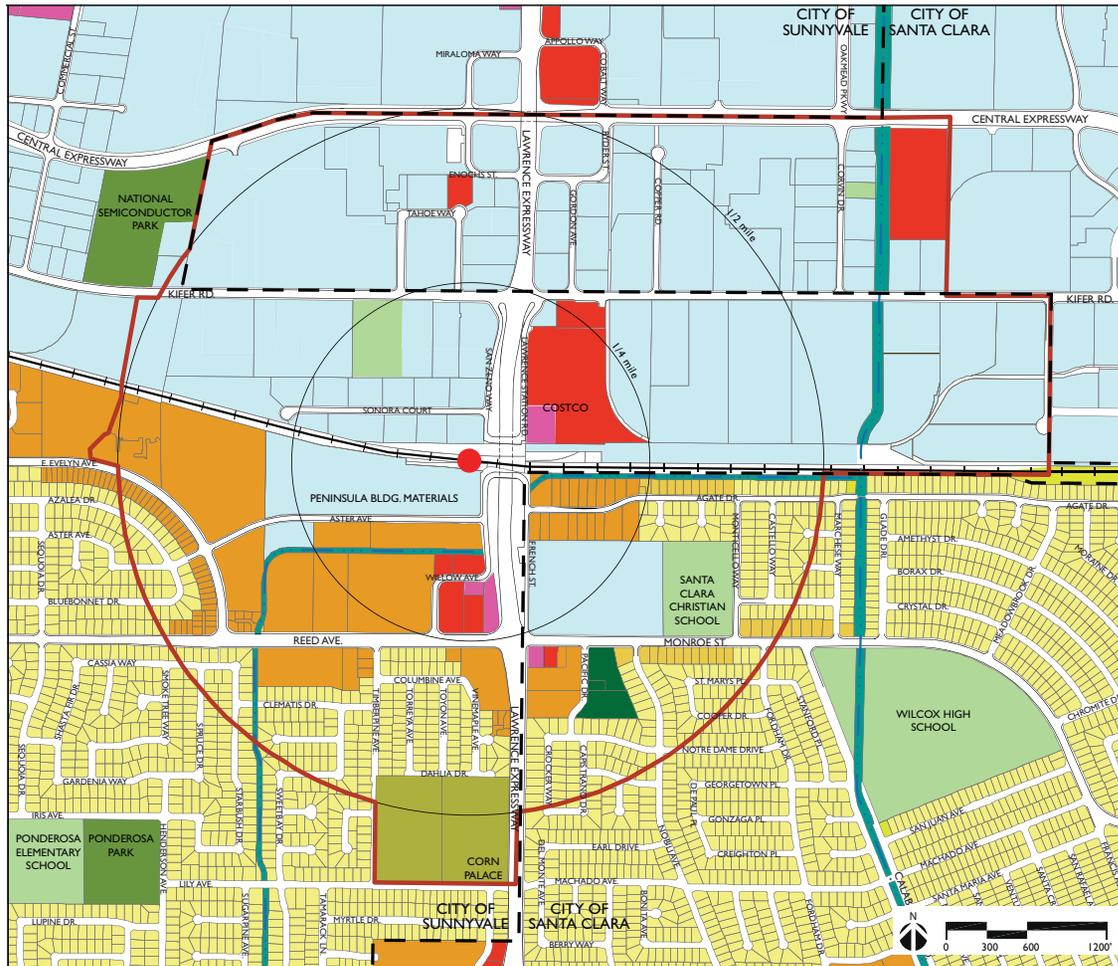


# EXECUTIVE SUMMARY

## Existing Land Uses



**LEGEND**

- STUDY AREA BOUNDARY
- SUNNYVALE / SANTA CLARA BORDER
- DRAINAGE CHANNEL / CALABAZAS CREEK
- LAWRENCE CALTRAIN STATION

|   | ACRES IN STUDY AREA |
|---|---------------------|
| <span style="background-color: #ffffcc; border: 1px solid black; width: 15px; height: 10px; display: inline-block;"></span> LOW DENSITY RESIDENTIAL (0-7 du/a)    | 69 AC               |
| <span style="background-color: #ffff00; border: 1px solid black; width: 15px; height: 10px; display: inline-block;"></span> LOW MEDIUM DENSITY RES. (7 - 14 du/a) | 11 AC               |
| <span style="background-color: #ffcc00; border: 1px solid black; width: 15px; height: 10px; display: inline-block;"></span> MEDIUM DENSITY RES. (14 - 27 du/a)    | 66 AC               |
| <span style="background-color: #cce5ff; border: 1px solid black; width: 15px; height: 10px; display: inline-block;"></span> OFFICE / INDUSTRIAL / R&D             | 302 AC              |
| <span style="background-color: #ff0000; border: 1px solid black; width: 15px; height: 10px; display: inline-block;"></span> AUTO-ORIENTED RETAIL                  | 26 AC               |
| <span style="background-color: #ff00ff; border: 1px solid black; width: 15px; height: 10px; display: inline-block;"></span> AUTO-SERVING RETAIL                   | 3 AC                |
| <span style="background-color: #008000; border: 1px solid black; width: 15px; height: 10px; display: inline-block;"></span> PARKS / RECREATION                    | 0 AC                |
| <span style="background-color: #008080; border: 1px solid black; width: 15px; height: 10px; display: inline-block;"></span> DRAINAGE CHANNELS / CALABAZAS CREEK   | 10 AC               |
| <span style="background-color: #90ee90; border: 1px solid black; width: 15px; height: 10px; display: inline-block;"></span> CIVIC USES / EDUCATION                | 14 AC               |
| <span style="background-color: #008000; border: 1px solid black; width: 15px; height: 10px; display: inline-block;"></span> RELIGIOUS / ASSEMBLY                  | 4 AC                |
| <span style="background-color: #808000; border: 1px solid black; width: 15px; height: 10px; display: inline-block;"></span> AGRICULTURE                           | 18 AC               |
| <span style="background-color: #ffffff; border: 1px solid black; width: 15px; height: 10px; display: inline-block;"></span> TRANSPORTATION / UTILITY              | 106 AC              |
| <b>TOTAL STUDY AREA</b>   | <b>629 AC</b>       |

\*ACREAGE SHOWN IS APPROXIMATE

## ISSUES AND OPPORTUNITIES

### Land Use

Land uses in the vicinity of the Lawrence Station are not of a type or density that are transit-supportive. However, in the long-term the Lawrence Station area has the opportunity to transform the mix and intensity of uses that will help support transit ridership and create more complete and vital neighborhoods in this area of Sunnyvale. Some of the land use challenges include the following:

1. Existing land use patterns and densities do not support transit.
2. The individual neighborhoods tend to be separated by overly wide collector streets.
3. There are virtually no services or retail in or near the residential neighborhoods, which requires residents to drive to all destinations.
4. The entire study area, but specifically the residential neighborhoods south of the tracks, lack usable open space in the form of parks or playgrounds.

It will be of key importance in considering future uses for the study area to protect the existing residential neighborhoods.

### Transportation & Circulation

The Lawrence Station Study Area is not well served by facilities for bicyclists, pedestrians, and buses. While the station has good facilities for vehicle drop-off and parking, it is located under Lawrence Expressway and has poor roadway access points (from Reed/Monroe via Willow and from Kifer via Lawrence Station Road and San Zeno Way). Awkward intersection designs combined with high vehicle volumes contribute to the inaccessibility of the station. The station's shuttle

service provides adequate service to many but not all employment centers, and service is limited to commute hours.

Observations indicate that while the Lawrence Station has the opportunity to be a successful station, many issues exist which prevent the station from being well-utilized. The overarching issue is the automobile-oriented transportation network in the area, with limited transit connections and poor pedestrian and bicycle circulation. The main transportation challenges include:

1. A framework of few streets and large blocks in the northern half of the study area limit access throughout the area
2. Gaps in the existing bikeway network
3. Gaps in the existing pedestrian network
4. Limited north/south bus service from the Lawrence Station area to employment centers and no direct bus service to the station
5. Inefficient parking management.

### Utilities & Infrastructure

The Lawrence Station Area is, in general, adequately served by public water conveyance infrastructure to meet the needs of existing conditions. Some infrastructure systems have considerable excess capacity while others may require improvement and upgrade if significant additional development occurs in the study area.

## Market Conditions

The market issues and opportunities include the following:

1. Despite current economic conditions and challenging local circulation patterns, the Lawrence Station Area has many strengths that would support mid- to long-term development at transit-supportive densities.
2. While some properties in the study area are underutilized, very little land is currently undeveloped. Therefore, most new development must achieve sufficient values to pay for such costs as lease buy-outs and demolition of existing uses as well as the costs of new building construction.
3. Given existing competitive supply, new office is not likely to be a near-term development (or redevelopment) opportunity in the study area, but higher density office does offer mid- to long-term prospects.
4. Though R&D is not typically considered transit-supportive, there may be types of R&D that are higher-density, higher-value propositions that may be appropriate for the study area in the mid- to long-term.
5. Neighborhood-serving retail is lacking in the study area and should be accommodated in the station area plan to complement residential and employment uses; retail should not be a leading land use.
6. There are a number of full-service grocery stores located outside of the study area but within three miles. While a grocery store in the study area would be an amenity for the existing and future residents, a significant increase in the number of study area households will be required to support a full-service, full-scale grocery.
7. Recent project performance indicates demographic and market support for higher-density housing in the study area.

**PRELIMINARY CONCEPTS**

Three preliminary land use concepts, a framework plan, parking strategies and infrastructure planning have been prepared for the study area based on technical analysis and comments received from the community and Technical Advisory Group (TAG). A summary of the key features of these concepts include:

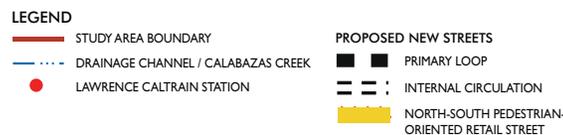
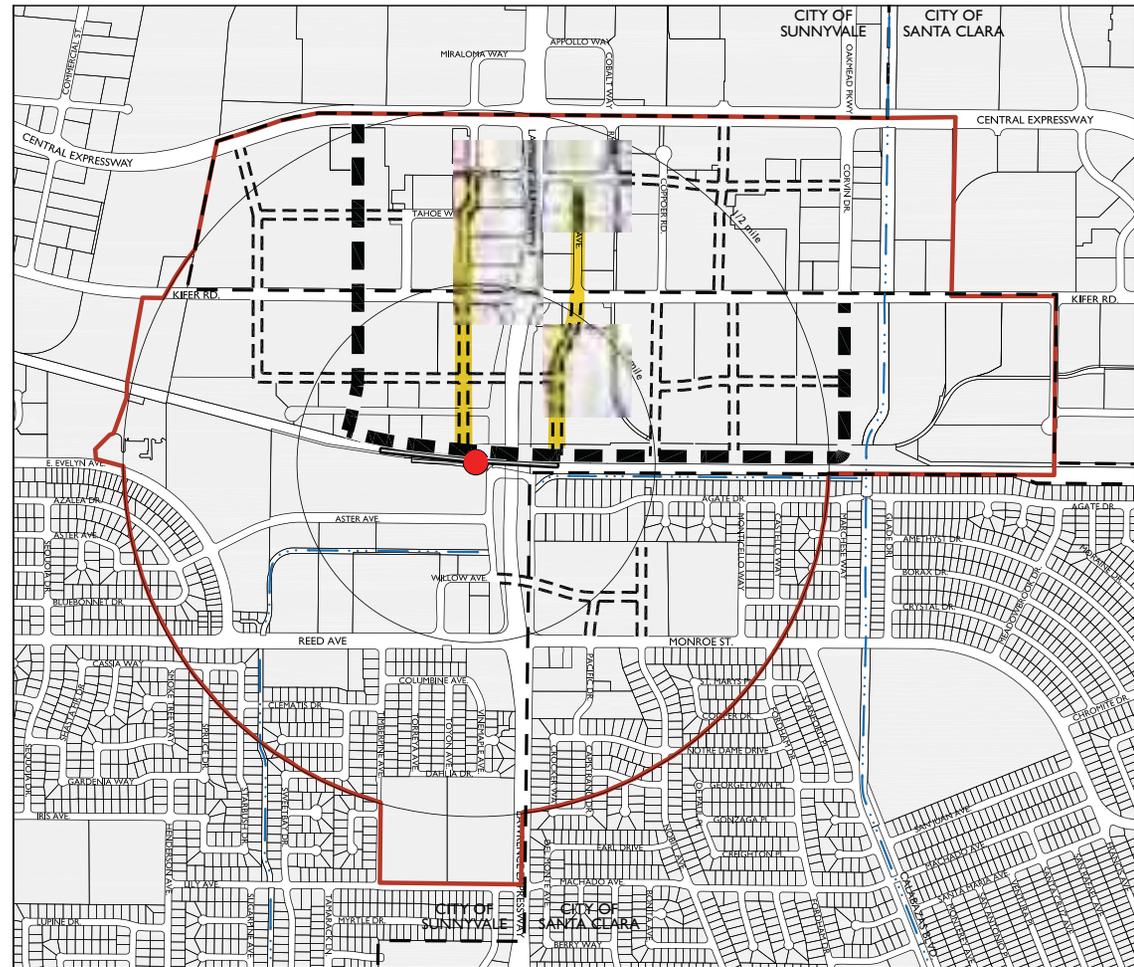
- Framework Plan. A conceptual framework of streets and blocks is proposed for those areas where land use change is likely or encouraged.
- Land Use Concepts. Three land use concepts with different mixes of use and density are presented.
- Transportation Improvements. A variety of transportation improvements will ensure good access to the Caltrain station and to districts and neighborhoods within the study area.
- Parking Strategies. Initial recommendations for modifications to parking requirements for all land uses is discussed.
- Utilities and Infrastructure. Probable utility improvements that will be occasioned by new development are presented.

**Framework Plan**

The framework plan is the system of streets and blocks that determine the structure of an urban area. The proposed framework plan is consistent throughout all three land use concepts.

The key assumptions of the proposed framework plan include:

- Retain existing framework of streets and blocks in existing residential areas with only minor improvements to provide safer street crossings and minor access improvements.
- Establish a grid of streets and blocks at a finer grain than currently exists in the area north of



the Caltrain tracks, with a pattern of blocks no longer than 400 feet.

- Emphasize missing elements of north-south access to Lawrence Station.
- To the extent possible, locate new streets along property lines between parcels to avoid impacts on building operations, and to share benefits between property owners. This will also allow phased development on a parcel-by-parcel basis at the discretion and timing of property owners as they seek to redevelop their land.

An important component of the framework plan is the North/South Pedestrian-Oriented Retail Streets. Future retail uses and services will be focused along two new pedestrian-oriented mixed-use streets that run north-south on both sides of Lawrence Expressway mid-way between the Expressway and the Primary Loop. These streets will form the walkable heart of the new neighborhoods, and will directly connect to the Lawrence Station area.

**Land Use Concepts**

The three preliminary land use concepts emphasize different land use patterns and densities and include the following:

- Concept One: Residential Emphasis
- Concept Two: Office/R&D Emphasis
- Concept Three: Mixed Development.

All three concepts envision a gradual change of use and density over time to uses that are compatible with a more balanced, transit-oriented neighborhood.

The concepts are based on the following key assumptions:

- All existing residential neighborhoods will be protected, therefore opportunities for major land use change are focused north of the tracks.
- Concepts for potential land use change may result in changes to city policy documents such as the General Plan and Zoning. However, actual change and redevelopment of properties will be at the discretion of the property owner.
- All three concepts envision a higher density central or core area focused within 1/4 mile of the Lawrence Station, with densities declining as distance increases from the station.
- South of the Caltrain tracks, all concepts result in minimal change to current land use policy. Changes primarily include replacement of auto-oriented uses with residential or neighborhood-serving retail/office mixed-use.
- In order to create a critical mass of local-serving retail and support services north of the Caltrain tracks, these uses are located along the new north/south pedestrian-oriented streets.
- While none of the concepts illustrate the provision of new open space, it is envisioned the areas of new development will incorporate new parks, open space and recreational areas in conformance with current city policies.

The City of Santa Clara recently updated its General Plan and identified higher intensity residential uses within the study area. This future development pattern is used in two of the three land use concepts: Residential Emphasis and Mixed Development Emphasis. In the Office/R&D Emphasis concept, however, uses consistent with those proposed for Sunnyvale are shown to allow testing of the feasibility of this development strategy. Any changes to the current adopted Santa Clara General Plan would be at the sole discretion of that city.

Residential Emphasis

**Sunnyvale**

| Land Use    | Units              |
|-------------|--------------------|
| Residential | 5,600-9,600 dus*   |
| Office/R&D  | 88,000 sf          |
| Industrial  | 523,000-747,000 sf |
| Retail      | 353,000 sf         |

\* includes 1,200 dus existing

Office/R&D Emphasis

**Sunnyvale**

| Land Use    | Units                  |
|-------------|------------------------|
| Residential | 2,200-2,900 dus*       |
| Office/R&D  | 2,476,000-4,864,000 sf |
| Industrial  | 1,678,000-3,057,000 sf |
| Retail      | 215,000 sf             |

\* includes 1,200 dus existing

Mixed Development

**Sunnyvale**

| Land Use    | Units                  |
|-------------|------------------------|
| Residential | 3,900-5,900 dus*       |
| Office/R&D  | 1,860,000-3,631,000 sf |
| Industrial  | 523,000-747,000 sf     |
| Retail      | 353,000 sf             |

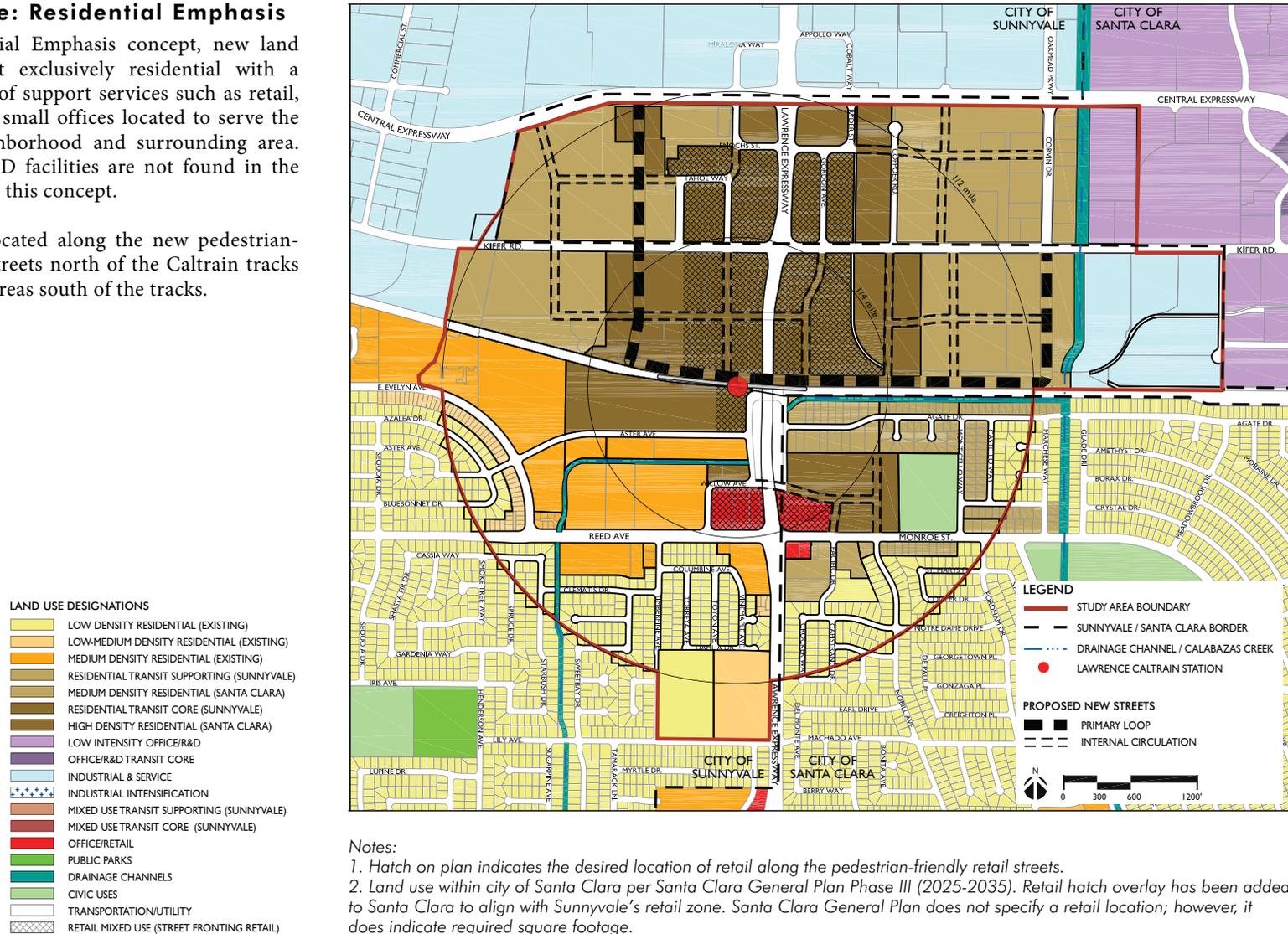
\* includes 1,200 dus existing

EXECUTIVE SUMMARY

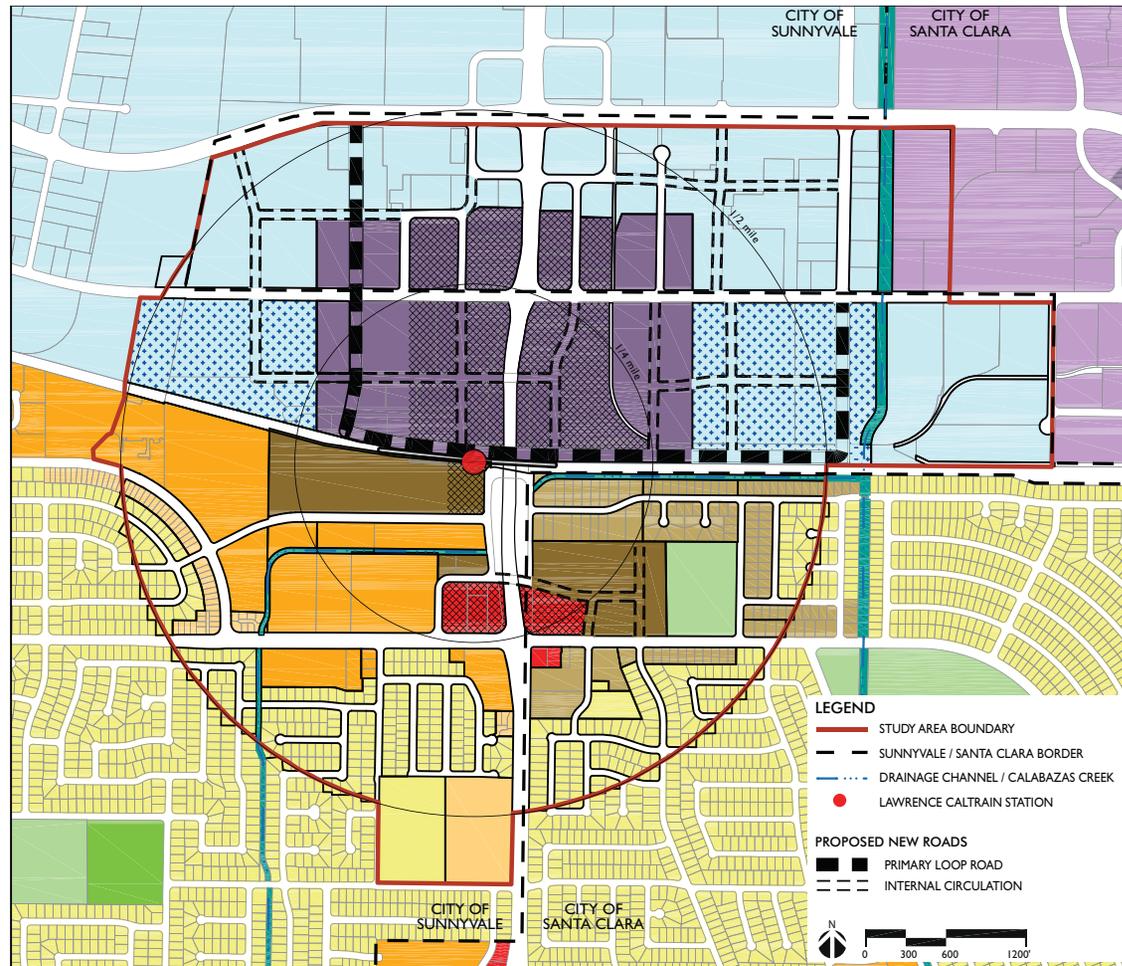
**Concept One: Residential Emphasis**

In the Residential Emphasis concept, new land uses are almost exclusively residential with a limited amount of support services such as retail, restaurants, and small offices located to serve the immediate neighborhood and surrounding area. Major office/R&D facilities are not found in the study area under this concept.

Retail will be located along the new pedestrian-oriented retail streets north of the Caltrain tracks and in selected areas south of the tracks.



Preliminary Land Use Concept | Office/Research & Development Emphasis



Notes:

1. Hatch on plan indicates the desired location of retail along the pedestrian-friendly retail streets.
2. Retail hatch overlay has been added to Santa Clara to align with Sunnyvale's retail zone. Santa Clara General Plan does not specify a retail location; however, it does indicate required square footage.

**Concept Two: Office/Research and Development Emphasis**

Under this concept, land uses north of the station are almost exclusively office and research and development (R&D), with a limited amount of support services. While land uses north of the Caltrain tracks look similar to the existing condition, there is less emphasis on industrial uses. Development is at higher densities, appropriate to R&D and office uses, and buildings and parking conform to the more accessible circulation framework. Highest densities are focused nearest the Lawrence Station.

Proposed residential development is limited to specific parcels south of the Caltrain tracks, consistent with Concepts One and Three.

In Santa Clara, a change to that city's General Plan land use policies has been suggested north of Kifer Road. Higher density office and R&D in this location would result in a land use pattern that is compatible with the office and R&D uses suggested between Kifer Road and the Caltrain tracks in Sunnyvale.

| LAND USE DESIGNATIONS      |  |
|----------------------------|--|
| [Light Yellow]             | LOW DENSITY RESIDENTIAL (EXISTING)         |
| [Light Orange]             | LOW-MEDIUM DENSITY RESIDENTIAL (EXISTING)  |
| [Orange]                   | MEDIUM DENSITY RESIDENTIAL (EXISTING)      |
| [Light Brown]              | RESIDENTIAL TRANSIT SUPPORTING (SUNNYVALE) |
| [Medium Brown]             | MEDIUM DENSITY RESIDENTIAL (SANTA CLARA)   |
| [Dark Brown]               | RESIDENTIAL TRANSIT CORE (SUNNYVALE)       |
| [Purple]                   | HIGH DENSITY RESIDENTIAL (SANTA CLARA)     |
| [Light Purple]             | LOW INTENSITY OFFICE/R&D                   |
| [Dark Purple]              | OFFICE/R&D TRANSIT CORE                    |
| [Light Blue]               | INDUSTRIAL & SERVICE                       |
| [Blue with stars]          | INDUSTRIAL INTENSIFICATION                 |
| [Brown with stars]         | MIXED USE TRANSIT SUPPORTING (SUNNYVALE)   |
| [Red with stars]           | MIXED USE TRANSIT CORE (SUNNYVALE)         |
| [Red]                      | OFFICE/RETAIL                              |
| [Green]                    | PUBLIC PARKS                               |
| [Blue line]                | DRAINAGE CHANNELS                          |
| [Light Green]              | CIVIC USES                                 |
| [White with black outline] | TRANSPORTATION/UTILITY                     |
| [Cross-hatch]              | RETAIL MIXED USE (STREET FRONTING RETAIL)  |

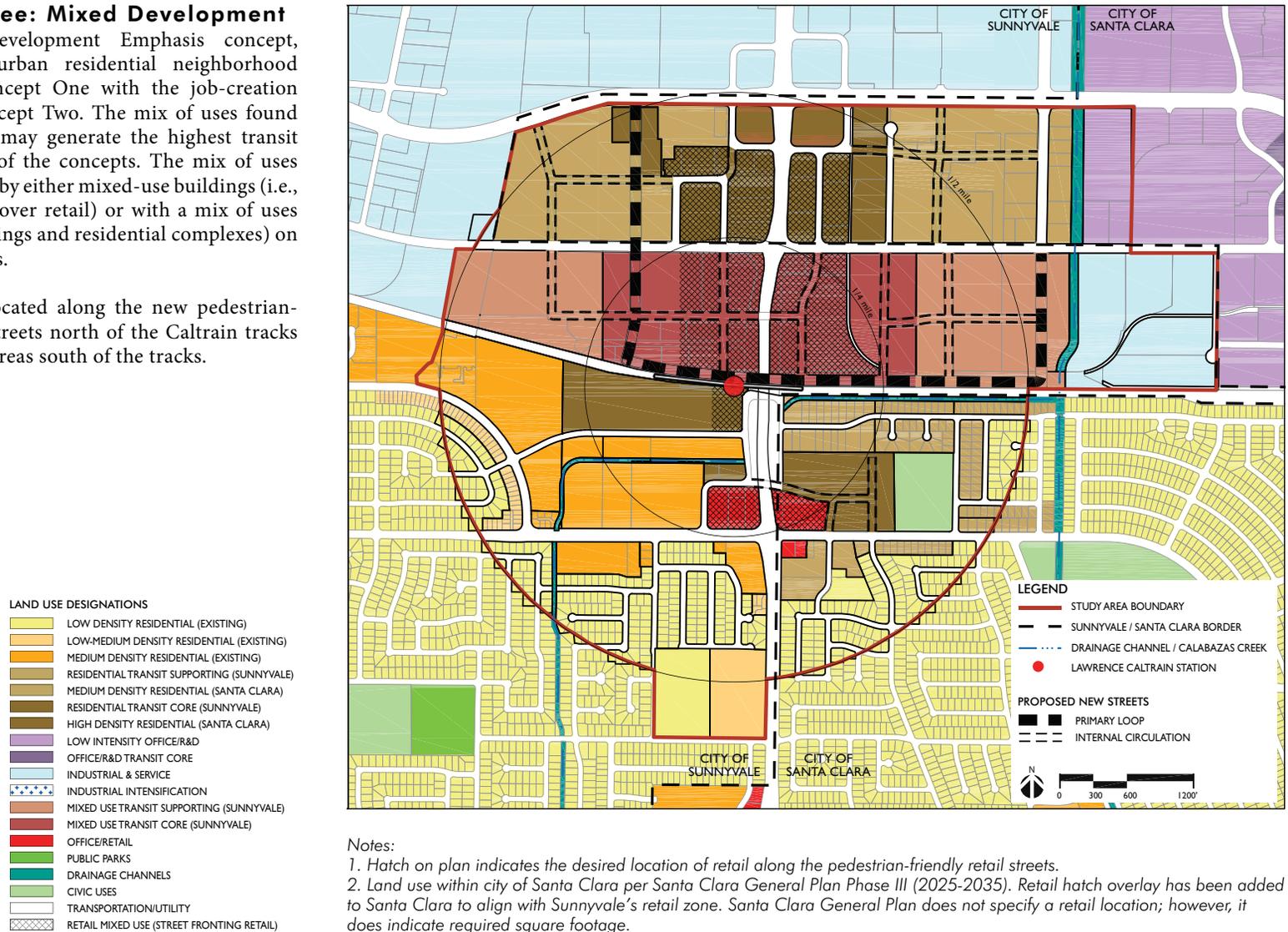
EXECUTIVE SUMMARY

**Concept Three: Mixed Development**

The Mixed Development Emphasis concept, combines the urban residential neighborhood qualities of Concept One with the job-creation qualities of Concept Two. The mix of uses found in this concept may generate the highest transit ridership of all of the concepts. The mix of uses may be achieved by either mixed-use buildings (i.e., with residential over retail) or with a mix of uses (i.e., office buildings and residential complexes) on adjoining parcels.

Retail will be located along the new pedestrian-oriented retail streets north of the Caltrain tracks and in selected areas south of the tracks.

Preliminary Land Use Concept | Mixed Development



## TRANSPORTATION IMPROVEMENTS

### Automobile and Streetscape Improvements

The proposed street network creates several new street connections, which provides direct station access for automobiles, shuttles, and potentially new transit routes. Enhanced local access can reduce traffic impacts on the expressway and arterial network. In addition, the balance of new neighborhood streets presents more opportunities for walking and bicycling through shortened travel paths to the station from nearby land uses.

Other streetscape improvements include potential future grade-separated interchanges along Lawrence Expressway at Reed Avenue and Kifer Road, which will be studied further in future phases in collaboration with the City of Santa Clara and the County of Santa Clara.

### Pedestrian Access Improvements

Pedestrian activity around the Lawrence Caltrain Station will likely experience an increase as the Station Area Plan lays the foundation for walkable streets throughout the study area. Additionally, the Caltrain Access Policy encourages providing multimodal accessibility near Caltrain stations, whereas the predominant access mode of transportation today is the automobile. The proposed framework plan will improve pedestrian access to the station.

### Bicycle Access Improvements

The new street connections proposed in the framework plan will provide more opportunities to directly access the station and connect to adjacent

neighborhoods. For example, Class II bicycle lanes proposed on the new Loop Road provide designated space for bicyclists to ride to Lawrence Caltrain Station. The existing roadway network has no bicycle lanes which lead bicyclists directly to the station either north or south of the tracks.

### PARKING

A combination of short-, medium- and long-term parking strategies are recommended for the Lawrence Station Area to reduce the quantity of required parking spaces and to encourage those living and working within the study area to share resources, minimize traffic impacts and utilize alternate modes of transportation beyond the private automobile. The primary parking strategy recommended is shared parking, which occurs when complementary land uses in close proximity are able to utilize the same parking spaces due to different peak parking characteristics. The results of a shared parking analysis for the three land use concepts indicate a range of potential parking reduction of between 12,000-22,000 spaces. The successful reduction of parking would increase overtime as new developments are built with compatible, adjacent land uses.

Other parking reduction strategies recommended for the station area include:

- Residential permit parking
- Carsharing
- Reduced Parking requirements
- Unbundle parking
- Retail credit
- Bicycle parking
- Additional park and ride at the station.

## UTILITIES

### Storm Drainage

Since much of the area has already been developed, peak run-off flow rates would not be expected to increase, and with new requirements for storm water treatment, peak flow rates may actually decrease.

Development projects within the flood plain (areas along the southern portion of Lawrence Expressway, and near the railroad right-of-way) need to be carefully considered, whether they propose to install improvements within the flood plain, or whether they seek to raise elevations locally to remove areas from the flood plain.

While private projects will typically incorporate applicable treatment systems within their individual sites, provisions for treatment of run-off from either new or newly widened public facilities, such as streets, sidewalks and bicycle trails/paths will also be required. As site planning within the Lawrence Station Area progresses, a comprehensive, regional approach to storm water treatment should be considered. A regional approach could include standards for public streets that allow storm water to be treated “at the source” before being captured in drainage inlets, and/or, large, regional facilities that treat run-off from multiple parcels and/or public rights-of-way. In either case, adequate space for these facilities must be programmed into any land planning effort.

### Potable Water

The City of Sunnyvale has adequate supply commitments to reliably meet the projected water needs of its residents and businesses for

## EXECUTIVE SUMMARY

the foreseeable future It is not anticipated that increased densities in the planning area would cause overall projected demands in the city to exceed supply. New projects within the study area will be required to install distribution mains within new public streets to serve fire and domestic water needs. The densities of development will likely increase over existing conditions, and will, in turn, increase domestic water demand in the area. A water model will need to be performed to establish final, actual line sizes in each street.

### **Wastewater Management**

Because the densities being proposed will increase wastewater generation, impacts to the elements of the City's conveyance system will need to be analyzed. These analyses could be performed on a project-by-project basis, or, a single, regional study on the existing system could be performed that evaluates global impacts to the system.

### **MARKET FEASIBILITY**

Market feasibility was studied to analyze the challenges and/or opportunities for various types of development under near-term market conditions. The findings suggest that townhome-density residential development may be among the first product types to be feasible in the study area, and may be able to displace existing lower-value industrial/flex buildings occupying key sites. Higher-density residential and office/R&D buildings are likely to be developable only in the mid- to longer-term, as market conditions and prices recover and as existing vacant supply becomes less available. These findings bear directly on the prospects for the three land use concept plans—Residential Emphasis, Office/R&D Emphasis, and Mixed Development. The Office/R&D Emphasis plan in particular faces challenges because the high cost of building dense office buildings with structured parking may not be supported in the study area for some years.

The conclusions may seem counter-intuitive—that lower-density development actually generates the highest land values and thus are most feasible in the near term. This result reflects the fact that lower-density development has lower construction costs per square foot or unit, while the market values achievable per square foot or unit may be the same or higher than those for higher-density developments.

Each of the land use concepts will require extensive traffic and circulation infrastructure improvements as well as sewer and storm drain improvements. New parks and open space are also likely to be required, and school improvements may also be necessary

under some scenarios. Infrastructure and facilities demands and cost estimates will be estimated in a later phase of work and will influence the feasibility of projects within the study area.



*Lawrence Caltrain Station with Lawrence Expressway above, January 2011*



*View of the northern platform of the Lawrence Caltrain Station, January 2011*