible with residential. d. Regulate signs through a planned sign program. e. Protect residential uses from the noise and traffic generated by commercial establishments with landscaping, open space for use by resident of the project. f. Provide sufficient parking for residents, 	This portion of the document applies directly to our TOD. Open space will be included on the roof of each building to ensure that we are providing green space in an already developed neighborhood. We will continue to only allow commercial development on ground level of mixed use developments.	N/A

		<p>employees, and customers.</p> <p>g. Provide an adequate amount of open space for use by residents of the project. Such open space area should be designed to provide a private area for residents.</p>		
Land Use	LU3.7	<p>Jobs/Housing Balance</p> <p>Continue to strive for a balance between the number of jobs in the Millbrae Planning Area and the number of housing units available for workers. To achieve</p>	Balance will be maintained through mixed use of office/retail/residential.	N/A
Circulation (Ped & Bike Amendment)	2	Ever increasing transportation costs, traffic congestion, and lack of parking make bicycling an even more attractive form of transportation now and in the future, especially when used in conjunction with public transit.	Bicycling will serve as a connection to the high speed rail.	Ever increasing transportation costs, traffic congestion, and lack of parking make bicycling an even more attractive form of transportation now and in the future, especially when used in conjunction with public transit. When connected with HSR, the implementation of bicycle infrastructure can be used as a local connection to connect the regional transit to local jobs.
Mobility Existing Conditions	5-41	<p>Connect bicycle infrastructure to transit</p> <p>If the bicycle is to be used as a significant alternative to the auto, connections with major public transit lines must exist. Therefore, it is important to tie into transit services provided by BART, Caltrain and SamTrans.</p>	Added HSR to list of transit.	If the bicycle is to be used as a significant alternative to the auto, connections with major public transit lines must exist. Therefore, it is important to tie into transit services provided

				by BART, Caltrain and SamTrans.
Mobility Existing Conditions	5-10	Improve Traffic Congestion around Millbrae Transit Center Traffic congestion is primarily around the Millbrae Intermodal Station. LoS D at peak PM hours. (mobility, page 10)	Added a goal to relieve traffic congestion during peak operation hours.	Traffic congestion is primarily around the Millbrae Intermodal Station. LoS D at peak PM hours. All measures should be taken to minimize the effect that the High Speed rail has on surrounding traffic.
Mobility Existing Conditions	5-55	Regional Airport System Plan The Regional Airport System Plan (RASP) 2000 is intended to explore a range of solutions to address the increasing air traffic demands being placed on the runways at the major commercial airports and on the airspace around these airports. The RASP provides an independent analysis of future aviation trends and airport system requirements to be used together with airport planning documents to help evaluate proposed improvements to the regional airport system capacity. The RASP forecasts for each airport are based on the analysis of individual markets. The RASP is primarily an advisory and informational document.	The building guidelines in the areas surrounding the airport restrict, building height, which may make it challenging to build a transit-oriented development around the Millbrae Station Area.	The density around the Millbrae station area should be increased to maximize the effects of Transit-Oriented development to include residential, retail, and employment spaces. However, airport area development guidelines should still be taken into account.
Housing	Goal H-1 Pg. 19	Reinforce the City's Commitment to Meeting Housing Needs	This is a generally commendable aspiration and should be committed toward aspects of the HSR development.	Remain the same
Housing	Goal H-2 Pg. 19	Protect and Enhance Existing Housing, Community Character and Resources	This is a generally commendable aspiration and should be committed toward aspects of the HSR development.	Remain the same
Housing	Goal H-3 Pg. 19	Provide New Housing and Address Affordable Housing and Other Special Needs	This is a generally commendable aspiration and should be	Remain the same

			committed toward aspects of the HSR development.	
Housing	H-2.4 Pg. 23	<p>“Energy Conservation in New Housing”</p> <p>Promote the use of energy conservation in residential construction by incorporating energy conservation in all new residential development. New homes shall meet State standards for energy conservation.</p>	This is a generally commendable aspiration and should be committed toward aspects of the HSR development.	Remain the same
Housing	H2.5 Pg. 22	<p>“Rental Assistance Programs,”</p> <p>Continue to publicize and participate in federal rental assistance programs such as Section 8 and the Housing Voucher programs.</p>	This is also worth maintaining into the HSR plan	Remain the same
Housing	H2.6 Pg. 22	<p>“Protection of Rental Housing Stock,”</p> <p>Promote the retention of rental units and encourage rental subsidy programs that can be applied to existing housing.</p>	This has an impact toward what developments are removed within the specific plan area	Remain the same
Housing	H2.7 Pg. 22	<p>“Community Preservation,”</p> <p>Assure the retention of the single-family character of older residential areas. Protect residents and maintain the housing stock by enforcing the housing and other codes for all types of residential units. As neighborhoods age, the City should provide all possible assistance for housing rehabilitation and maintenance measures through aggressive code enforcement and community preservation.</p>	This may run against desirable levels of density near the proposed station.	Amend codes for building height concerning residential development to decrease density restrictions / promote greater density than would otherwise occur

Housing	H2.9 Pg. 23	<p>“Housing Design.”</p> <p>Protect the character of existing residential neighborhoods and provide stable, safe and attractive neighborhoods by ensuring excellence in project design consistent with existing community character (architecture, site planning, amenities, etc.).</p>	This may run against desirable levels of density near the proposed station, but could be considered carefully along a case by case basis	Amend codes for character concerning residential development. Maintain stability, safety, and attractive neighborhoods. Consider implementing a gradient that transitions increased density into existing character
Housing	H2.10 Pg. 23	<p>“Application of Existing Regulations and Guidelines.”</p> <p>Provide and apply regulations and guidelines to promote the maintenance and protection of existing residential areas.</p>	The integrity of existing residential may be compromised by nearby development	See above comments
Housing	H3.1 Pg.25	<p>Housing for New Employees and their Families.</p> <p>Given the increase in commercial and retail development expected through build-out of the city, encourage an adequate supply and variety of rental and ownership housing that meets the needs of new employees and their families.</p>	This suggests an ongoing assessment of employee and family needs, but also a mix of rental and ownership housing in the new HSR development.	Although this policy does not present any counterproductive clauses, additional specificity may be desirable in identifying the scope of employees and their families; being that a significant percentage of these will begin to inhabit and/or maintain employment in areas beyond city limits.
Housing	H3.2 Pg. 25	Planned Development Process. Encourage the use of the planned development process to achieve a diversity of housing types and tenure and to provide greater choice for residents and workers in Millbrae.	This is a necessary and productive policy in formulating an HSR plan.	Remain the same
Housing	H.3.3 Pg. 25	Mixed-Use Development Encourage mixed residential and commercial uses on those parcels where a mix is feasible and appropriate, consistent with the General Plan, through the following and other means: (1) Increased	This is a necessary and productive policy in formulating an HSR plan. It will	Remain the same

		densities, (2) Reduced unit sizes, (3) Allowances for required ground-floor retail.	be consistent with the General Plan so long as the proposed set of amendments to the general plan are internally consistent	
Housing	H.3.4 Pg. 25	<p>“Second Units”</p> <p>Develop a second unit ordinance to allow auxiliary housing units where appropriate.</p>	This policy does not directly interfere or affect the HSR proposal.	Remain the same
Housing	H.3.5 Pg. 25	<p>“Affordable Housing”</p> <p>Improve the balance of housing type, tenure and affordability by encouraging development of housing at appropriate sites and locations to serve various income levels, and utilize available programs to achieve affordable housing</p>	This is a necessary and productive policy in formulating an HSR plan. The scope of appropriate site and locations may have to be expanded.	Remain essentially the same. Reference other areas influencing what are deemed appropriate sites
Housing	H.3.6 Pg. 25	<p>“Incentives for Affordable Housing.”</p> <p>Continue to approve housing at higher densities when affordable units are provided, consistent with environmental constraints, surrounding development patterns and design excellence (architecture, site planning, amenities, etc.). To the extent they are feasible and workable at a given location, the City will offer a density bonus and other incentives, such as reduced fees, cost-saving site design techniques, reduced parking requirements, smaller unit sizes, fast-track project review, and other methods of reducing the total cost of internal roads and utilities serving the development.</p>	This is a necessary and productive policy in formulating an HSR plan. Can be leveraged to create a stronger case/argument for density. Overlaps with increased desire for density as a result of HSR development.	Remain essentially the same.
Housing	H.3.7 Pg. 26	<p>“Density Bonuses for Affordable Housing Projects Consistent with State Density Bonus Law.”</p> <p>The City will offer density bonuses of at least 25 percent and at least one other incentive, consistent with the State Density Bonus Law (Government Code Section 65915), for projects which include at least: (a) 20 percent of the units for lower-income households; or (b) 10 percent of the units for very low income households; or (c) 50 percent of the units for senior citizens. When in the interest of the city, offer larger density</p>	This is a necessary and productive policy in formulating an HSR plan. Can be leveraged to create a stronger case/argument for density. Overlaps with increased desire for density as a result of HSR development. Section 65915 Areas (a) and (b) may make the	Remain essentially the same but amend to specifically encourage means (a) and (b) as methods for granting density bonuses. Build upon density as being in the interests of the city.

		bonuses. Until the city adopts a density bonus law, continue to follow state law by offering the incentives outlined in state law.	most sense for catering to the economic base established by HSR.	
Parks, Open Space and Conservation Goals	Goal PC5 p.16	Provide for Public Access and Use of Open Space as Appropriate To enhance the recreational value of open space areas, provide for public access to and use of open space areas where such access and use will not harm the area's natural features or habitat.	This goal does not directly interfere or affect the HSR proposal.	Remain the same
	Policy PC 5.2 P. 19	For open space areas in public ownership, clearly delineate areas which are appropriate for public use and access, and differentiate them from those areas to be protected from human disturbance. In areas where public access is appropriate, provide access points and accessible design features (e.g., trails and related facilities).	Good. Identify areas for potential connection of HSR station to public pedestrian paths, bike trails and facilities in the local community.	Remain the same.
	Policy PC 5.3 P. 19	Special Need Groups Ensure that public access points and recreational design features provide equal opportunity for people with special needs to access and enjoy public open space areas.	Okay.	Remain the same.
	Program PCIP-13 P. 23	Street Tree and Landscape Master Plan. Develop a street tree and landscape master plan for major streets. The plan should promote the use of indigenous species and be guided by the concept of interconnected open space in Millbrae, linked visually via dense street plantings along the sides of streets and in median strips. The plan should include special plantings at gateways to the city.	Okay.	Remain the same.
Parks, Open Space and Conservation Goals	Goal PC 6 p.16	Protect and Conserve Natural Resources Preserve natural resources which provide important habitat, ecological or archeological value, and maintain clean air and water quality.	Not directly relevant to HSR but important to make sure the HSR station will not adversely impact the natural environment or natural resources.	Remain the same.
	Policy PC 6.3	Development Patterns Encourage development patterns which minimize impacts on the City's environmental resources and integrate development with open	Okay.	Remain the same.

		space areas. Cluster development and other creative site planning techniques should be encouraged to preserve open space, habitat, and other environmental or recreational resources.		
	Program PCIP-16 p. 23	Habitat Protection Ordinance Comply with State and Federal laws regarding habitat protection to identify and protect areas of biological value, including chaparral, broadleaf/riparian woodlands, open grasslands, marshy areas, creeks, and sensitive nesting sites. The ordinance would include setback requirements, guidelines for impact avoidance and mitigation, standards for compensation of habitat loss (as established by a qualified biologist), and requirements for monitoring and habitat enhancement plans.	Will not affect HSR.	Remain the same.
	Program PCIP-17 p.23	Consultation on Fish and Wildlife Impacts The City will continue to notify and consult with the California Department of Fish and Game and the Army Corps of Engineers when development projects are proposed in locations where there may be impacts to fish and wildlife and their habitats.	Will not affect HSR.	Remain the same.
Noise	Goal NS1 p. 11	Preserve and Improve the “Quiet Ambiance” in Existing Neighborhoods. Protect Millbrae neighborhoods by providing an acceptable noise level throughout the community, identifying and alleviating or minimizing, existing noise problems where possible.	HSR may increase noise in the area but the airport is also nearby which has a larger noise impact. However potential noise issues can be addressed.	Remain the same.
Noise	Policies NS 1.1 P. 11	Protection of Residential Areas. Protect the noise environment in existing residential areas, requiring the evaluation of mitigation measures for projects under the following circumstances: <ol style="list-style-type: none"> The project would cause the Ldn to increase 3 dB(A) or more. Any increase would result in an Ldn greater than 60 dB(A) The Ldn already exceeds 60 dB(A). The project has the potential to generate significant adverse community response. 	HSR most likely will not drastically increase the existing noise levels in the area in comparison to the airport..	Remain the same.
Noise	Policies NS 2.5 p. 14	Noise Sensitive Uses The City will protect schools, hospitals, libraries, churches, convalescent homes and other noise sensitive uses from noise levels exceeding	HSR will not be located close to noise sensitive uses.	Remain the same.

		those allowed in residential areas. Projects located near noise sensitive uses should be oriented away from noise sources unless mitigation measures are included in development plans and regulation occurs of the activities or uses generating noise that might cause noise disturbances for noise sensitive uses.		
Noise	Programs NSIP-6 p. 16	Purchase of City Vehicles and Equipment Consider noise criteria in the purchase of new city vehicles, their components and other equipment.	Okay. New HSR Station construction and elements can incorporate noise reduction technology.	Remain the same.
Safety	Goal S1 P. 17	Protect Community Health and Safety from Natural and Man-made Hazards Minimize the potential for loss of life, injury, damage to property, economic and social dislocation and unusual public expense due to natural and man-made hazards, including protection from the risk of flood damage and minimizing hazards of soil erosion, weak and expansive soils, potentially hazardous soils materials, other hazardous materials, geologic instability and seismic activity.	Not directly affected by HSR.	Remain the same.
Safety	Policies S1.4 P. 17	Seismic Safety Assure existing and new structures are designed to protect people and property from seismic hazards.	HSR safety involved in construction.	Remain the same.
Safety	Program SIP-2 P. 21	Public Information The City shall keep its citizenry informed as to the current nature and extent of local safety hazards.	Incorporate HSR safety in public distribution of information.	Remain the same.

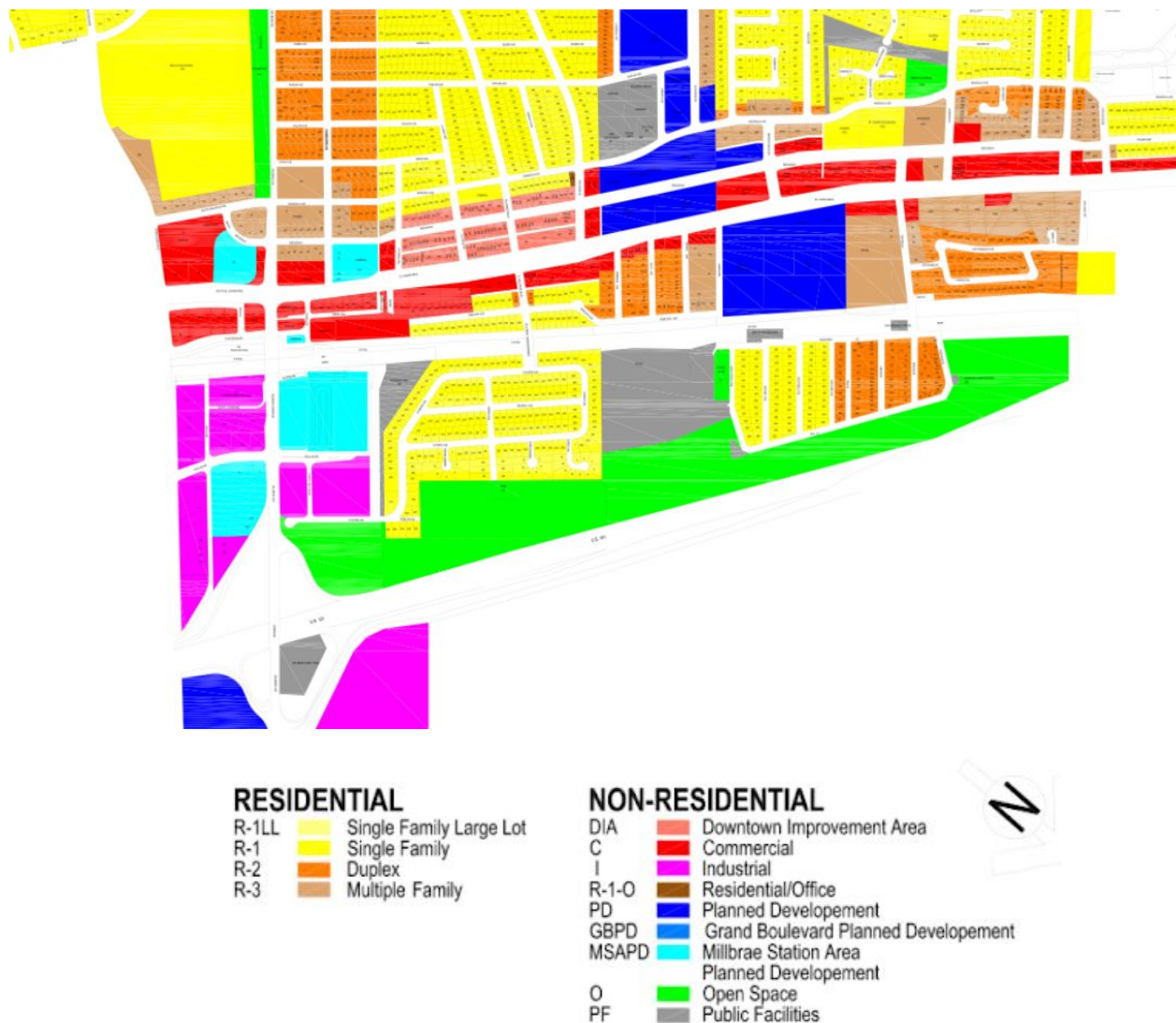
Re-subdivision of the Specific Plan

Existing Subdivision

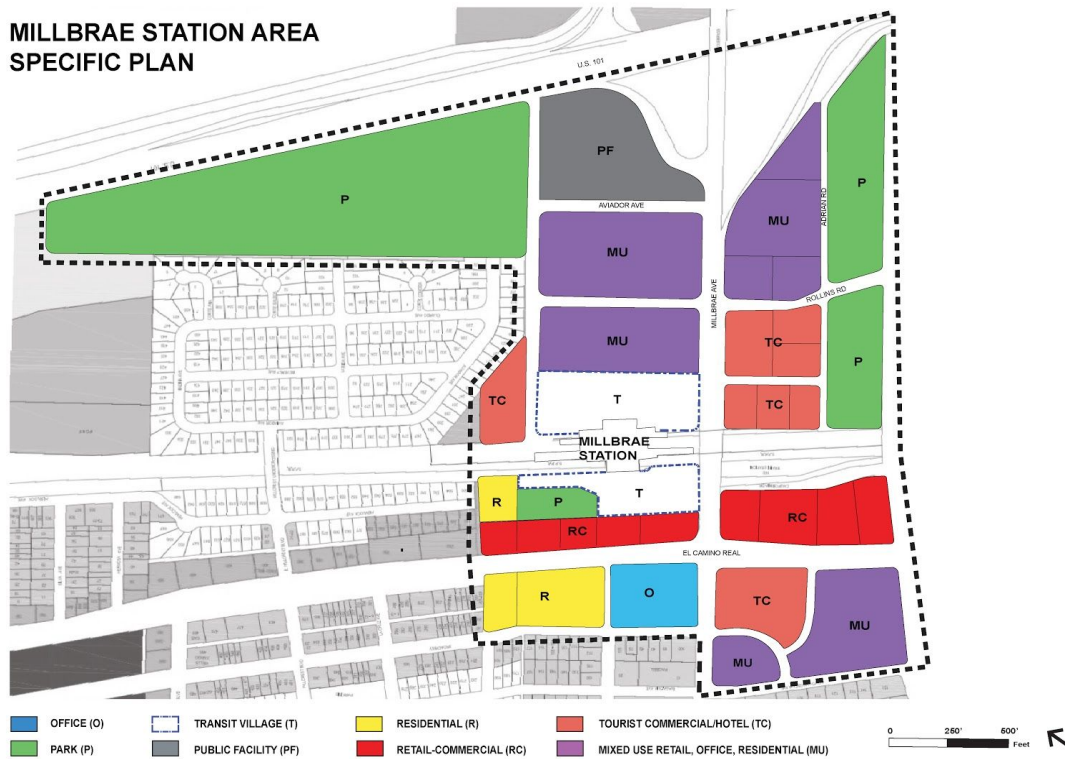
Purpose

Subdivision regulations are locally adopted laws governing the process of dividing land. This division is normally accomplished through procedures of subdivision map review by the City. A subdivider is not permitted to divide and sell his land until the proposal has been approved by the Planning Commission (City of Millbrae).

Existing subdivision map



New Subdivision Map



Recommendations

Land use considerations

1. Dedicate areas for park land and create green space buffers to serve as a transitional spaces between the Transit Village and the existing Industrial area.
2. The existing land use around the Millbrae Station area is primarily parking. The existing surface level parking will be moved underground, below ground floor retail spaces to create space. Some existing community retail establishments will be maintained while new mixed use developments such as office, hotels and other retail will diversify and strengthen the local economy.
3. Enhance the pedestrian and bicycle safety networks through street improvements such as the implementation of protected bike lanes, pedestrian refuge islands and bridges, lighting, updated signage, and other relevant complete streets elements.
4. Preserve a no development zone near the airport and near the freeway-on and off-ramps.
5. Maintain a connection to the existing neighborhoods west of Millbrae Station Specific Plan Area and respect existing communities.

Infrastructure / Capital Improvements

Water

Millbrae purchases the entirety of its water supply from the San Francisco Public Utilities Commission. This water supply is financed by water rates charged to customers in the city. Since the specific plan area anticipates an increase in residential and commercial activity, the city will have to address the need for more water supply. If financial means cannot adapt to meet the new need, the city must instead consider more aggressive water conservation measures. Under either contingency the city must carefully consider the impact of this strain on stakeholders, possibly through community outreach and polling.

The 2015 Urban Water Management Plan, the most recent assessment of past, current, and future water demand can provide a baseline measurement of water needs for the city after the HSR development in the specific plan area. According to the Urban Water Management Plan (UWMP), the city need only expect moderate, steady growth of water demand levels through to 2040. (UWMP 2015, Executive Summary, viii).

This statement of need is formulated on the basis of the city's present full-buildout status. It anticipates that significant new volumes of water resource requirements can and will only occur on the basis of redevelopment of existing property from lower to higher density. The expectation of moderate growth occurs in lieu of recent California droughts, a population that is increasingly cognizant of water use and water availability, as well as state and local policy measures to reduce consumption of water resources. These factors, working in tandem with expected population increase for Millbrae, reinforce the case for a moderate growth contingency.

The UWMP 2015 does not, however, anticipate water demand for an HSR contingency that would accelerate anticipated levels of residential and commercial growth. Therefore any reasonable projections of water use for the city at large should exceed estimates from the 2015 UWMP. Water demand for the specific plan area itself can be anticipated more directly based on anticipated square footage and subsequent count of units developed by type.

Table 1: Projected Project Water Demand

Development Type	Potential Additional Development (# of Units)	Water Demand Factor by Unit Type	Water Demand per Unit	Projected Daily Water Demand (gal)	Projected Water Demand (AF)
Multifamily Residential	348	0.72	216	75207.27273	0.2308026452
Retail	455	0.35	105	47775	0.1466160914
Office	50	0.01	3	150	0.000460333097
Hotel	2008	0.36	108	216830.7692	0.6654291969
Total Daily Use (AF)					1.043308267
Total Annual Use (AFY)					380.8075173

[Table prepared by MMZWS & Partners using rules of thumb obtained from BAWSCA. <http://bawasca.org/water/use/>]

Total anticipated water demand is 380.807 AFY for the higher density redevelopment. The City should anticipate improvements to existing water infrastructure equal to, or moderately exceeding in increase in demand by 380.807 AFY since previous plans for water infrastructure assumed no major future property developments.

Wastewater and Stormwater

As a result of increased levels of density in the new HSR Specific Plan, a greater demand for wastewater and sanitary sewer infrastructure is anticipated. Demand is expected to increase, however present capacity exceeds present demand by nearly 200%. The current system has a capacity of 3 MGD, and up to 9 MGD during peak conditions. 2015 inflow of wastewater was 1.8 MGD (UMWP 2015), therefore the city can safely relegate major improvements beyond the timeframe of the Millbrae HSR Specific Plan.

Although the magnitude of water distributed to existing filtration and treatment systems may produce strain, it is possible that existing water main infrastructure could accommodate higher development density if surface developments are required to implement rainwater mitigation at every available opportunity. Examples for stormwater mitigation include bioswales and permeable paving. This will shift a significant amount of cost from the city to private developers, although some central system improvements are inevitable.

Energy infrastructure

Energy consumption in Millbrae prior to the arrival of the high speed rail is largely dependent on natural gas. Furthermore, 59% of energy consumed comes from the residential sector. Millbrae

expects a 20% increase in energy consumption along with a 15% increase in residents due to the HSR development. Infrastructure to support this surge will be derived from 100 percent renewable sources, primarily solar. The expected shift shall result in 44% of the city's energy coming from electricity and 54% from natural gas. The city of Millbrae currently has multiple programs available to residents to promote energy conservation and sustainable infrastructure. Through the subsidization of energy efficient appliances and fixtures, as well as subsidization of solar resources for both businesses and residences, Millbrae will continue to move toward a more sustainable future.

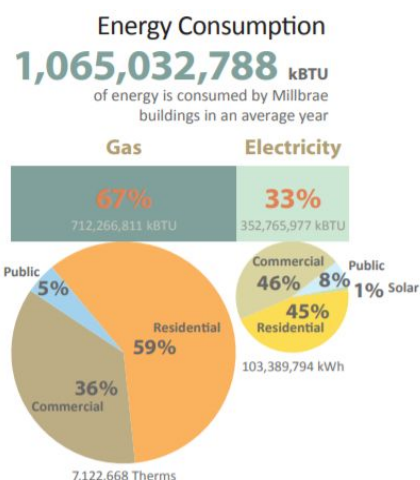


Figure 1: Average energy consumption in Millbrae

Solid waste-generation, collection, management of trash

In collaboration with the South San Francisco Scavenger Company (SSSC) on providing solid waste and recycling services, Millbrae residential and business commercial facilities are provided debris box/dumpster/roll-off bin rentals. Residents may choose between a 20-gallon, 32-gallon or 64-gallon garbage container on wheels. California State licensed demolition or construction contractors are allowed to self-haul their own garbage and recyclables if they are using their own vehicles, equipment and employees to perform the self-hauling, and as long as such hauling is related to their primary business function. In 2013, the statewide residential per capita disposal rate was 4.4 pounds per resident per day, and the statewide employee per capita disposal rate was 10.2 pound per employee per day.

Schools

The City of Millbrae is part of the Millbrae Elementary School District for K-8 public education, the San Mateo Union High School District for 9-12 public education, and the San Mateo Community College District for college-level education. Listed below are colleges and universities with over 2000 students near the Millbrae Station Area:

- Skyline College (about 5 miles; San Bruno, CA; Full-time enrollment: 5,824)
- College of San Mateo (about 6 miles; San Mateo, CA; FT enrollment: 5,398)

- City College of San Francisco (about 10 miles; San Francisco, CA; FT enrollment: 17,569)
- San Francisco State University (about 10 miles; San Francisco, CA; FT enrollment: 24,644)
- University of San Francisco (about 13 miles; San Francisco, CA; FT enrollment: 9,190)
- Academy of Art University (about 13 miles; San Francisco, CA; FT enrollment: 12,352)
- Canada College (about 13 miles; Redwood City, CA; FT enrollment: 3,446)

Public high schools in Millbrae:

Mills High (Students: 1,091, Location: 400 Murchison Dr., Grades: 9-12)

Design Tech High (Location: 400 Murchison Dr., Grades: 9-12, Charter school)

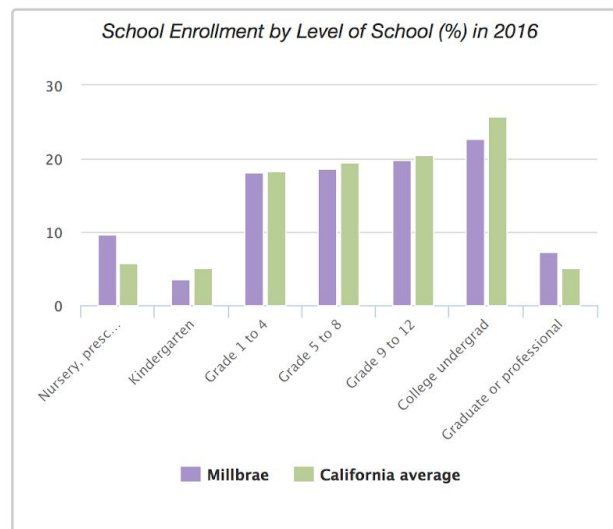
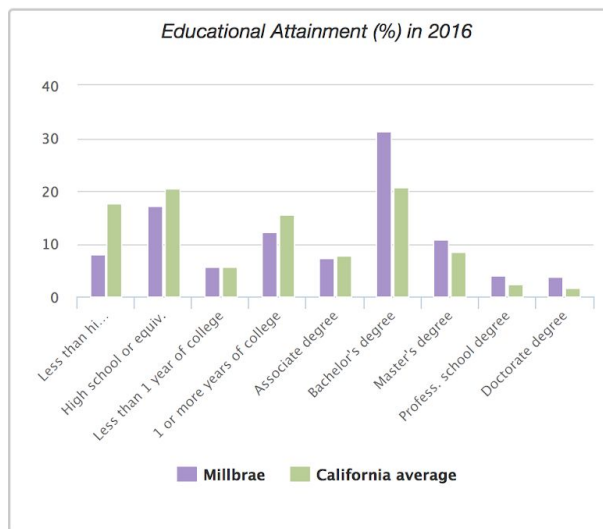
Public elementary/middle schools in Millbrae:

Taylor Middle School (Students: 828, Location: 850 Taylor Blvd., Grades: 6-8)

SPring Valley Elementary (Students: 243, Location: 817 Murchison Dr., Grades: KG-5)

Green Hills Elementary (Students: 183, Location: 401 Ludeman Ln., Grades: KG-5)

Meadows Elementary (Location: 1101 Helen Dr., Grades: KG-5)



Based on 1% population increase per year, over the course of 15 years and a 15% increase in total population there will be a need for more elementary through high school institutions. The introduction of the HSR will also increase the need of more schools as it will also cause a population increase as more people consider Millbrae a permanent home.

Parks

There are twelve existing in Millbrae includes Bayside Manor Park, Central Park, Green Hills Park, Josephine Waugh-Soroptimist Park, Lion “Bill Mitchell” Park, Marina Vista Park, Meadows PArk, Mills Estates Park, Mosta Grover/Sister City, Rotary Park, Skate Park and Spur Trail Phases I & II. The Millbrae Station project will add four new parks spaces to Millbrae.

Information and communication infrastructure

Information and communication infrastructure in Millbrae include telephone and internet service providers and tv broadcast stations.

TV Broadcast Stations around Millbrae

- KQED (Channel 9; San Francisco, CA; Owner: KQED, Inc.)
- KCSM-TV (Channel 60; San Mateo, CA; Owner: San Mateo County Community College District)
- KGO-TV (Channel 7; San Francisco, CA; Owner: KGO Television, Inc.)
- KPIX-TV (Channel 5; San Francisco, CA; Owner: CBS Broadcasting Inc.)
- KTVU (Channel 2; Oakland, CA; Owner: KTVU Partnership)
- KRON-TV (Channel 4; San Francisco, CA; Owner: Young Broadcasting of San Francisco, INC.)
- KMTP-TV (Channel 32; San Francisco, CA; Owner: Minority Television Project)
- KBHK-TV (Channel 44; San Francisco, CA; Owner: Viacom Television Stations Group of San Francisco INC.)
- KBWB (Channel 20; San Francisco, CA; Owner: KBWB License, INC.)
- KFSF (Channel 66; VALLEJO, CA; Owner: Telefutura San Francisco LLC)
- KCNS (Channel 38; San Francisco, CA; Owner: Wray, INC.)
- KTSF (Channel 26; San Francisco, CA; Owner: Lincoln Broadcasting Company, A California LP)
- KBIT-CA (Channel 28; San Francisco, ETC., CA; Owner: Polar Broadcasting, Inc.)
- KICU-TV (Channel 36; San Jose, CA; Owner: KTVU Partnership)
- KTEH (Channel 54; San Jose, CA; Owner: KTEH Foundation)

Transportation:

Millbrae Station

Millbrae station currently has an average weekday ridership of 20,000 passengers. It is also one of the stations with the highest ridership growth, with an average annual ridership growth rate of approximately 8% per year. Approximately 18 percent of riders who used public transit to access the Millbrae Station from home used SamTrans.

Table 2: Caltrain average weekday ridership(AWR), 2014-15

Station	2014		2015		% Change
	Rank	AWR	Rank	AWR	
San Francisco	1	12,160	1	13,571	11.6%
Palo Alto	2	6,156	2	7,197	16.9%
Mountain View	3	4,274	3	4,570	6.9%
San Jose Diridon	4	3,714	4	4,160	12.0%
Millbrae	5	3,291	5	3,536	7.4%
Sytemwide		52,611		58,245	10.7%

Source: Caltrain 2015 Annual Passenger County Key Findings

SamTrans

SamTrans currently operates 73 bus routes, with two lines directly serving Millbrae Station. Route ECR runs as a regional connection between Daly City and Palo Alto, and serves approximately 12,460 riders per day with 20 to 30 minute headways. Route 397 is a nighttime bus that operates between Downtown San Francisco and Palo Alto, primarily via El Camino Real. The route operates every night between 1:00 AM and 6:00 AM with one-hour headways.

Caltrain and BART

Currently, Caltrain serves approximately 3,500 passengers at Millbrae Station on an average weekday. According to an intercept survey conducted by Fehr and Peers in 2013, approximately 1,600 riders transfer between Caltrain and BART daily. About 49 percent of Caltrain passengers at Millbrae transferred from BART. A more detailed table outlining daily BART and Caltrain ridership can be found below.

Table 3: Millbrae Station daily boardings and transfers, 2013

	Non-Transfer	Transfer	Total
BART	4,830	1,600	6,430
Caltrain	1,655	1,600	3,255

Source: MSASP DEIR, p. 4.13-25

Pedestrian Activity

In a study conducted by Pirzadeh & Associates, pedestrian volumes were counted at intersections surrounding Millbrae Station during the morning (7:00 – 9:00 AM) and evening (4:00 – 6:00 PM) peak hours. The counts show that pedestrian activity is generally highest at the intersections closest to the station:

1. El Camino Real and Millbrae Avenue (169 AM; 193 PM)
2. Rollins Road and Millbrae Avenue (121 AM; 141 PM)

3. El Camino Real and Victoria Avenue (94 AM; 154 PM)

Pedestrian volumes are also high during the PM peak period along El Camino Real north of the station at La Cruz Avenue (123 PM) and Hillcrest Boulevard (195 PM). The high counts at these intersections indicate that most pedestrians access the station from areas to the west and southwest of the station, which are the most walkable and provide direct access to residential neighborhoods.

Bicycle Activity

Bicycle counts were also conducted by Pirzadeh & Associates on weekdays between 6:30 and 9:30 AM and between 4:00 and 7:00 PM. In the morning three-hour period, an average of four bicyclists entered the station and 18 exited. During the evening three-hour period, an average of 14 bicyclists entered the station and 10 exited. The highest bicycle volumes were observed on California Drive at Murchison Drive in the northbound direction during the AM peak period (14 cyclists) and in the southbound direction during the PM peak period (15 cyclists). These relatively low peak counts indicate that bicycling is currently an under-utilized access mode at Millbrae Station. Since most bicycle access is on the westside, bicycle storage facilities near the westside station entrance are mostly full during the peak periods, while storage facilities near the eastside station entrance are mostly empty.

Complete Streets

Throughout the transportation planning process, emphasis will be placed on accommodating for all different modes of transit in streets surrounding the station. As demonstrated by statistics above, people enter and exit the station with all different modes, and street improvements would be necessary to accommodate for an increase in station usage. However, an emphasis will be placed on transportation via sustainable modes (pedestrian, bicycle, bus transit), which aligns with the goals presented in the Millbrae Station Area Specific Plan.

Services (Police, Fire, building and equipment)

Police

The nearest police station is located at 581 Magnolia Ave, Millbrae, CA. This is within just 0.7 miles of Millbrae Station where our proposed transit village will be located. An increased demand for police service can be expected due to increased volumes of passengers passing through the station as a result of the addition of the high speed rail.

Fire, Hospital and Emergency Services

1. Fire and emergency medical services for the City of Millbrae are provided by the Central County Fire Department (CCFD). The CCFD service area encompasses approximately 3.2 square miles and a population of approximately 22,000. There are two fire stations within the city limits and they are maintained 24 hours a day. The nearest Fire Station is approximately 0.7 miles away from Millbrae Station.

2. The nearest hospital is Mills-Peninsula-Medical Center and is 0.7 miles away from Millbrae Station.

Hospitals and medical centers in Millbrae:

- A and C Convalescent Hospital of Millbrae (33 Mateo Avenue) Millbrae Serra
- Convalescent Hospital(150 Serra Avenue)
- Other hospitals and medical centers near Millbrae:
- Mission Hospice Inc (Home Health Center about about 2 miles away; Burlingame, CA)
- Davita Burlingame (Dialysis Facility, about 2 miles away; Burlingame, CA)
- Peninsula Medical Center Acute Care Hospitals (about 2 miles away; Burlingame, CA)
- Burlingame Health Care Center (Nursing Home, about 2 miles away; Burlingame, CA)
- Tender Loving Care (Home Health Center, about 2 miles away; Burlingame, CA)
- San Bruno Conv Hosp (Nursing Home, about 2 miles away; San Bruno, CA)
- San Bruno Skilled Nursing Hospital (Nursing Home, about 2 miles away; San Bruno, CA)

Economic Development

Millbrae Station Specific Plan Area will capitalize on pass by travelers visiting from the San Francisco International Airport and the new proposed High-Speed Rail link. By attracting people to Millbrae through local business opportunities, lively restaurants and bars, as well as retail establishments, the City of Millbrae is envisioned a vibrant hub perfect for short term stays as well as permanent residence.

In order to attract the correct demographic mix of short-term travelers and permanent residents, the Millbrae Station Specific Plan will implement the following strategies:

Hotel Construction

Incorporating new hotels into the existing Millbrae community will increase more job opportunities while preserving existing jobs. These hotels will serve to keep travelers in Millbrae rather than encouraging them stay elsewhere. Through retaining travelers, Millbrae will increase the return developed off of sales and hotel taxes.

Office Spaces

In order to promote economic development in Millbrae, a new focus for the city will be adopted. Through the creation of modern and pleasant office spaces in mixed use environments, Millbrae hopes to attract tech startups to the area. These office spaces may even serve as local hubs for the larger silicon valley tech giants.

Commercial Spaces

To promote economic development through commercial spaces, Millbrae will focus on creating the appropriate mix of retail and services. By promoting more retail, restaurants, and bars in vibrant mixed use developments, Millbrae hopes to provide an entertaining and inviting atmosphere for both travelers and residents to spend their time and money.

In order to capitalize on the high volumes of pedestrian traffic around the station, Millbrae will implement the following strategies:

Transit Village

The new transit village will accommodate a variety of uses to maximize the spending of travelers, commuters, and permanent residents. The transit village will be a pedestrian/bike center for business where people are able to stop and travel at the human scale. Bike only zones are meant to create a friendly and social environment. The introduction of new public spaces encourages a more vibrant street life for all demographics.



Figure 2: Proposed public space in mall in Century City, California



Figure 3: Mall entrance in Century City, California

Higher residential density and mixed uses

The introduction of mixed use retail, medium-density residential, and office uses will create a more vibrant urban life in Millbrae and the community. The mixing of uses will ensure that people will not need to travel as far to access key services and facilities, promoting walkability and a sustainable lifestyle. Additionally, by maximizing the number of household units near the station, Millbrae hopes more people will use the transit system which will help reduce traffic congestion around the station.



Figure 4: Medium Density Residential in Southport, Australia



Figure 5 : A multi-use development in Denver, Colorado

Sustainability and Healthy Community

Sustainability in Millbrae is the ability to meet existing needs requisite to the public's well being without endangering future generations' needs. The Millbrae Station area will be transformed to accommodate a sustainable transit-oriented development; balancing principles of environmental responsibility, economic efficiency, and social equity to achieve this end.

A healthy Millbrae community embodies walkable streets and easily accessible characteristics such as improved pedestrian and bicycle safety, access to healthy food options, and environmentally conscious development.

Streetscape

In order to create a more walkable Millbrae, pedestrian and bicycle infrastructure will be prioritized around the station area. Each existing and new business within 0.5 miles of the station will be required to contribute to the streetscape, and will receive density bonuses as a result.

Safe and efficient transportation infrastructure such as protected bicycle lanes and connected sidewalk networks will provide a safe, pleasant, and convenient journey for the daily commuters using the station. Such improvements also encourages higher levels of pedestrian and bicycling activity. To enhance the experience of residents, a few existing streets within the Transit Village area will be transformed into complete streets. The complete streets will incorporate bicycle lanes, transit boarding islands, pedestrian safety islands, shaded pedestrian walkways, and stormwater retention cells. A brief overview of these elements is included below:

Elements of a complete street:

Bicycle Lanes

Improves the safety of pedestrians and bicyclists by creating distance between the moving traffic and active transportation users.

Transit boarding islands

Transit boarding islands create a safe environment for transit riders to wait for their bus. Sometimes, they can double as pedestrian safety islands, as shown below:



Figure 6: Safe separate bike lanes and transit boarding islands

Pedestrian safety islands

Pedestrian safety islands improve the safety of pedestrians by reducing the distance that pedestrians need to cross travel lanes. The presence of safety islands also makes the road narrower, which slows down vehicle traffic.

Shaded pedestrian walkways

Shaded pedestrian walkways can provide a more pleasant journey for commuters who choose to travel to the station by foot. These trees can also be used to provide spaces for stormwater infiltration. Planting additional trees within the station area can dampen vehicle noise and reduce the effects of urban heat island, which can be a result of urban development.

Noise

Roadway traffic noise can be reduced through the implementation of trees. Complete streets noise can be reduced through

- How we will reduce traffic to reduce noise on the street, impression of safety, as well as likelihood of collisions
- Pedestrian and bicycle safety will be prioritized.
- Require all deliveries to be in the morning, and away from residential areas.
- Hotels serve as buffer from ambient noise from airport.
- Noise of planes from above is inevitable, however most planes fly towards the bay.

Land Use Compatibility

Land Use Dispersion

Commercial uses will be non-centralized within the specific plan area; instead distributed to minimize travel time between new residential developments and plausible commercial needs

Circulation and Accessibility

Accessibility and efficient circulation between locations and services will be a cornerstone of a successful HSR development around the Millbrae station. Ease of access and transfer between will encourage greater ridership to and from Millbrae as well as nearby cities. Additional bus services at the station will supplement robust pedestrian pathways and connect a broad cross section of local residents to HSR and improve the transit experience. This strategy will be implemented at the local and regional level.

At the local level, the project will improve bicycle and pedestrian infrastructure to make active transportation between destinations safer. Internal organization of destinations shall foster a policy of prioritizing residential proximity to healthy food options. This must occur in tandem with the objective of creating an active streetfront composed of a mix of existing local businesses and regional and national firms that are willing to support community benefit will promote vigilance over property.

This mix of businesses is encouraged to include venues similar to Whole foods, Food 4 Less, and Safeway. Affordable dining and grocery options are acceptable, but must be augmented by access to green space and parks, health services. Adequate access may be considered direct (10 minute radii or less,) pedestrian routes or accommodations for the aforementioned bus system. This sphere of access shall included healthcare and all essential basic services.

At a regional level, this project is likely to reduce traffic congestion in the area, as creating cheaper, safer, and faster alternatives will likely result in a shift in preferred mode of travel. The new HSR will link Millbrae to the rest of California, primarily the central valley and the Los Angeles and San Diego areas. Additionally, the station's close proximity to SFO will also increase accessibility for people who live in the central valley to SFO. Additionally, people who fly into SFO from other places will also have the option to get to a broader range of destinations in California without driving a car.

Over the years, we can expect continued ridership growth for BART and Caltrain, and therefore, we can also expect an expansion to their system service areas. The high-speed rail is a long-term solution that will ultimately reduce the amount of vehicles on the road, and will serve as a long-range transportation option for those who need to travel within California. The BART and Caltrain will be able to serve as shorter connections to get both domestic and international travelers to their end destinations.

Environment

The total environmental impact of developments occurs along several vectors. The plan must consider impact under the lens of transit as well as building construction.

Developments within the project boundary shall be considerate of their environmental impact from the standpoint of maximizing use of sustainable transit in order to minimize use of less sustainable transit alternatives. The sustainable options offered must foster a pleasant ridership experience. Cost savings are encouraged but should not occur at the expense of perceived safety or cleanliness within the system.

In order to ensure that sustainable transit options are utilized they must also demonstrate that they are more convenient than driving on an individual basis. Transit must accommodate ease of transition between modes, including biking and regional transit lines.

.....

Through creating a fast, efficient, clean and low-cost transit option, transit ridership can be increased and more people will embrace public transit over other modes of travel.

All new development will be required to achieve certain standards in order to reduce the environmental impact of the project development during construction and during operations. Examples such as installing energy efficient appliances, utilizing locally sourced materials and providing good insulation (heating, cooling, noise) are simple ways to decrease emissions and lessen environmental impacts. One goal that the developments can achieve is to have at least 50% of energy will come from renewable sources. This can be achieved through photovoltaic covered parking roofs and photovoltaic canopies which produces clean energy and offer more shade opportunities.

Another important aspect for new developments is to provide adequate stormwater management and drainage options that will manage stormwater runoff. Bioretention cells, swales, permeable paving and rain gardens can assist with water filtration, groundwater infiltration and capture and treat runoff from impermeable surfaces.

Economy

The nature of the new Transit Village area is likely to create a boost in the local economy around Millbrae Station. Due to the high volumes of tourists and travelers expected from the high speed rail and airport, the hotel, tourism, and entertainment industry is expected to flourish within this area. Additionally, the construction of new facilities around the high speed rail area will create temporary jobs during the construction phase and permanent jobs via new businesses, residential support, and increased maintenance and critical services capacity.

Another strategy to boost the local economy would be to encourage the use of active transportation, which includes walking and bicycling. According to a study conducted by the New York City Department of Transportation (NYCDOT), active transportation is closely associated with higher levels of economic activity, as it would be easier for people on foot or on bikes to stop at local retail establishments mid-journey than drivers.

Education/Advocacy

Education and programs can be an effective method promote sustainable practices such as the California Solar Initiative Program and the City of Millbrae Recycling and Water Waste Prevention Program. To implement these programs, public outreach will need to be done, which includes identifying individuals and groups that are typically underrepresented in the areas. Stakeholder meetings will need to be scheduled in order to ensure that these groups are represented.

Some programs in particular that could be useful include the following:

- Funds and Fees
 - Certain development fees can be charged for new buildings constructed in the Millbrae Station area to help fund streetscape improvements, which will improve the flow and type of traffic around the station area.
- Incentives
 - Incentives may include looser zoning density restrictions if the developer is willing to implement certain features that may benefit the community. This includes, but is not limited to green building materials, noise insulation from airport noise, streetscape/drainage improvements, and the creation of public open spaces.

Sustainable Development

Each developer will be required to use locally sourced green building materials throughout the development process to minimize the environmental impact of the Transit Village development. Because Millbrae Station lies in a flood zone, and is likely to experience problems with flooding. Due to these considerations, flood resistant building design shall be implemented to minimize these risks. All new development shall have a net carbon footprint of zero. Net Zero will be implemented to residential development by 2020 and commercial development by 2030

Public Participation/ Outreach

Stakeholder individuals and organizations in Millbrae

Many government entities, transit agencies, private businesses, and individual community members will be affected by the development and expansion of the Millbrae Station. It is important to work with existing community stakeholders from the beginning of the process, keep them informed, and include them in the decision making process when completing the station area specific plan. Usually, it is the community members who are the first ones able to stop a project from happening, so it is important to gain the feedback from all stakeholders and incorporate their ideas/concerns into our plans. This will help us to formulate a long term strategy that genuinely represents a community vision and will minimize resistance to the planning and development of the HSR expansion for the Millbrae Station.

Services and infrastructure Members

Police & Fire

When developing this project, it will be necessary to work closely with emergency services to ensure that the increased demand resulting from the proposed HSR development will not exceed the current capacity for services. When planning subdivisions and roadway layout, sufficient space will be needed to accommodate for the turning movements of large emergency vehicles.

Water/PG&E

Make sure project demands will be served and any exceeding the existing capacity can be accommodated

San Francisco Airport Commission (SFO)

SFO should appoint a member of their staff to be a part of the planning group. Important data such as the types of travelers, where they go, what the SFO vision is, and certain other restrictions will be useful to and that may be problematic due to developing next to an airport (noise, building heights, traveler demographics). SFO is one of the major players, so they should be included as soon as possible.

Federal Aviation Administration (FAA)

The Federal Aviation Administration has many regulations that may be relevant in the development of our station area specific plan. It would be beneficial to have a member of their staff on our team Building height restriction

Transit Agencies (BART, SamTrans, HSRA)

The increased volume of passengers coming in and out of the station via HSR will directly increase the demand for other transit services serving the Millbrae Station. Therefore, it is important to work with other transit agencies to ensure that this forecasted demand can be met.

Resident Community

Neighborhoods

To minimize conflict and resistance throughout the planning process, it is important to include the community. Outreach can be done throughout the community in areas like schools, churches, public parks, and other community events. The people who will be most affected by the project are the people living in neighborhoods directly adjacent to the station. Increased traffic, noise, and other factors will need to be addressed. Mostly work with existing neighbors, but the travelers in the airport also play a big part in this plan area. It will be challenging to include them because they are always different.

Schools

There are a few high schools located half a mile away from the station such as the San Mateo Union High School. Educational institutions are great places to spread awareness about the project and receive feedback from students and staff who utilize the train everyday.

Local Businesses

Existing local businesses and partners in City of Millbrae are critical for the HSR project. As the HSR will be increasing the population of Millbrae and travelers, local businesses are key in working with the City in providing inviting and unique experiences for all. Furthermore, increased new commercial-retail and office spaces will provide more economic opportunity and

Approval Process for Specific Plan

A Specific Plan must be in conformance with the General Plan. The approval process for a Specific Plan in Millbrae requires the Planning commission to review and provide recommendation actions to the City council. A Specific Plan can only be adopted by the City Council because it is a legislative action.

Appendix A Calculations

Proposed Land Use Table

	Use	Footprint	Total SF	75%	Floors	SF Per Unit (Avg.)	# units
1	Hotel	30000	120000	22500	4	325	276.9
2	Residential	54000	108000	40500	2	825	98.18
3	Residential	52500	210000	39375	4	825	190.91
4	Retail	55000	220000	41250	4	1500	110
5	Hotel	35000	140000	26250	4	325	323.08
6	Mixed-use Retail	65000	65000	48750	1	1500	32.5
	Mixed-use Residential	65000	65000	48750	1	825	59.09
7	Hotel	41000	82000	82500	2	325	507.69
8	Mixed-use Retail	110000	110000	82500	1	1500	55
	Mixed-use Hotel	110000	330000	45000	3	325	761.53
9	Mixed use-Retail	60000	60000	45000	1	1500	30
	Mixed use-Hotel	60000	60000	45000	1	325	138.46
10	Tech office	25000	50000	18750	2	37500	1

Water Demand per Unit Assumptions

Use	ERU	Water demand per unit (ERU*300)
Any single family home	1	300
Multifamily project per unit	0.72	216
Shopping centers and stores, per 1000 sq. ft	0.35	105
Hotels/motels without kitchens, per room	0.36	108
Restaurant, 12 hours or less per day, per seat	0.14	42
Travel Trailer Park, per seat	0.45	135
Churches, assembly halls, theaters, per seat	0.01	3
Offices and warehouse, per 1000 sq. ft.	0.01	3
Nursing home, per resident	0.05	15
Hospital, per bed	0.36	108
Fast food, per employee	0.06	18

***300 is the base metric assumed; all other values in the chart originate from a fraction multiplied by the single family home rule of thumb at 300*

[Bay Area Water Supply and Conservation Agency]

Water Use Demand

Development Type	Potential Additional Development (# of Units)	Water Demand Factor by Unit Type	Water Demand per Unit	Projected Daily Water Demand (gal)	Projected Water Demand (AF)
Multifamily Residential	348	0.72	216	75207.27	0.23
Retail	455	0.35	105	47775.00	0.15
Office	50	0.01	3	150.00	0.00
Hotel	2008	0.36	108	216830.77	0.67
Total Daily Use (AF)					1.04
Total Annual Use (AFY)					380.81

TABLE 12: TRIP PURPOSE, NON-HOME-BASED ORIGINS

Trip Origin	Non-Home Based
<i>Workplace</i>	66%
<i>Work-related/ business appointment</i>	4%
<i>Social/ recreational</i>	16%
<i>College/ university (student)</i>	4%
<i>Airplane trip</i>	<1%
<i>Personal Errands</i>	2%
<i>Restaurant/cafe</i>	3%
<i>Hotel</i>	3%
<i>Medical/dental</i>	1%
<i>Escorting others</i>	<1%

Source: BART 2015 Station Profile Survey

TABLE 14: PERCENTAGE OF BART RIDERS WALKING FROM ORIGIN TO MILLBRAE STATION

Type of Rider	Percent of Type
<i>Home Origins in Millbrae</i>	54%
<i>All Non-Home Origins</i>	31%
<i>All Home Origins</i>	15%
<i>All Origins (Home and Non-home)</i>	21%

Source: 2015 BART Station Profile Survey

TABLE 17: CALTRAIN AVERAGE WEEKDAY RIDERSHIP (AWR), 2014-2015

	2014		2015		
Station	Rank	AWR	Rank	AWR	% Change
<i>San Francisco</i>	1	12,160	1	13,571	11.6%
<i>Palo Alto</i>	2	6,156	2	7,197	16.9%
<i>Mountain View</i>	3	4,274	3	4,570	6.9%
<i>San Jose Diridon</i>	4	3,714	4	4,160	12.0%
<i>Millbrae</i>	5	3,291	5	3,536	7.4%
<i>Sytemwide</i>		52,611		58,245	10.7%

Source: Caltrain 2015 Annual Passenger County Key Findings



MILLBRAE STATION

VISION

Millbrae Station will be transformed into a multi-modal international hub that serves those utilizing the High Speed Rail, landing in SFO, and the locals in the surrounding neighborhoods.

TRANSIT VILLAGE

The new Transit Village zone will improve an overall public transit experience, establish a more efficient and easily navigable transit station and promote economic development through higher density mixed use areas.



Commercial & Office



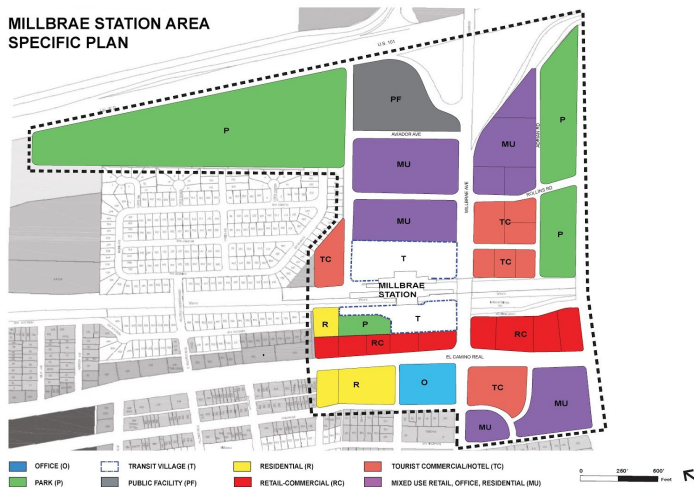
Parks & Public Plazas



Hotels

MAP

MILLBRAE STATION AREA
SPECIFIC PLAN



3 SUSTAINABILITY GOALS

Environmental
Economic Development
Public Support



**Come join and ask us any questions at the
Project Showcase at Millbrae Station, June 21, 2018 @3 pm.**

Please contact Ivy Zhao at ivy@millbrae.ca.us for more information and any questions regarding the Millbrae Station Specific Plan.