2 Background and Key Issues

2.1 SITE CONTEXT

LOCATION AND SURROUNDING DEVELOPMENT

The Milpitas Transit Area is centered on the area surrounding the existing Great Mall and Montague Light Rail stations and the future BART station proposed near the intersection of Montague Expressway and Capitol Avenue. Located at the southern edge of the city, it is immediately adjacent to San Jose. It has great access to transportation routes, since it lies within a mile of Interstate 880, Interstate 680, and Highway 237, and is bisected by the Great Mall Parkway and Montague Expressway. The total gross acreage is approximately 437 acres.

The Transit Area Plan Study Area incorporates much of what was the southern portion of the Midtown Plan, plus the Great Mall and an area northeast of Piper Drive and Montague Expressway. The boundaries, which are shown in Figures 2-1 and 2-2, are roughly the northern extent of the Great Mall, South Main Street on the west, Trade Zone Boulevard and the city limits on the south, the alignment of Milpitas Boulevard on the southeast, and the existing rail line in the northeast.

Residential units surround the Transit Area in the north and west sides.

Existing Industrial/R&D Land Uses

Existing Industrial Building

Great Mall Retail

As Figure 2-1 shows, land to the south and the east of the Transit Area is predominantly used for general and light industrial. Multifamily residential surrounds the Transit Area on the northern and western sides. A substantial amount of new multifamily housing is proposed in the area immediately west of the Transit Area between the Union Pacific railroad tracks and South Main Street. Further to the east is a single family residential neighborhood. The area immediately northwest of the Transit Plan area along South Main Street and South Abel Street is planned as a pedestrian downtown for the City of Milpitas. This area is included in the Midtown Specific Plan, and is the focus for a lot of planning work and public investment, including a public library and extensive streetscape improvements.

EXISTING LAND USES AND BUILDINGS

At the time of adoption of the Transit Area Specific Plan, the existing land uses and buildings were as described in Figures 2-2 and 2-3, and in the text below. Figure 2-2 shows an aerial photo of the Transit Area, and Figure 2-3 shows existing land uses. Traditional uses in the Transit Area include industrial, light industrial, research & development, trucking terminals, and warehousing. Recently, a housing project known as The Crossings has been built in the southeastern corner of the Transit Area. The Great Mall is also located with the Transit Area, containing multiple retail uses as well as a movie theater and restaurants.

Most of the industrially zoned parcels have a one-story building on them, built at around 0.35 FAR on average, which is close to the maximum allowed by the zoning, with the remainder of the lots taken up with parking lots and some vegetation. In total the Transit Area contains around 3.1 million square feet of industrial building space.

The Great Mall consists of a single large one-story building with a few surrounding retail buildings, two hotel buildings, an office building, and Heald College. The uses are surrounded by surface parking, and one parking structure at the rear of the Mall. Small retail structures are located along South Main Street, in the northwest corner of the Transit Area and on Capitol Avenue next to existing residential development. The entire Transit Area has around 2 million square feet of retail and restaurant space, with almost all of that in the Great Mall itself. The hotels are roughly 175,000 square feet and the school is in a 50,000 square foot office building.

The Crossings is located east of Capitol Avenue, near the site of the proposed BART station. The complex is made up of a dozen or more residential structures arranged around parking lots and private drives, containing 468 housing units.

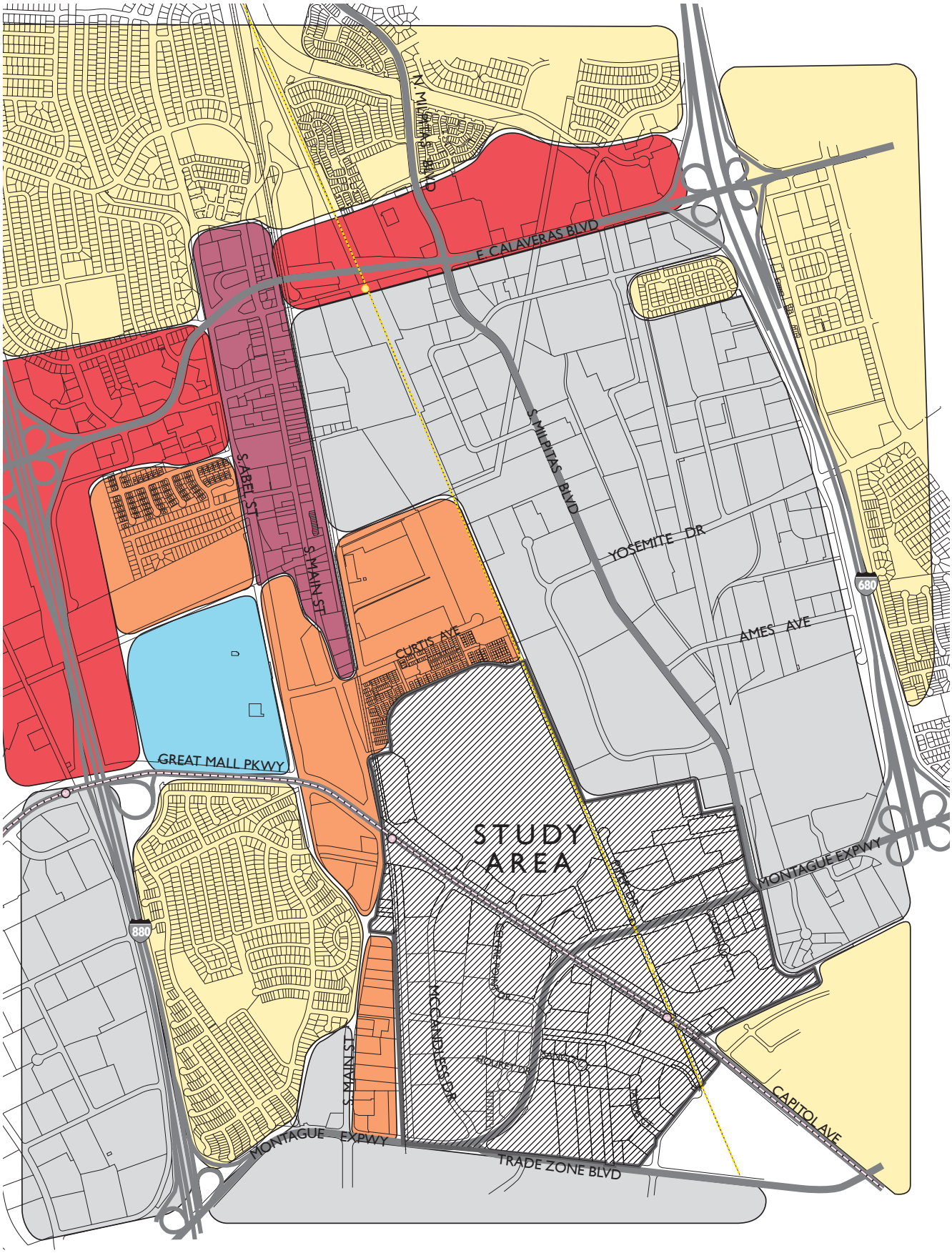


Figure 2-1

Site Context

Figure 2-2
Transit Area Aerial

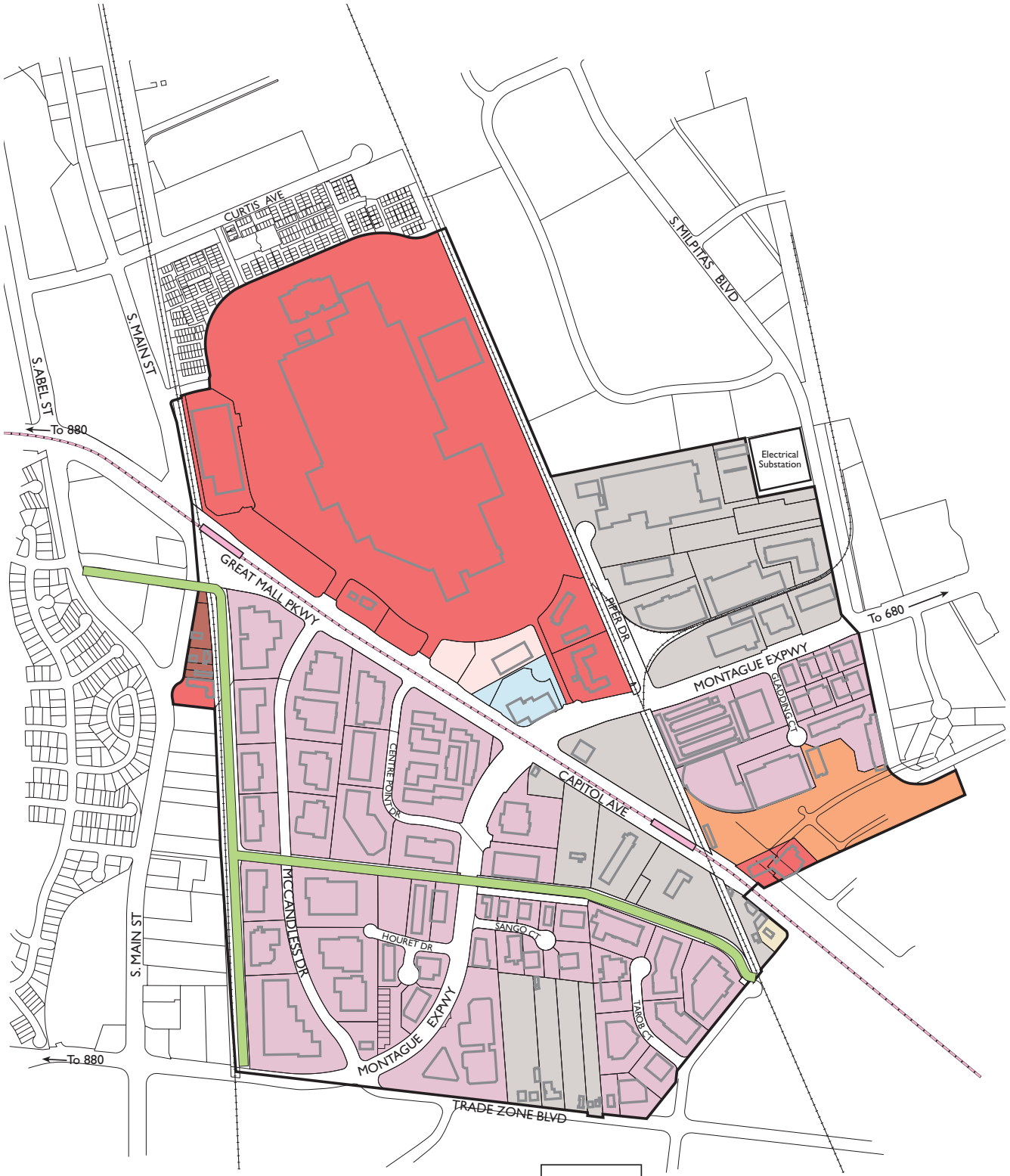


Figure 2-3

Existing Land Uses

MIDTOWN SPECIFIC PLAN AND EXISTING ZONING

The project area is largely within the area of the Midtown Milpitas Specific Plan, adopted by the City in 2002. This plan provides policy direction for southern areas of the city in terms of land use, circulation, community design, and utilities and services. The Midtown Milpitas Plan addresses an approximately 1,000 acre area with a strategy of creating a mixed-use community that includes high-density, transit-oriented housing, with parks and community facilities while maintaining needed industrial, service, and commercial uses, and adding approximately 4,800 new residential units. Policy 7.5 of the Midtown Milpitas Plan requires the creation of a coordinated development plan for the parcels at and around the proposed BART station, calling for the plan to promote transit-oriented development. The Transit Area Specific Plan will be independent of the Midtown Specific Plan. However, the policies within the Transit Area Specific Plan are consistent or compatible with those in the Midtown Specific Plan.

Land Use

The Midtown Plan altered the zoning of the Transit Study Area to permit Very High Density Multifamily residential in much of the area south of Montague Expressway and west of Capitol Avenue, as shown in Figure 2-4, converting it from industrial uses only. The Midtown Plan also added a Transit-Oriented Development overlay to parcels near the proposed BART station and along Great Mall Parkway. The plan maintained the C-2 (General Commercial) district over the Great Mall and existing retail on Capitol Avenue and the city limits, the R-3 (Multifamily High Density) district on The Crossings development, and the M-2 (Heavy Industrial) zone over the rest of the Transit Area.

The area north of Montague Expressway and east of the Great Mall is outside of the Midtown Milpitas Plan area. The City's General Plan designates that land for Manufacturing and Warehousing.

Parks and Trails

The Midtown Plan intends to expand the existing park and trail system of the city into the Midtown area, linking new housing and transit stations with the rest of Milpitas. Two parks are called for in the area south of the BART station—one along the Penitencia Creek channel and another south of that. Furthermore, within the Transit Area, the Midtown Plan calls for off street paths along:

- the Penitencia Creek East Channel;
- the east side of the Union Pacific railroad track that runs parallel to McCandless Drive;
- Berryessa Creek, south of Montague Expressway; and
- the Union Pacific right of way just east of the Great Mall, extended from Montague Expressway northwards to the Hetch Hetchy right of way.

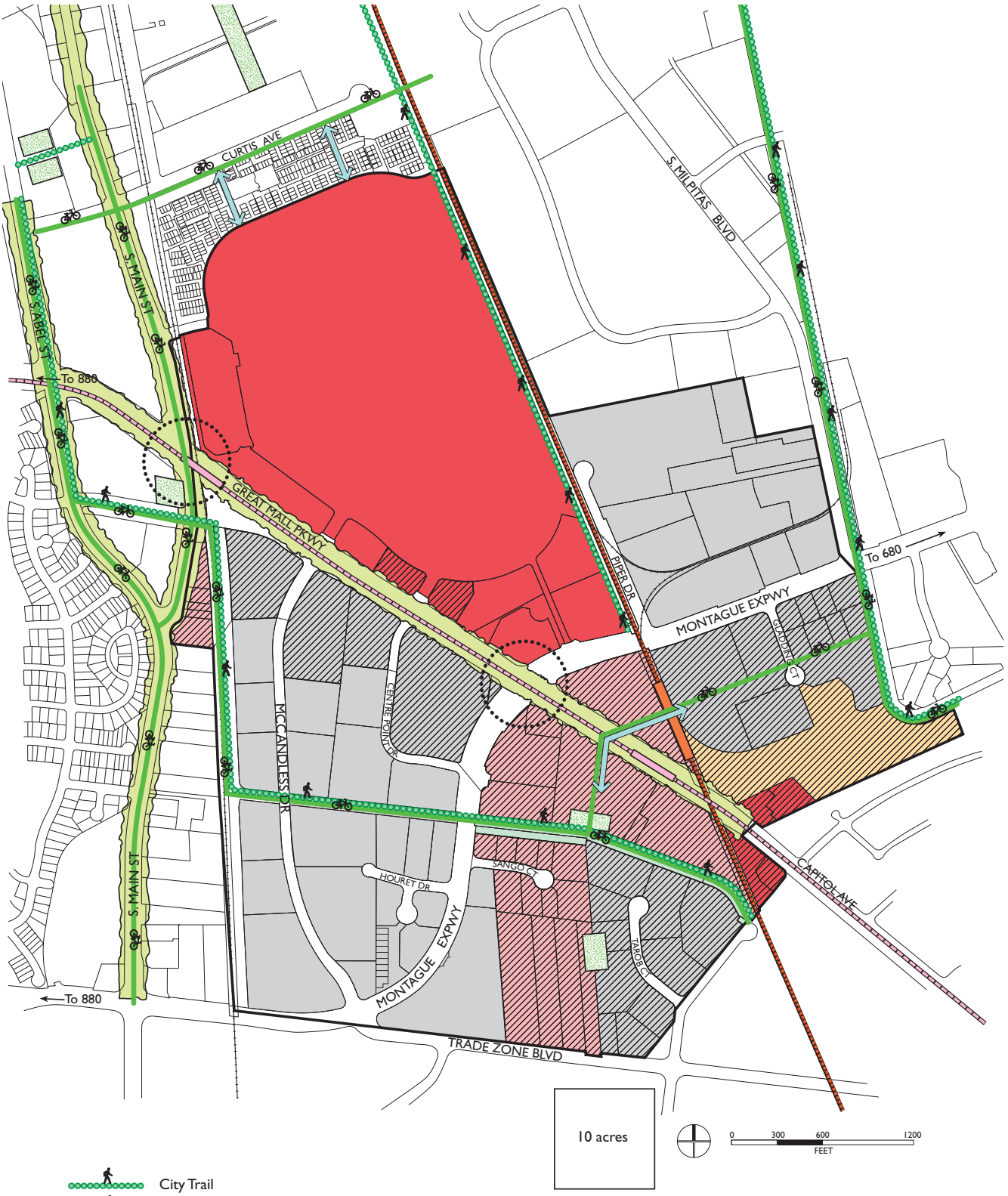


Figure 2-4

Existing Zoning and Midtown Specific Plan Components

The Transit Area Specific Plan maintains those policies for parks and trails as exhibited in Figure 3-6: Public Parks, Spaces and Trails.

The Midtown Plan also calls for an on-street trail connection along South Main Street that continues northward to Calaveras Boulevard and beyond, and another on-street connection to be created linking the Penitencia Channel path to the Montague light rail and BART stations and onward to the Berryessa Creek trail. Figure 3-5: Bicycle Circulation Improvements illustrates the connections to the Montague light rail and BART stations.

Streetscape Improvements and Gateways

Improving pedestrian and bicycle circulation is a key objective of the Midtown Plan, which notes that the main barrier to pedestrian circulation is not infrastructure—most streets in the area have sidewalks—but land uses patterns and wide streets that make walking uncomfortable and are designed to only serve automobiles.

The Midtown Plan aims to make improvements to streets and intersections to accommodate the flow of traffic, bicyclists, and pedestrians and to develop new streets that are pedestrian-oriented in scale and connectivity. New blocks should not exceed 400 feet in length, to create a street pattern that is convenient and efficient for pedestrians, and a publicly accessible pathway is to be provided every 200 feet. High-density housing is advocated as a crucial land use. The Midtown Plan also calls for enhancements to streetscapes with provisions for pedestrian circulation, bike circulation, street tree landscaping, pedestrian-scale light fixtures, benches, and other amenities. The Transit Area Specific Plan continues these themes throughout the plan area.

Particular tree types are recommended along Great Mall Parkway and near the light rail and BART stations. The Midtown Plan calls for landscaping along streets to be placed at the curb edges of sidewalks in order to improve the pedestrian environment. The community gateway at Capitol Avenue and the city limits is recommended to have unified street tree planting and lighting to enhance the sense of entry, and new development there should incorporate architectural features that express a sense of entry.

Potential Future Connections

New residential and mixed-use development near the BART and light rail stations should be developed with a street and block system that provides through connections to the stations. The Midtown Plan calls for new streets around the BART station, with a connection across Capitol Avenue from the station southwards in order to connect the Penitencia Creek Trail to the light rail and BART stations. A public access easement is also required between the Montague light rail station and the Union Pacific right-of-way on which the BART station will be located.

REDEVELOPMENT AREAS

The Milpitas Redevelopment Agency has designated most of the Transit Area as part of a redevelopment project area. Increased property tax revenue from a redevelopment area does not go to the City's General Fund but instead goes to the Redevelopment Agency for use in capital improvements, property acquisition, and affordable housing among other investments. Also, the Agency has jurisdiction within a redevelopment area to aid development efforts through land acquisition, infrastructure construction, financial participation, and other tools.

The Transit Area is 437 acres in size, of which 146 acres are in the Great Mall Redevelopment Area and 245 acres are in other redevelopment areas. Only 46 acres—located north of Montague Expressway and east of the Great Mall—are outside of a redevelopment area, as seen in Figure 2-5.

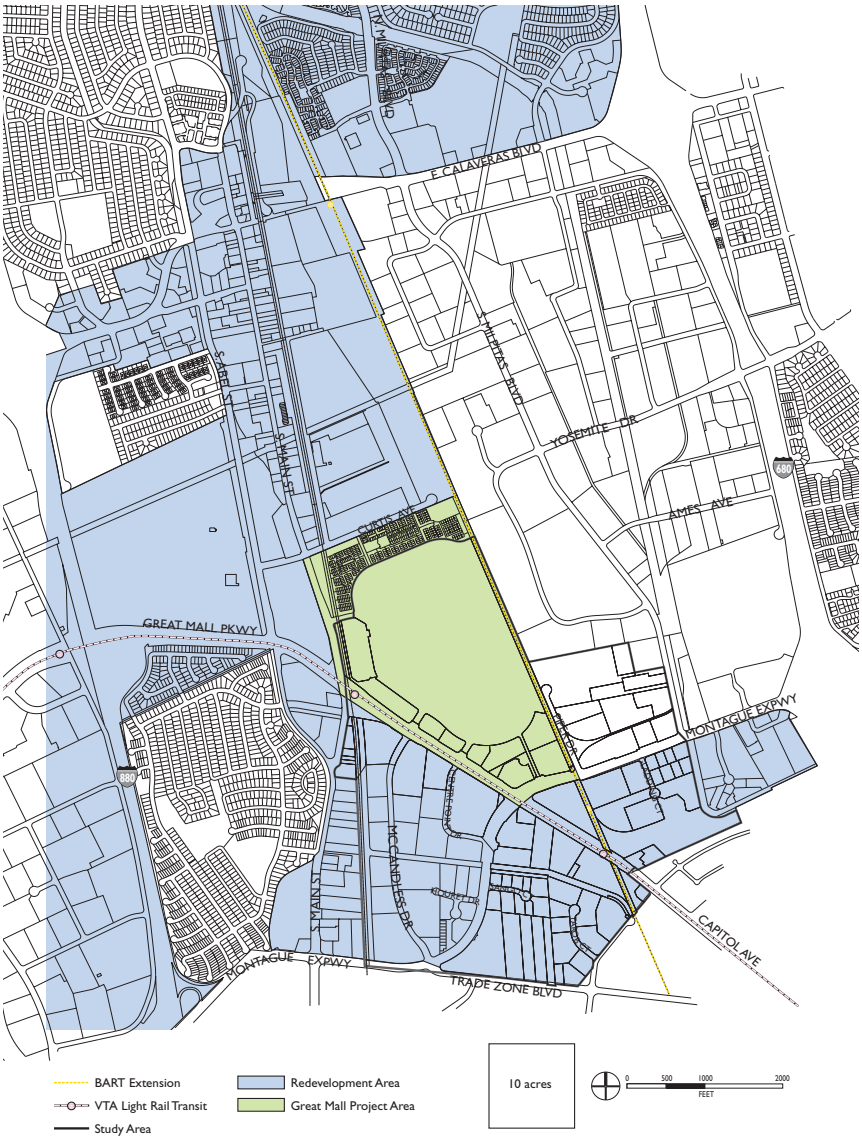


Figure 2-5
Redevelopment Areas

TRANSPORTATION

The Transit Area is crossed by a light rail line, heavy rail lines, storm drainage channels, and major regional roadways, as well as local thoroughfares. There are facilities for pedestrian and bike travel, as well as bus lines, but the area is generally auto oriented. A BART station is planned near the eastern corner of the intersection of Montague Expressway and Great Mall Parkway/Capitol Avenue, easily accessible to regional car traffic as well as linking to the VTA light rail system.

Regional Roadways

Regional access to the project site is provided by Interstate 880 (I-880), I-680, State Route 237 (SR 237), Montague Expressway, and Great Mall Parkway/Tasman Drive/Capitol Avenue. Local access to the site is provided by Main Street, Abel Street, Milpitas Boulevard, McCandless Drive/Trade Zone Boulevard, Centre Point Drive, Oakland Road, and Lundy Street. Figure 2-6 presents the regional roadway map. Numbered circles indicate the intersections studied for the traffic analysis of the Plan's environmental impact report.

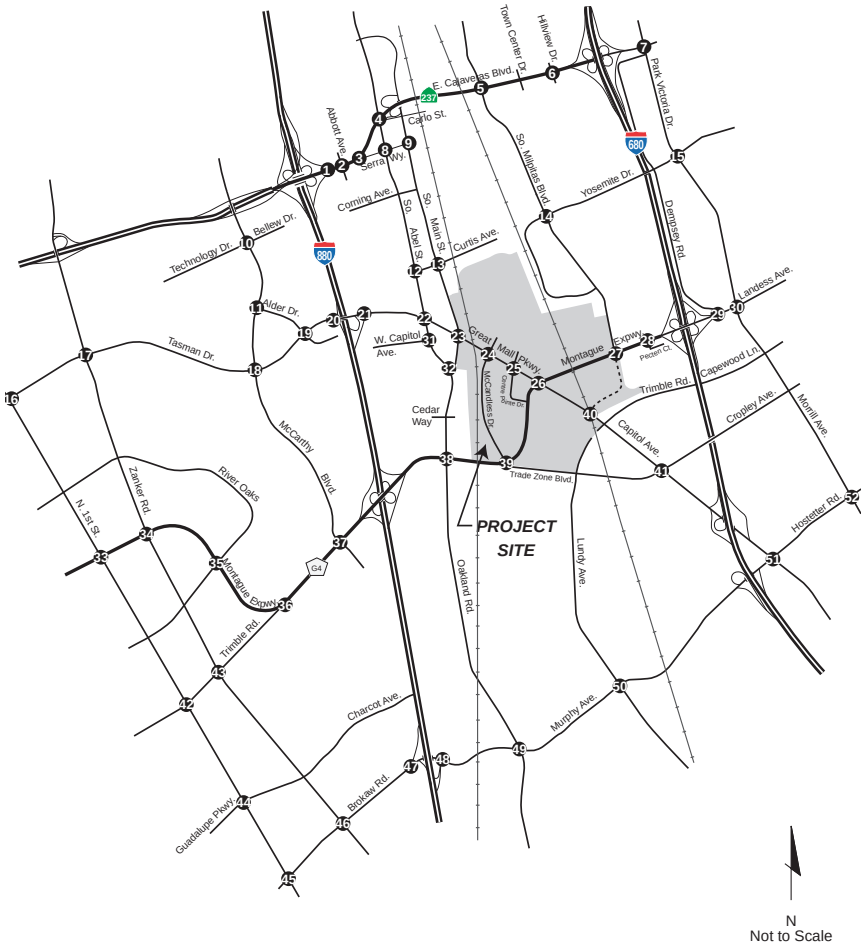


Figure 2-6
Regional Roadway Map

I-880 is a north-south freeway west of the project site extending south to the City of San Jose and north to the City of Oakland. In the vicinity of the project site, the freeway includes eight lanes north of State Route (SR) 237/Calaveras Boulevard and six lanes to the south. Regional access to the project site is provided via interchanges at Great Mall Parkway/Tasman Drive and Montague Expressway. The peak direction of travel is westbound during the AM peak hour and eastbound during the PM peak hour.

I-680 is a north-south freeway east of the project site extending south to the City of San Jose and north to Solano County. In the vicinity of the project site, the freeway includes six mixed-flow lanes plus a southbound HOV lane north of Calaveras Boulevard (SR 237) and eight mixed-flow lanes to the south. Access to the site is provided via interchanges at Calaveras Boulevard, Montague Expressway, and Capitol Avenue. Southbound I-680 is the commute direction during the AM peak hour and northbound I-680 is the commute direction during the PM peak hour.

SR 237 is an east-west roadway that includes two distinct facilities: a six-lane freeway extending from I-880 west to US 101, and a four- to eight-lane arterial roadway between I-880 and I-680 with an elevated section over the Union Pacific Railroad tracks. The arterial section is locally designated as Calaveras Boulevard, which is six lanes except on the bridges over the Union Pacific railroad tracks and Main Street, where it is four lanes. Calaveras Boulevard serves as a major commute route with heavy directional travel during the peak hours (westbound in the morning and eastbound in the afternoon).

Montague Expressway is an east-west, six- to eight-lane divided arterial roadway extending from US 101 east to I-680. Limited access is provided to land uses fronting Montague Expressway. Montague Expressway bisects the Transit Area. Montague Expressway includes directional HOV lanes during peak periods (westbound during the morning and eastbound during the afternoon commute hours). Montague Expressway connects with I-880 and I-680 via full cloverleaf interchanges.

Great Mall Parkway is an east-west, six-lane divided arterial roadway extending from I-880 east to Montague Expressway. Great Mall Parkway also bisects the Transit Area. Great Mall Parkway is designated Tasman Drive west of I-880 and extends into the cities of San Jose, Santa Clara, and Sunnyvale. Great Mall Parkway becomes Capitol Avenue east of Montague Expressway and continues south through the City of San Jose. VTA operates light-rail transit (LRT) service along the median of Tasman Drive/Great Mall Parkway/Capitol Avenue.

Great Mall Parkway

Montague Expressway

Centre Point Drive

McCandless Drive

Local Streets

Main Street is a north-south, two- to four-lane arterial roadway parallel to Abel Street extending from Railroad Avenue (north of Calaveras Boulevard) south to Montague Expressway. This street is designated as Marylinn Drive north of Railroad Avenue and Oakland Road south of Montague Expressway. Main Street includes two lanes north of Curtis Avenue and four lanes with a two-way left-turn lane and bike lanes south of Curtis Avenue. Access to east Calaveras Boulevard is provided via ramps at Carlo Street.

Abel Street is a north-south, four-lane roadway parallel to Main Street extending from Milpitas Boulevard (north of Calaveras Boulevard) south to Main Street (south of Great Mall Parkway). The section of Abel Street between Corning and Curtis Avenues includes four travel lanes plus a two-way left-turn lane.

Milpitas Boulevard is a north-south, four-lane arterial extending from the Milpitas-Fremont City limit line (also the Santa Clara-Alameda County limit line) south to Montague Expressway. Milpitas Boulevard is designated Warm Springs Boulevard north of the City/County limit.

McCandless Drive is a north-south, two-lane collector roadway with a two-way left-turn lane extending through the project site from Great Mall Parkway south to Montague Expressway. The street is designated Great Mall Drive north of Great Mall Parkway and serves as an entrance to the Great Mall. McCandless Drive becomes Trade Zone Boulevard at Montague Expressway.

Trade Zone Boulevard is an east-west, four-lane minor arterial roadway extending along the southern border of the project site from Montague Expressway east to Capitol Avenue in San Jose. Trade Zone Boulevard is designated Cropley Avenue east of Capitol Avenue.

Centre Point Drive is a two-lane roadway connecting Great Mall Parkway in the northwest with Montague Expressway in the southeast. The street is designated Mustang Drive north of Great Mall parkway and serves as an entrance to the Great Mall.

Lundy Place is a north-south, two-lane roadway extending from the Union Pacific Railroad tracks west of Capitol Avenue south to Trade Zone Boulevard. It is designated Lundy Street south of Trade Zone Boulevard and continues south into the City of San Jose.

Future Transportation Improvements

The Transit Area is expected to see a number of significant changes to its transportation system over the next 20 to 30 years. Figure 2-7 shows the existing transportation system and planned improvements. These alterations are intended to increase the capacity of the regional roadway system, introduce

rapid heavy rail transit to the area, and phase out underused freight rail. These improvements are being carried out by a variety of actors, including the City, the County, and VTA. Many of them are only partially funded and to be completed at an unknown date in the future.

Future BART Line Corridor: Existing Railroad Tracks

Site Adjacent to future BART Line- Potential Location for BART facilities.

BART Extension

The BART line that currently ends at Fremont is expected to be extended southwards to Santa Clara and San Jose, passing through Milpitas, with a station planned for the intersection of Capitol Avenue and Montague Expressway that will link with the existing light rail station there. The train line will follow the right of way of the Union Pacific railroad track that currently passes just east of the Great Mall. BART will be elevated for much of its extent, but as of summer 2007 it is planned to be underground—likely in a retained cut, rather than a tunnel—within the Transit Area. The City Council has expressed its opposition to an above ground line, due to the noise and visual impacts on quality of life in the Transit Area.

The BART station design is proposed as a vaulted structure with adjacent bus transfer, passenger pickup/drop-off, and parking facilities. A connection across Montague Expressway for foot and bike traffic may also be provided.

Union Pacific Railroad Spur

A spur railroad line used by freight traffic currently passes just north of Montague Expressway, through the Piper/Montague subarea. There are no active plans to relocate or remove the spur, as there are two inter-related issues that hamper the relocation of the spur line. First, the spur line serves industrial businesses which have an entitlement to rail access, so this right would need to be bought out or the spur line moved to the northern edge of the Transit Area.

Secondly, the Transit Area is where the existing Union Pacific rail line will be truncated, with its southern terminus at Montague Expressway, due to transfer of the right-of-way to BART. Union Pacific will need a train turnaround at the end of its rail line that extends from the north. There are two potential locations for the train turnaround—on the current spur line, or along the northern boundary of the Piper Montague subdistrict.

It is also possible that operational changes such as engines at both ends of each train can be adopted, obviating the need for a turnaround.

Roadway Capacity

As a component of the BART Station construction, Milpitas Boulevard will be extended south of Montague Expressway, turning west to pass the station before connecting with Capitol Avenue. This new road segment will enhance bus and automobile access to the BART station, and also relieve pressure on the Montague/Capitol intersection by allowing some traffic to bypass it.

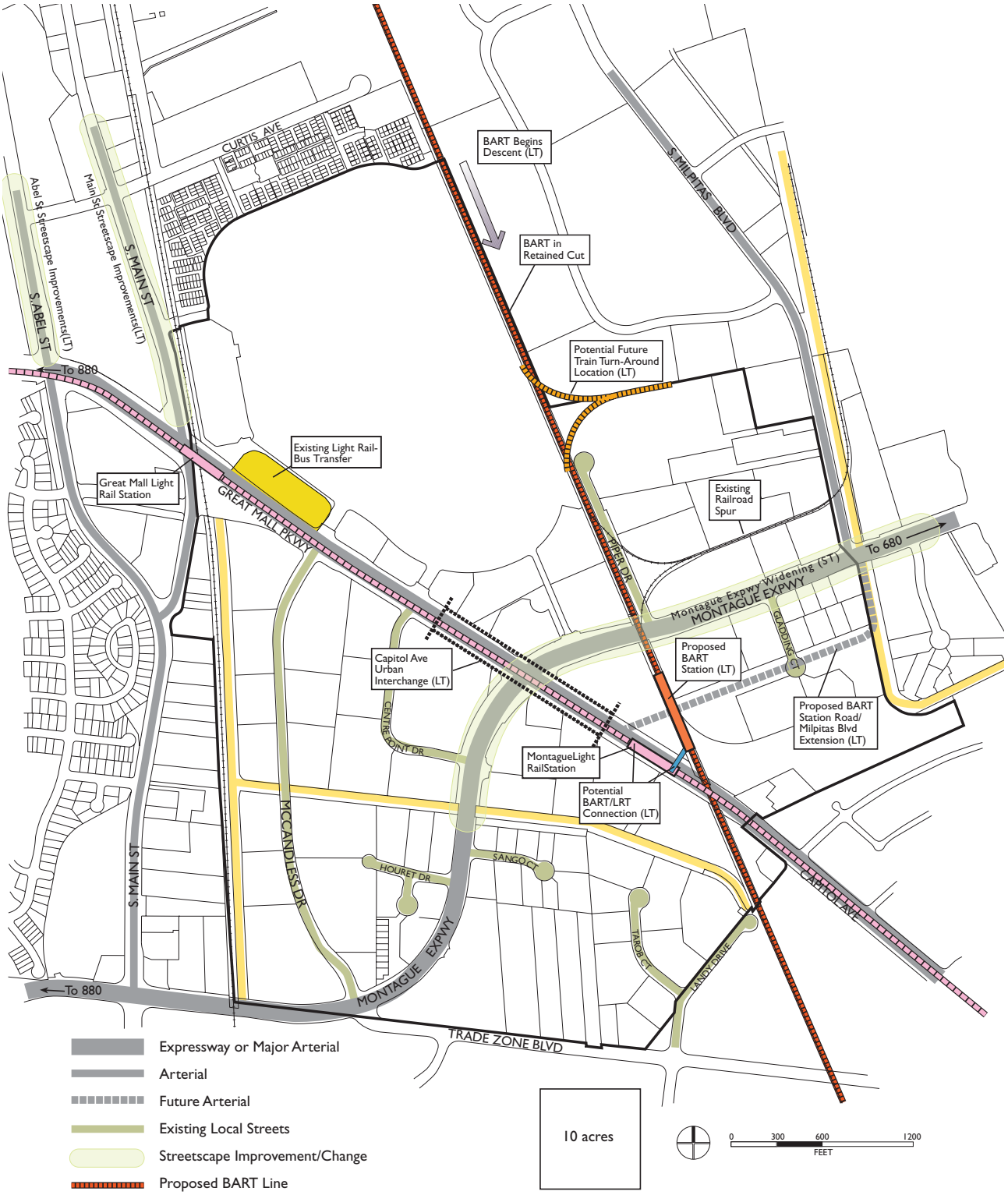


Figure 2-7

Transportation System

Existing and Planned Improvements

Montague Expressway will also be undergoing expansions to its capacity by the County, which controls the roadway. The segment between Capitol Avenue and I-680 is currently being widened from six to eight lanes. A similar expansion is planned for the segment west of Capitol Avenue throughout the Transit Area, although engineering details and the timelines for that work are unknown. The Montague Expressway widening is a required mitigation measures for future development in north San Jose.

Montague Expressway is planned to be widened from six to eight lanes.

In addition, an "urban interchange" is identified for the Montague Expressway and Capitol Avenue-Great Mall Parkway intersection, which would grade separate two roads and eliminate the traffic signal. However, this is an expensive and large-scale project, so the timeframe to acquire the funding, plan, and execute the urban interchange is considered very long term, and will likely not occur during the 20 year timeframe established for the Transit Area Plan.

Public Transit

The Santa Clara Valley Transportation Authority (VTA) operates bus and light rail service in Santa Clara County; routes within the Transit Area are shown in Figure 2-8. The VTA has three light rail lines, one of which runs through the Transit Area. The Alum Rock-Santa Teresa line connects the Milpitas stations with downtown San Jose and allows transfers to another line that travels to Santa Clara, Sunnyvale, and Mountain View and connects with Caltrain and Amtrak service. The Transit Area includes two light rail stations:

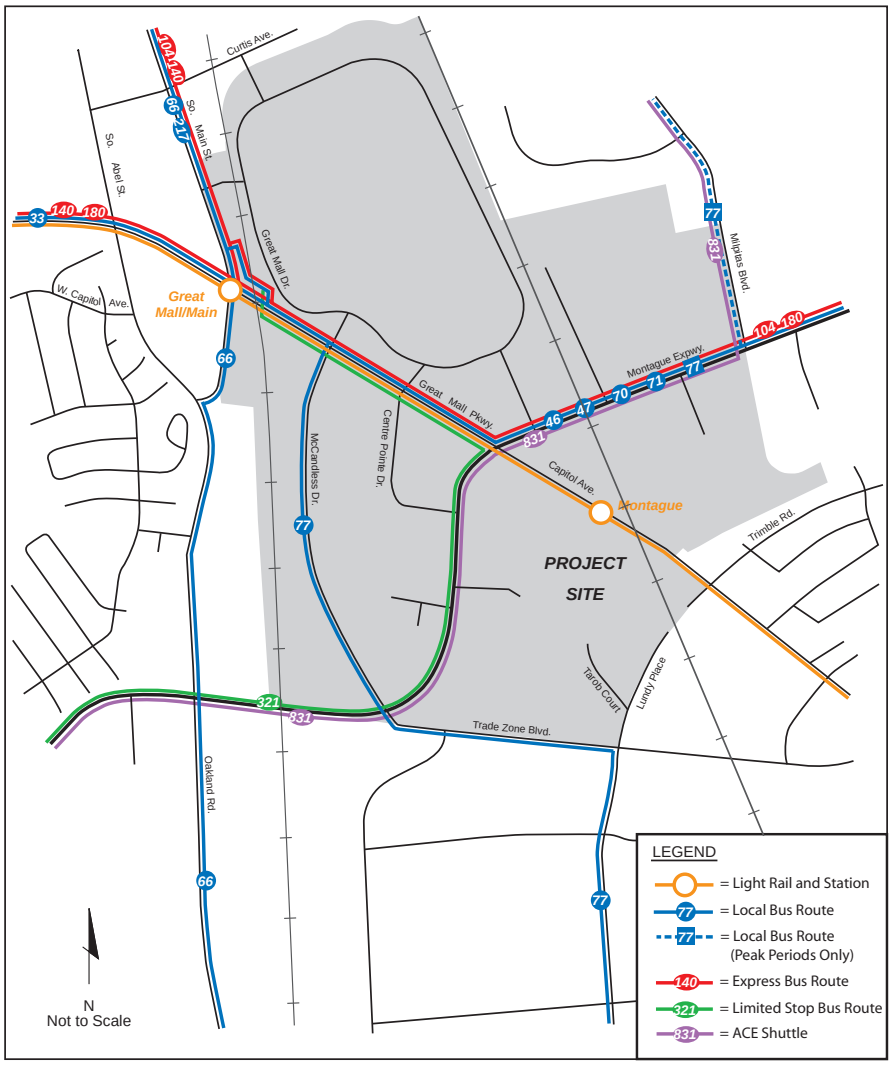
- The Great Mall/Main Transit Center is located on the north side of Great Mall Parkway and east of Main Street. This multimodal transit hub consists of an elevated light rail station above Great Mall Parkway and a bus transfer facility and park-and-ride lot located on the northeast corner of the Great Mall Parkway/Main Street intersection.
- The Montague light rail station is located on the east side of the Transit Area and is elevated above Capitol Avenue. No bus or park-and-ride facilities are provided at this location.

VTA bus routes 33, 46, 47, 66, 70, 71, 77, 104, 140, 180, and 321, as well as AC Transit route 217, serve the Great Mall/Main Transit Center and provide bus service within the Transit Area. The Altamont Commuter Express (ACE) Violet Shuttle (Route 831) also provides service within the Transit Area.

Figure 2-8

Transit Service Map

Source: Fehr & Peers



Bike Routes

Class II bicycle lanes are located on Great Mall Parkway, Lundy Street, Main Street, McCandless Drive, and Capitol Avenue south of Trimble Road. Class III bicycle routes are located on Cropley Avenue, Montague Expressway, Capitol Avenue between Montague Expressway and Trimble Road, and Trade Zone Boulevard east of Lundy Street. No Class I bicycle paths are located within the Transit Area.

PROPERTY OWNERSHIP

The Transit Area has approximately 110 private parcels, owned by around 80 different corporations and individuals as shown in Figure 2-9. In several areas, groups of parcels are controlled by a single owner or by a partnership between separate owners. These groups are marked in red on Figure 2-9. Much of the area south of the Great Mall and west of Montague Expressway is controlled by just two entities, and the land east of the Great Mall and north of the rail spur is owned by just three separate interests.

Figure 2-9
Property Ownership

2.3 MARKET ANALYSIS

The Transit Area has seen little new development in recent years. This is partially a statement on the depressed regional market for light industrial and R&D uses, as well as anticipation by property owners who are awaiting the completion of the Transit Area Plan before proceeding with site redevelopment. However significant development is occurring around the site. The southern area of Milpitas is a prime location for infill development, given its ready access to regional highways, VTA's light rail and the BART extension, and to the jobs of Silicon Valley.

MARKET DEMAND ANALYSIS

Strong Demand for Residential Units – Park Place Project Under Construction

High Vacancy Rates in Existing R&D Space

Economic Research Associates (ERA) conducted a comprehensive market demand analysis, analyzing existing supply and future demands over the 20 year planning timeframe to provide a high-low range of real estate market demand forecast for the Transit Area.

The City has drawn the following conclusions from the market analysis:

- ***Office***. New office development should be targeted to around 1,000,000 square feet, based on potential market absorption. Existing office and R&D space will absorb remaining demand by using existing space more intensively.
- ***Retail***. There is demand for up to 500,000 square feet of new retail, based on the new residential units in Milpitas, unmet existing demand, and potential regional demand for an exciting pedestrian-oriented shopping area.
- ***Hotel***. There is likely to be a demand for two hotel sites, estimated at a total of 350 rooms. These are a very important revenue source for the city.
- ***Residential.*** Market demand is projected at about 4,400 market-rate units. Affordable housing units will be added over and above this market demand. Additional capacity for housing should be provided in case projections underestimate demand, in order to ensure a large amount of housing near BART and light rail.
- ***Industrial/R&D.*** There is almost no market for more industrial space. The vacancy rate is currently 40 percent, far above the county average, and industrial will not be a viable economic use in this high-intensity transit location over the long run.

RECENT AREA DEVELOPMENT

While recent and new development activity in the Transit Area is somewhat limited, there have been many proposals and approved projects for South Main Street—just to the west of the project area. These nearby developments are shown on Figure 2-10.

Within the Transit Area, the Great Mall has recently opened a new Kohl's store and a new parking structure, as well as completing internal upgrades. Just to the north and the west of the Great Mall, multifamily residential developments have recently been completed. The Parc Metropolitan development to the north has 382 units built at 18 units to the acre; Monte Vista apartments to the west have 306 units at 19 units per acre.

Meanwhile, along South Main Street between Calaveras Boulevard and Montague Expressway, at least eight different residential developments have been proposed, ranging from dense single-family homes to townhouses to multifamily structures.

Park Metropolitan Project – Recent Area Development

OPPORTUNITY SITES AND DEVELOPMENT ISSUES

Property owners were interviewed to learn about the existing conditions on land, future plans for their property, and physical constraints or issues related to new development. The stakeholders were also asked about their recommendations for the long term future of the area. Figure 2-11 is a map of development opportunity sites, based on information from property owners. It also shows the properties which are within a one-third mile radius of the light rail stations and/or future BART station.

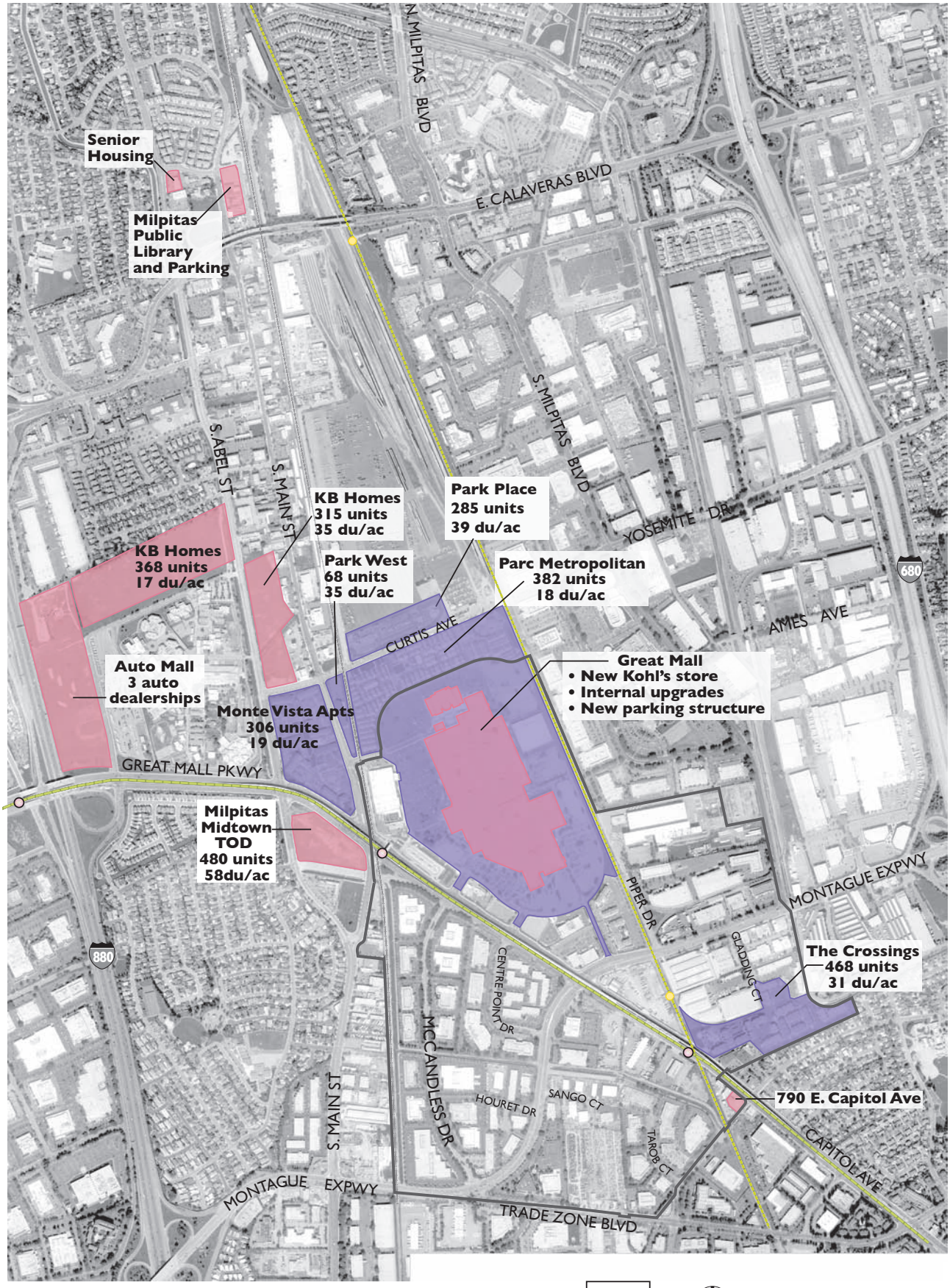
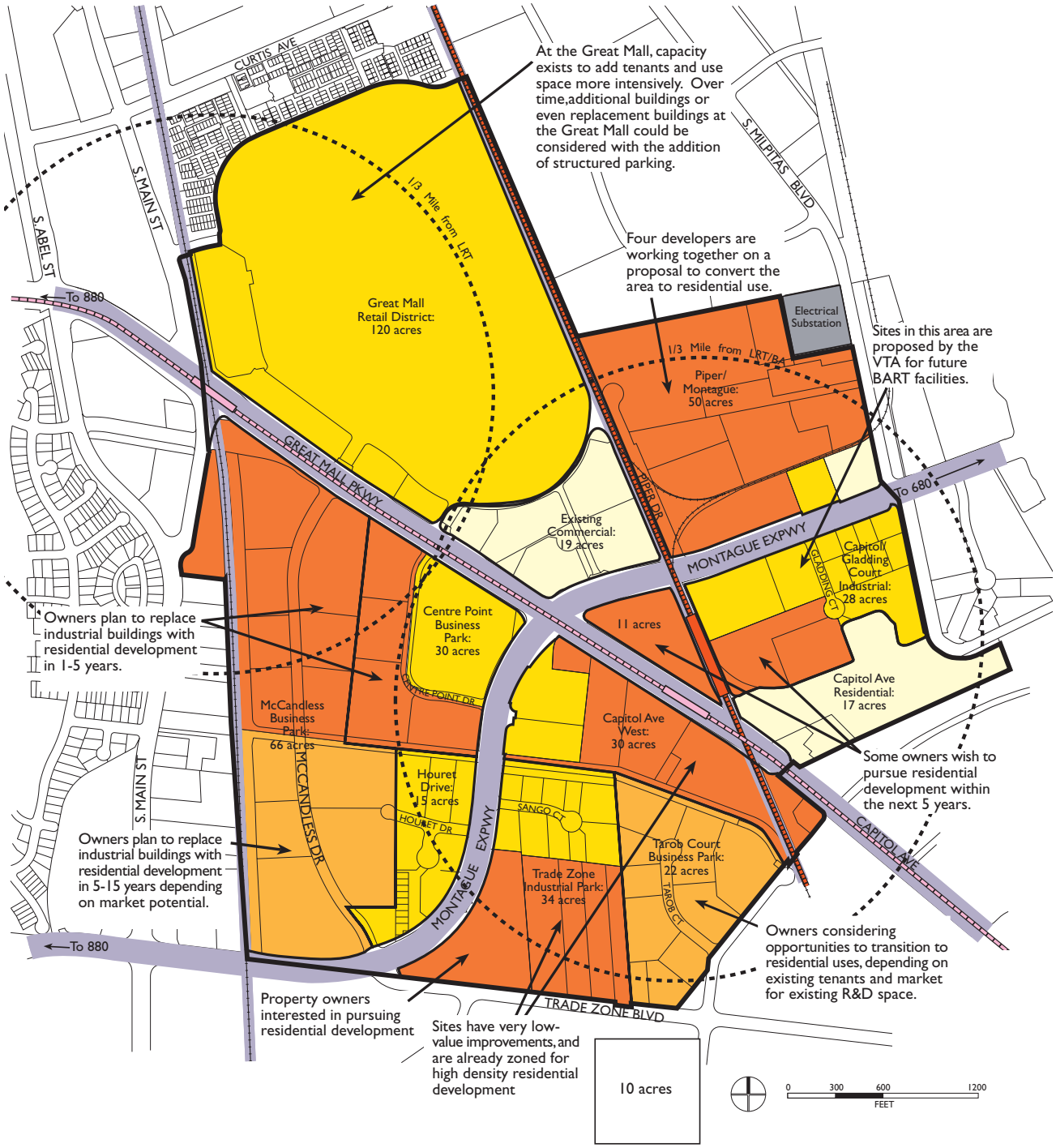


Figure 2-10

Recent Area Development



Note: The entire study area is within one half-mile of a BART or Light Rail station.

Figure 2-11

Opportunity Sites

Issues Identified by City Staff and Stakeholders

Through the stakeholder interviews, several key issues were identified that will be critical to moving forward with new development in the area. Many of these issues are addressed in the Plan's policies, but City officials and staff from a variety of City departments will need to work with property owners and other stakeholders to resolve these issues.

Timing and Greater Certainty about Land Acquisition and Site Plan for BART

In order for development to proceed in the areas surrounding the future BART station, property owners need to have greater certainty about plans for all the new roads, parking, transfer facilities, and other infrastructure associated with BART. While the BART extension is not expected to open until at least 2015, the layout of the project components must be known prior to future development in the BART Station area, and will significantly affect development in the Piper/Montague and Capitol Avenue areas.

Future Expansion of the Great Mall and Great Mall Parking Strategy

The Great Mall is an important part of the fiscal base of Milpitas, and is important to the regional identity of the City. There is the potential for future additions of entertainment, restaurant, or even sports venues that could be an enhancement to the Mall, and could enhance the regional identity of Milpitas. There is a need to figure out where additions might take place, and develop a short term and long term parking strategy. Currently there are very tight restrictions on parking for the Great Mall that preclude significant further additions of new tenants.

Parking Ratios for Residential Development

The City will need to consider what parking ratio reductions are appropriate given the proximity of sites to transit.

Building Code Issues for Higher Density Residential Development

Higher density housing types typically involve building code solutions and interpretations that are not familiar in a suburban Milpitas context, and the City will need to consider how the building code can be applied to these new housing types, in a way that guarantees safety and still promotes cost efficiency and good design.

Pedestrian Connections and Street Improvements for Pedestrians

These are very important for access between housing and offices and the Great Mall and the light rail stations and future BART Station. Pedestrian-oriented street improvements are considered critical to future residential development being attractive and having a connection that allows residents to comfortably walk to the light rail station.

Additional Sewer Treatment Capacity

Additional sewer treatment capacity will need to be secured to serve projected cumulative growth and development throughout the city, including additional development within the Transit Area that is over and above what has been approved by the Midtown Specific Plan. That will require negotiations with surrounding jurisdictions to secure capacity.

Other Issues

Property owners brought up other concerns that either pertain to a particular property, or are outside the control of the Plan. These include:

- Rail spur and railroad turnaround location,
- Landscaped buffer around the PG&E substation,
- Schools for new residential development,
- Improved flood control/drainage facilities, and
- Improved phone service network.

Property Owner Recommendations

The property owners interviewed had recommendations about the long-term development of the Transit Area.

The former owner of the Great Mall, Mills Corporation, believed that adding higher density residential in the area would enhance the stability and success of the mall. Anything that makes Milpitas more of a destination, such as an entertainment or sports venue, would also be a major enhancement. Transit service is not seen as a big factor for retail, though it could be a major asset for other supporting uses such as entertainment or residential.

Industrial property owners believe that in the long term industrial manufacturing operations will not locate in Milpitas due to the opportunity to operate at a much lower cost outside Silicon Valley. They believe that over time industrial properties with the advantages of a location near transit should convert to more intensive uses such as office and residential. However several industrial properties are fully leased with longer term leases, and owners wish to retain their industrial land use designation for at least ten years.

Residential developers see tremendous long-term potential for residential in this area. They make the following points:

- There is a huge demand, because there are so many more jobs than housing units in Milpitas and Silicon Valley.
- The economy of Silicon Valley continues to expand, which will generate more jobs and more housing demand.
- This location is close to freeways and close to transit, so it is a great location for residential.
- Locating housing in the South Bay will help the overall regional traffic congestion problems.

2.4 DEVELOPMENT ISSUES

FLOODING

The majority of the Planning Area is within FEMA flood zones A, AO, and AH of the 100-year floodplain, as designated by the Federal Emergency Management Agency (FEMA) and shown in Figure 2-12. The 100-year flood is the largest event likely to occur once every 100 years, that is, the event with a one-percent chance of flood occurrence in any given year. The entire area is located within the 500-year flood hazard zone.

These flood zones are low-lying areas that are subject to ponding during the 100-year event, and are defined by FEMA as follows:

- Zone A: Areas subject to inundation by the 1-percent-annual chance (100-year) flood event generally determined using approximate methodologies. Because detailed hydraulic analyses have not been performed, no Base Flood Elevations (BFEs) or flood depths are shown.
- Zone AO: Areas subject to inundation by 1-percent-annual-chance (100-year) shallow flooding (usually sheet flow on sloping terrain) where average depths are between one and three feet. Average flood depths derived from detailed hydraulic analyses are shown in this zone. Some Zone AO has been designated in areas with high flood velocities such as alluvial fans and washes. Communities are encouraged to adopt more restrictive requirements for these areas.
- Zone AH: Areas subject to inundation by 1-percent-annual-chance shallow flooding (usually areas of ponding) where average depths are between one and three feet. BFEs derived from detailed hydraulic analyses are shown in this zone. Mandatory flood insurance purchase requirements and floodplain management standards apply.

Development within the designated flood plain must follow the provisions within Section XI-15 of the Milpitas Municipal code. These provisions are modeled after and consistent with FEMA construction rules in order to qualify for federal flood insurance. Flood insurance is a requirement of all federally funded loans. The City's flood plain regulations have several standards that will affect the overall design and appearance of development:

- The lowest finished floor of a building must be at least one foot above the expected flood level (e.g., if the average flood depth is 2 feet above ground level, then the bottom floor of a store must be at least 3 feet above current ground level).
- Parking garages can be underground or below the flood level, as long as certain construction rules are followed.

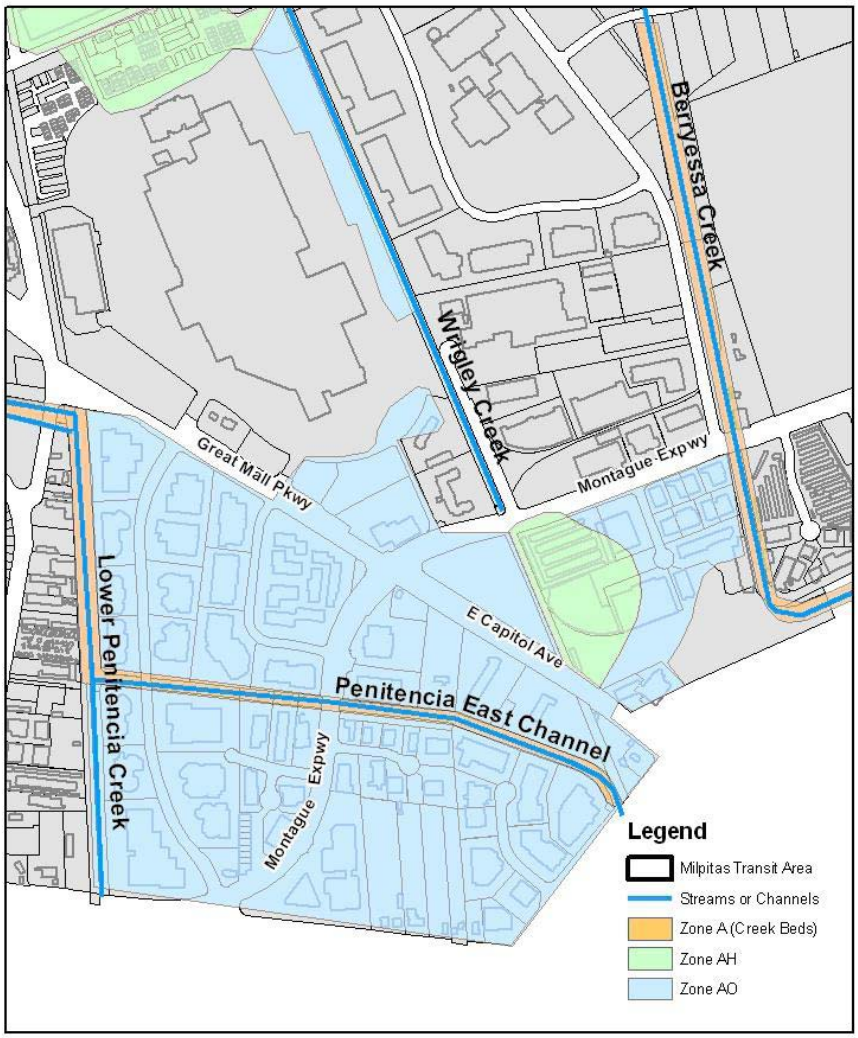
Existing Drainage Channel – Penitencia East

Existing Drainage Channel – Penitencia East

Existing Drainage Channel between Industrial Buildings

Figure 2-12

FEMA Flood Hazard Zones



Source: RMC, 2007

TRAFFIC CAPACITY

Preliminary traffic analysis indicated that regardless of the development scenario—the current General Plan and Midtown Plan policies, or intensification of the Transit Area—several of the intersections in the Transit Area will attain "F" levels of service sometime during the next 20 to 25 years. Some intersections will likely operate at level of service "D" or "E". Thus existing and future residents will experience traffic congestion during peak periods. Some intersections could be reconfigured to improve traffic circulation; for others there may not be any feasible improvements.

Some traffic congestion will continue to exist during peak periods.

For many residents and commuters, both BART and the VTA Light Rail will offer an alternative to traffic congestion for at least some trips. Studies show that people are only motivated to use transit if there is some significant level of traffic congestion. Some level of traffic congestion is thus appropriate in areas where there is major public investment being made in transit infrastructure, and there is limited funding for new roads. Transit service would need to be frequent and available such that a transit trip does not add significantly more time to the commute. Also, it will be critical to ensure the pedestrian-oriented character of the Transit Area, so that people can walk to transit, stores, services, and jobs.

In addition, several street improvements to the City and County's roadway network are already planned over the next 20 years to help alleviate traffic problems. Key ones related to the study area include the extension of Milpitas Boulevard, and the widenings of Montague Expressway and Calaveras Boulevard.

BART STATION DESIGN AND LAYOUT

BART Site

At the time of writing, VTA had not yet made a final proposal for the BART station site layout. The Milpitas City Council and VTA have agreed that the BART station will be partially underground. The parking structure locations and bus bay layout are key remaining issues. The parking structure serving BART patrons may be located on the east side of the station, or on other immediately surrounding sites depending on land acquisition by VTA.

BART Line Overhead Vs. Enclosed Trench

VTA plans to proceed with either an open-air retained cut layout or an aboveground BART line. At the time the Specific Plan was completed, the City and VTA have reached an agreement that the retained cut option would be pursued. This approach will greatly reduce the noise and visual impacts of the BART line on the nearby development, and will better allow the Transit Area to become a neighborhood with community identity and stability.

RAILROAD LINES IN THE PIPER MONTAGUE SUBAREA

A spur railroad track that serves industrial businesses in eastern Milpitas is currently located to the east of Piper Drive, running parallel to Montague Expressway. The spur track also includes a turnaround "Y." The presence and continued use of the spur and "Y" rail tracks will detract from the development potential of that area, which is designated for largely residential development. In addition to noise from passing trains and visual blight, the track will limit at-grade crossings from the housing north of the track with the BART station and mixed use development south of the track.

VTA has indicated that as part of the BART extension project, it may be cost effective to buy out or relocate the spur line to eastern industrial areas, or they may instead just build over or under the spur line crossing and leave the spur line in place. The City has advocated for the relocation of the "Y" to the north and the buy-out or relocation of the railroad spur. The Piper/Montague subarea is a large developable area and, in the long term, removal of the "Y" and spur would better accomodate successful residential development of a transit-oriented neighborhood adjacent to the new BART station.

SCHOOL DEMAND

In order to accommodate intensive development within the Transit Area as envisioned in the Midtown Plan, there will likely be a need to build a new combined elementary and middle school within the Milpitas Unified School District. The estimated number of school-age children that will live in the Transit Area could be as high as 900 students in the Milpitas United School District and 450 to 550 students in the Berryessa Union and East Side Union High School districts. It appears that the Berryesssa Union and East Side High Union school districts, which cover most of the property south of Montague Expressway, have capacity for these new students at their existing schools and properties. The boundaries of the school districts are shown in Figure 2-13.

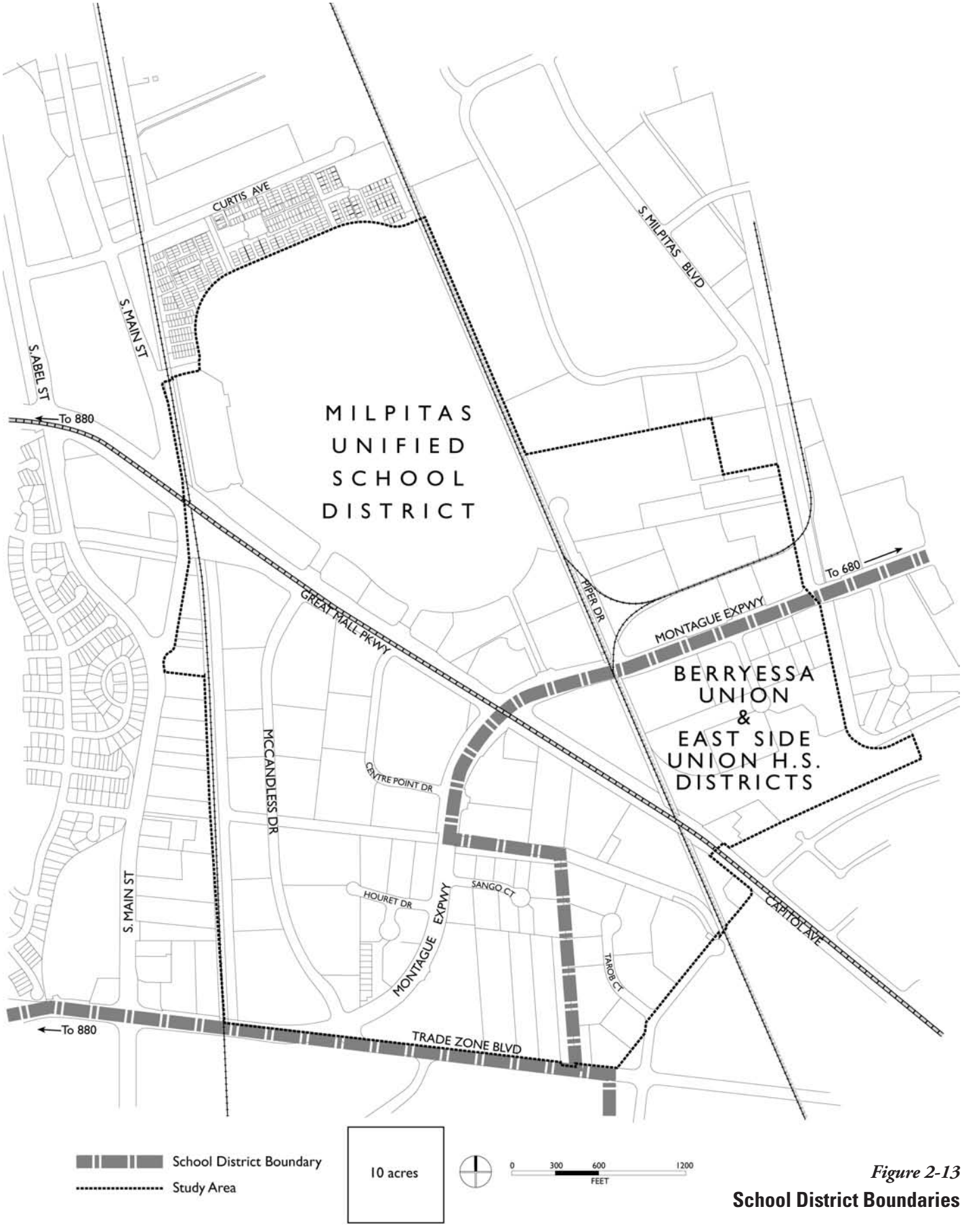


Figure 2-13
School District Boundaries

Thirty to forty aces of public park space will be needed to serve future residents.

PARK NEEDS AND REQUIREMENTS

Total Acreage

New public parks are required for the new residents to provide them with active and passive recreation opportunities as well as crucial community gathering space. Based on the expected amount of residential development and the City's prevailing park space standards, 30-40 acres of public park space is needed.

Types of Parks

In a high density transit-oriented development as envisioned here, small urban parks are the most appropriate type. Many of the residential units can look out onto a landscaped park, and these parks serve as a visual amenity which is critical for higher density housing, as well as a place for recreation. Some of the parks need to accommodate playing fields, as there is a huge demand for those facilities currently, which will only increase with new residents. There is also a need for a community center building where recreational programs could be held and a big open space for citywide events is also desired.

PUBLIC SAFETY SERVICES

Fire Department

The Milpitas Fire Department (MFD) provides full response, preparedness, and prevention services. The department's emergency response and preparedness division handles emergency incidents, safety, training, disaster preparedness and public information. The department fire prevention division handles fire plans, and permits, hazardous materials regulation, inspections and investigations.

Three fire stations are near the Transit Area: Fire Station #1, just northwest of the Great Mall at Curtis and South Main streets, Station #2 located north east of the project on Yosemite Drive and South Park Victoria Drive, and Station #4 on Barber Lane just west of I-880. The City has automatic aid and mutual aid agreements with the cities of San Jose and Fremont.

The Transit Area Specific Plan presents unique operational issues for the MFD due to its high-density residential and mixed-use structures. The increase in population, business and vehicular traffic resulting from the buildout of the area will increase the demand in service levels and has the potential to impact response times, in addition to presenting challenges to fire department vehicle access and firefighting operations. To maintain current levels of service, an increase in staffing and equipment will be necessary. A "standards-of-cover" analysis should be conducted to determine the precise impact on the department's staffing, equipment and any required facility enhancements.

The new personnel and equipment would need to be located in or near the plan area. Firefighters need to reach emergencies within four minutes, the goal established in the General Plan, which could be hampered by traffic congestion.

Police Department

Most of the crime that currently occurs in the plan area is specific to the Great Mall—thefts, forgery/fraud, and stolen vehicles, although little violent crime. In the rest of the Transit Area, more than half of the police-related calls are vehicle violations, traffic accidents, and theft from autos. Given the change in the land uses, traffic flows, and number of residents created by the Plan, the nature of police needs in the Transit Area will change significantly.

The increase in population, business traffic, and vehicular traffic resulting from the buildout of the Transit Area Plan will increase the workload of the Milpitas Police Department (MPD). To maintain current levels of service, an increase in staffing and equipment will be necessary, although a new police station is unlikely to be required. The metrics that MPD would use to determine the number of additional staff required are: projected call volume and impact in service levels, such as an increase in dispatch and response times; ring times for 9-1-1 calls; and calls that are pending for an officer.

Endangered species may use existing trees as a habitat.

ENVIRONMENTAL ISSUES

Environmental Science Associates (ESA) has conducted research into potential environmental problems in the Transit Area.

Biological and Cultural Resources

There are no significant biological or cultural resources in the Transit Area. However there are endangered species that may use existing and future trees and vegetation as habitat; and protections may need to be established.

Air Quality, Noise, and Geology

Developments in the Transit Area will need to take steps to mitigate potential negative impacts related to air quality, noise, and geologic hazards. These policies are included in the Plan and highlighted by its Environmental Impact Report.

Hazardous materials sites

The Transit Area contains at least 28 documented hazardous material releases, seven of which have not been resolved. The open cases include groundwater contamination from the Jones Chemicals site, just north of the proposed BART station. Individual assessments will be needed for each development project to determine compliance with environmental regulations.

Four Major Noise Sources

Light Rail

Future BART Line

Vehicular Noise

Freight Trains

NOISE

The Transit Area experiences noise from four main sources: light rail, BART, vehicular traffic, and freight trains. The light rail line will not generate noise above ambient levels. For the other three noise sources, however, noise insulation features will likely be required to keep interior noise levels for residential and possibly some commercial uses at acceptable levels. Future noise contours from these noise sources are shown in Chapter 5.

If the BART line is built above ground within the Transit Area, then nearby residential units will need to be highly insulated against the noise caused by passing trains. Elevated BART train pass-by events can exceed 80 dBA at the ground level. However, BART trains will be slowing down to enter the station, so they will generate less noise than would occur in full speed operations.

Residential sites along Great Mall Parkway, Montague Expressway, and Piper Drive could be located where ambient noise levels currently exceed 60 dBA DNL. The land use compatibility standards contained in the Noise Element of the City of Milpitas General Plan indicate that development of multi-family residences in areas with an ambient noise levels greater than 60 dBA DNL are "conditionally acceptable."

Railroad tracks run adjacent to the western edge of the Transit Area and along a freight-serving spur through the eastern portion of the Transit Area in the Piper-Montague subdistrict. Freight operation noise levels are in excess of 70 dBA DNL immediately adjacent to the tracks, decreasing to 60 dBA DNL at 300 feet.

Housing built close enough to these noise sources will require insulation to keep noise levels no higher than 45 dBA indoors. Exterior noise levels in open space areas may require specific design measures, such as orienting balconies away from street frontages, to reduce noise in locations like backyards and balconies.