

4

CONSTRAINTS

New housing development can be constrained by economic forces in the private market as well as regulations and policies imposed by public agencies. These constraints can limit the production of housing and/or increase its cost and can also affect the maintenance and/or improvement of existing housing. Governmental and non-governmental constraints that can affect the housing market and stock in Antioch are discussed below. Chapter 6 will identify ways, where feasible, to reduce or overcome constraints to the maintenance, improvement, and development of housing for all income levels.

A. GOVERNMENTAL CONSTRAINTS

Governmental regulations, while intentionally regulating the quality and safety of development in the community, can also unintentionally increase the cost of development and housing or make it difficult to meet the demand, especially for affordable housing. Governmental constraints typically include policies, standards, requirements, or actions imposed by the various levels of government upon land use and development such as zoning and subdivision regulations, growth management measures, building codes, fees, processing and permit procedures, and other exactions that developers must satisfy.

The City has limited influence over state and federal requirements that may constrain housing, but the State affords local agencies considerable flexibility in establishing land use policies and regulations. Therefore, the discussion in this section is generally limited to the policies, standards, requirements, and actions at the local level.

Land use controls may limit the amount of density of development, thus increasing the cost per unit. Required improvements and/ or off-site mitigation also increase the cost of development. Processing procedures, including review by multiple agencies and permitting requirements, may delay the approval process and increase the cost of development.

1. FEDERAL AND STATE

Federal and State programs and agencies play a role in the imposition of non-local governmental constraints. Federal and State requirements are generally beyond the influence of local government and therefore cannot be effectively addressed in this document.

4. CONSTRAINTS

CALIFORNIA ENVIRONMENTAL QUALITY ACT

The California Environmental Quality Act (CEQA) was developed to protect the quality of the environment and the health and safety of persons from adverse environmental effects. Discretionary projects are required to be reviewed consistent with the requirements of CEQA to determine if there is potential for the project to cause a significant adverse effect on the environment. Depending on the type of project and its potential effects, technical traffic, noise, air quality, biological resources and geotechnical reports may be needed. If potential adverse effects can be mitigated, a Mitigated Negative Declaration (MND) is required. If potentially adverse effects cannot be mitigated, an Environmental Impact Report (EIR) is required. These documents have mandated content requirements and public review times. Preparation of CEQA documents can be costly and despite maximum time limits set forth in the Public Resources Code, can extend the processing time of a project by a year or longer.

LABOR COSTS

Labor costs have risen since the Great Recession in 2008, especially in expensive, metro areas like the Bay Area. During the Recession and the recovery period that followed, many in the construction industry left the field. This continues to impact the availability of workers today. Labor costs continue to rise given the shortage of skilled labor. Labor costs are not a governmental constraint. However, public works projects and affordable housing financed through the use of public funds are required to pay prevailing wages, which create a significant cost impact on the construction or rehabilitation of affordable housing units for low- or moderate-income persons and the infrastructure to support such housing.

2. LOCAL

LAND USE CONTROLS

Land use controls are minimum standards included in the General Plan and implemented through the Zoning and Subdivision Ordinances. General Plan land use designations are a means of ensuring that the land uses in the community are properly situated in relation to one another and providing adequate space for each type of development. Zoning regulations are designed to implement the intentions of the General Plan land use designations. They also control such features such as the height and bulk of buildings, lot area, yard setbacks, population density and building use. If zoning standards are significantly more rigid than private sector design standards and do not follow sufficient land use flexibility, development costs could increase, and housing production may decrease.

General Plan

Each city and county is required by State law to have a General Plan, which establishes policy guidelines for development. The General Plan is the foundation of all land use controls in a jurisdiction. The Land Use Element of the General Plan identifies the location, distribution, intensity, and density of the land uses within the City. General Plan residential densities are expressed as dwelling units per acre. The Antioch General Plan identifies five residential land use designations, as shown in Table 4-1. Densities range from as low as 1 unit per acre in the Estate Residential designation to 35 units per acre in the High-Density Residential designation. In addition, there are also some mixed-use designations such as Transit Oriented Development (TOD) and certain Planned Development Districts that allow residential uses as well.

TABLE 4-1 GENERAL PLAN – RESIDENTIAL USE LAND CATEGORIES

Designation	Description	Density Range
Estate Residential	Primarily single-family detached units	1-2 du/ac
Low-Density Residential	Primarily single-family detached units	4 du/ac maximum
Medium Low-Density Residential	Single-family detached; small lot single-family detached; duplex	6 du/ac maximum
Medium-Density Residential	Single-family detached; small lot single-family detached; multi-family attached; mobile homes; townhouses; garden apartments	10 du/ac maximum
High-Density Residential	Multi-family attached; group residential; Residential Care Facilities	Up to 35 du/ac; Density bonus for senior housing projects

Source: City of Antioch, General Plan, Land Use Element, 2003.

To make a housing project economically feasible based on land costs and economies of scale, certain densities are necessary. Housing elements are required to demonstrate how adopted densities accommodate the regional housing need for lower-income households. To do this, local governments are given the option of utilizing the “default” density standard that is deemed appropriate to accommodate housing for lower-income households. The default density option was adopted by the City in 2003 by consensus with local government representatives, builders, planners, and advocates. For metropolitan jurisdictions such as Antioch, a minimum density of 30 units per acre has been established for the very-low- and low-income categories. As a result of amendments to the General Plan that the City Council approved in June 2014, densities up to 35 units per acre are now allowed in areas designated high-density residential. This change made it possible for the Council to also establish a new high-density residential district as discussed below.

Zoning Code

The Zoning Code is the primary tool for implementing the General Plan. It is designed to protect and promote public health, safety, and welfare.

Table 4-2 summarizes the requirements for establishing residential uses in residential and mixed-use zones in Antioch. Single-family residential zones include RE, RR, R-4, R-6, R-10, R-20, R-25, R-35, and MCR. Single-family dwelling units are permitted by-right in all of the single-family residential zones, except for R-10 and MCR where a use permit is required. In order to preserve land resources for higher-density development, in R-20, R-25 and R-35, no new single-family development is permitted but existing single-family dwellings are permitted to remain and may be replaced. The multi-family residential zones are R-10, R-20, R-25, R-35, and MCR. As a result of revisions to the Zoning Ordinance enacted in June 2014, the maximum density for multi-family development was increased through the creation of a new R-35 High-Density Residential District. The ordinance was also amended to allow multi-family residential development at 20 units per acre permitted by-right in the R-35 zone as well as in the new R-25 zone. Multi-family development continues to be subject to a use permit in the R-10, R-20, MCR and RTR-20 zones. The ordinance also requires a use permit to allow multi-family projects with more than 20 units per acre in the Medium-Density, High-Density, and Mixed-Use districts.

There is a discrepancy in the R-35 District that needs to be addressed. The R-35 District established a minimum density of 30 units per acre, but also allows multi-family projects with 20 units per acre by-right. The City has not allowed projects less than 30 units per acre and the Housing Element includes a program to amend the code and remove this provision in the R-35 District.

4. CONSTRAINTS

TABLE 4-2 PRIMARY USES – RESIDENTIAL ZONES

Zone	Single-Family	Multiple-Family	Two-Family (Duplex)	Residential Care Facility
RE – Rural Estate Residential District	P	--	--	--
RR – Rural Residential District	P	--	--	--
R-4 – Single-Family Low-Density Residential District	P	--	--	--
R-6 – Single-Family Low-Density Residential District	P	--	--	--
R-10 – Medium-Density Residential District	U	U	P	U
R-20 – Medium-Density Residential District	P ^a	U	P	U
R-25 – High-Density Residential District	P ^a	P, U ^b	P	U
R-35 – High-Density Residential District	P ^a	P, U ^b	P	U
MCR – Mixed Commercial/Residential District	U	U	U	U

Notes: P = Permitted by Right U = Use Permit Required

^a Single-family dwellings existing prior to the effective date of the Zoning Code or Amendment to the Zoning Code are permitted uses, conforming to the R-20, R-25, and R-35 zones. However, development of new single-family dwelling units, other than replacement of existing single-family dwellings, are prohibited within the R-20, R-25, and R-35 zones.

^b Up to 20 units/acre permitted by-right subject to compliance with all other applicable standards.

Source: City of Antioch, Zoning Code.

In addition to amending the Zoning Ordinance to increase the maximum residential density from 20 to 35 units per acre, the City also established new multi-family residential standards. The standards, which comprise Chapter 5, Article 7 of the Antioch Municipal Code, are intended to facilitate the approval of multi-family projects by establishing clear requirements for a variety of issues such as setbacks from adjacent single-family homes and building articulation that were previously addressed during design review. Article 7 also establishes a procedure for modifying the new dimensional requirements without approving a variance. The approval of reduced setbacks for multi-family development on arterials will reduce another obstacle to residential development.

In all districts the maximum density may, of course, be exceeded if a project is entitled to a Density Bonus under the State Density Bonus law (Government Code Section 65915). Since the densities are permitted by-right and do not require zoning approval or review under CEQA, the establishment of the R-25 zone also removes another constraint to housing production due to the time and cost associated with the environmental review process.

In addition to the residential and mixed-use base districts listed in Table 4-2, the City of Antioch also has residential zones that accommodate various types of development. These residential zones are as follows:

Planned Development District (P-D)

The Planned Development District (P-D) is a floating district that can be established on parcels containing at least 3 acres. This district is intended to encourage flexibility in the design and development of land so as to promote its most appropriate use. A P-D provides greater flexibility when needed to accommodate a variety of types of development, such as neighborhood and district shopping centers, multiple-family housing developments, single-family residential developments, commercial service centers, industrial parks, or any other use or combination of uses.

Hillside Planned Development District (HPD)

This is an overlay district applicable to hillside areas where slopes of 10 percent or more predominate that are not covered by an approved tentative map or final development plan. The purpose of this zone is to assure the preservation of the predominant hillsides, ridges, ridgelines, and other natural features and land forms by promoting a more harmonious visual and functional relationship between the existing natural environment and the needs of a growing community.

Transit-Oriented Development District (TOD)

This is a type of Planned Development District intended to provide for a mix of high-density uses that are oriented toward rail or bus transit stations within and adjacent to the city. This district thus accommodates development of an integrated mix of residential, commercial, and employment-generating uses as appropriate in both horizontal mixed-use and vertical mixed-use.

Table 4-3 shows the development standards for each zone designed for residential uses within Antioch.

Specific Plans for Future Residential Growth*Downtown Antioch*

The Planning Area boundaries of Downtown Antioch are generally the San Joaquin River to the north, Fulton Shipyard Road to the east, 10th Street to the south, and Auto Center Drive to the west. This area is approximately 1.5 miles wide and 0.5-mile deep, with a total area of 0.75 square miles. The Planning Area boundaries generally reflect the traditional grid that was developed during the 19th and early 20th centuries.

- The Downtown Area contains a variety of Land Use Districts with unique histories, building forms, land use compositions and influences. Land use designations incorporating residential uses include: Mixed-Use District (MU), Neighborhood Commercial District (C-N), and the Downtown Residential Districts (MDR & HDR).
- Base densities for residential range from 12-28 units/acre.
- Each of the districts have their own standards for building height, floor area ratio and setbacks. Heights for residential uses range from 2 to 4 stories, depending on location and incentive standards. Parking is required only for new construction/additions or by Use Permit. Existing buildings are exempt.

East 18th Street

The Antioch General Plan identifies the area on the north side of East 18th Street, westerly of Drive-In Way as the East 18th Street Specific Plan. Since 1999, this plan gave direction to work with area landowners and business interests to resolve the current circulation, utility service, and related development constraints; maximize opportunities for development of employment and revenue producing uses in a clean, attractive business park setting; incorporate sufficient incentives and flexibility to stimulate economic development; and provide a program-level set of entitlements to address all major policy issues and further incentivize development in the area.

4. CONSTRAINTS

TABLE 4-3 RESIDENTIAL DEVELOPMENT STANDARDS

Zone	Maximum Height (ft) ^a	Minimum Building Site (ft ²)	Minimum Lot Width (ft)		Maximum Lot Coverage	Minimum-Density Required ^b	Maximum-Density Allowed ^c	Front Yard Minimum [^]	Minimum Side Yard Required (ft) ^d		Minimum Rear Yard Required (ft)
			Corner	Interior					Corner	Interior	
RE			<i>To be determined by City Council through planned development process</i>								
RR			<i>To be determined by City Council through planned development process</i>								
R-4	35	6,000	65	60	40%	n/a	4 du/acre	*	*	5	20
R-6	35	6,000	65	60	40%	n/a	6 du/acre	*	*	5	20
R-10	45	6,000	65	60	40%	n/a	10 du/acre	*	*	5	10
R-20	45	20,000	70	70	40%	n/a	20 du/acre	*	*	5	10
R-25	45	20,000	70	70	50%	20 du/acre	25 du/acre	*	*	5	10 [^]
R-35	45	20,000	70	70	50%	30 du/acre	35 du/acre	*	*	5	10 [^]
PD			<i>To be determined by City Council through planned development process</i>								
HPD			<i>To be determined by City Council through planned development process</i>								
MCR	45	6,500	65	60	50%	n/a	20 du/acre	*	*	5	10
TOD			<i>To be determined by City Council through planned development process</i>								

^a Height shall be the vertical distance from the average level of the highest and lowest point of that portion of the lot covered by the structure, excluding below ground basements, to the topmost point of the roof. Some exceptions to the specified height limitation are detailed in the Zoning Ordinance.

^b In units per gross developable.

^c In units per gross developable acre; See Zoning Ordinance for definition of maximum developable gross acreage.

^d For at least 25% of the lots in a given subdivision, one side yard of an interior lot shall be 10 feet in width and the other side yard can be five feet. The 10-foot side yard area shall remain as unrestricted open area. This shall also apply to all two-story single-family residential lots. On any parcel of land of an average width of less than 50 feet, which parcel was under one ownership or is shown as a lot on any subdivision map filed in the office of the County Recorder prior to April 11, 1950, when the owner thereof owns no adjoining land, the width of each side yard may be reduced to 10% of the width of such parcel, but in no case to less than 3 feet.

* Front yard and street side setbacks shall be reserved for landscaping only, excluding access and egress driveways and shall be determined on a graduated scale based upon type of street and land use as follows:

Non-residential uses:

Arterial street: Minimum 30-foot setback with 30-foot landscaping on all frontages

Collector street: Minimum 25-foot setback with 25-foot landscaping

Local street: Minimum 20-foot setback with 20-foot landscaping

Single-family detached and two-family dwelling uses:

Arterial street: Minimum 30-foot setback with 30-foot landscaping on all frontages

Collector street: Minimum 25-foot setback and landscaping for front yard and 10-foot street side yard setback with landscaping

Local street: Minimum 20-foot front yard setback with 20-foot of landscaping and 10-foot street side yard with landscaping

Multi-family dwelling uses:

Arterial street: Minimum 15-foot setback with 15-foot landscaping on all frontages

Collector street: Minimum 15-foot setback with 15-foot landscaping

Local street: Minimum 10-foot setback with 10-foot landscaping

[^] Where a multi-family dwelling abuts a lot that is zoned RR, RE, R4 or R6, a minimum rear yard of 20 feet shall be provided.

Source: City of Antioch, Zoning Code.

East Lone Tree

The East Lone Tree Area is comprised of roughly 800 acres bounded by Lone Tree Way on the south; Empire Ave and the SP railroad on the east; the Contra Costa Canal on the north; and existing residential subdivisions to the west. Land use is almost entirely agricultural, with a few farm residences. Lands to the west and north are within the Antioch city limits. The western border is abutted by residential subdivisions, consisting of detached homes on lots averaging 5 units per acre. Lands to the south and east are unincorporated and subject to the County General Plan. The remaining segment of the eastern border adjoins lands designated for low (1.0-2.9 units per acre) to high (5.0-7.2 units per acre) density single-family residences.

Hillcrest Station Area

The Hillcrest Station area is a unique 375-acre site in East County, offering large land acreage with freeway visibility at a strategic location—the juncture of State Route 4 (SR 4) and State Route 160 (SR 160) and nearby the Antioch BART station which opened in 2018. The area is a major opportunity site for transit-oriented development—an opportunity to take advantage of the major public investment in transit infrastructure and to create a compact area with both jobs and housing.

Parking Requirements

Chapter 5.17 of the Zoning Ordinance establishes parking standards for type of use in each zone, as shown in Table 4-4. Parking requirements do not constrain the development of housing directly, but compliance may result in a reduction in the number of housing units that can be developed on a given site, which can reduce a project's economic feasibility. A review of parking requirements in nearby jurisdictions that was conducted in conjunction with 2014 zoning updates concluded that Antioch's parking requirements compared favorably with those imposed by peer communities in Contra Costa County. The City Council did, however, revise the process for modifying parking requirements to clarify the procedure. The changes approved in June 2014 allow the Zoning Administrator or the Planning Commission to reduce or modify parking requirements for Senior Housing, Shared Parking Facilities or those near public parking, residential and mixed-use projects within 0.5-mile of a major transit stop or incorporating transportation demand management measures, projects on infill sites, historic structures as described below.

The following types of residential projects may be considered for reduced parking requirements:

- **Senior Housing.** The required parking for a senior housing development may be reduced below the normally required 0.75 space per dwelling unit for projects anticipated to generate lower parking demand due to vehicle ownership patterns of the residents and/or characteristics of the project (e.g., proximity to commercial services, proximity to public transportation systems).
- **Transit-Supportive Development.** Residential or mixed-use projects that contain no more than 50 dwelling units and are located within 0.5-mile of a major transit stop.
- **Infill Sites.** Residential or mixed-use projects that contain no more than 30 dwelling units and are located on infill sites.
- **Historic Structures.** Projects for which allowing a reduction in the number of required spaces (and/or modifications to dimensional requirements for parking areas) will facilitate the re-use of an existing building that is a historic resource as defined by the State Public Resources Code or is a designated Historic building.

4. CONSTRAINTS

TABLE 4-4 RESIDENTIAL PARKING REQUIREMENTS

Use Classification	Required Parking Spaces
Single-Family Residential (Attached)	2 spaces per unit, one of which must be covered, plus 1 space per 5 units for guest parking
Single-Family Residential (Detached)	2 spaces per unit in a garage, plus one guest parking space on the street within close proximity to the unit served
Multi-Family Residential	1.5 spaces per unit up to 2 bedrooms; one space to be covered 2 spaces per unit for 3 bedrooms; one space to be covered plus 1 space per 5 units for guest parking
Elderly Residential (Senior Housing Overlay)	0.75 covered space per unit, plus guest parking as determined during project review
Convalescent Facilities	1 space per 2 residents

Source: City of Antioch, Zoning Code.

Planned Development (P-D) District

Although not specifically intended to encourage housing production, the P-D approach can be used to produce residential development that is a better fit with surrounding development. The P-D allows for more economical provisions of streets and utilities, preserves the natural and scenic qualities of open space, offers greater recreational opportunities convenient to residents, enhances the appearance of neighborhoods through the preservation of natural green spaces, and counteracts the effects of urban congestion and monotony. This approach can address some of the concerns that are often raised regarding the introduction of higher density and infill development.

All site and building requirements, including yard, building height, lot coverage, and landscaping are determined by the City Council during the planned development process. As mentioned above, the minimum area required for the establishment of a P-D District is three contiguous acres of land except for areas covered by a Specific Plan.

Zoning for Diverse Housing Types

Provisions of the Zoning Ordinance and State law facilitate development of affordable housing and diverse housing types, such as Accessory Dwelling Units (ADUs), residential hotels, senior housing, emergency shelters, transitional housing, residential hotels, and housing for persons with disabilities. City regulations related to these housing types are consistent with State law, and where there are inconsistencies, programs have been identified in the Housing Element to bring City policies into compliance. See Chapter 5, Resources, for more information on the different housing typologies allowed under the City's regulations.

Housing for Persons with Disabilities

Fair Housing Law prohibits local governments from making housing opportunities unavailable to people with disabilities through discriminatory land use and zoning rules or other policies and procedures. Persons with disabilities are significantly more likely than other people to live with unrelated people in group housing, and therefore the definition of "family" can be a constraint to housing for persons with disabilities. The Antioch Zoning Ordinance (Section 9-5.203) defines a family as "one or more persons occupying a premises and living as a single housekeeping unit, as distinguished from a group occupying a hotel, club, fraternity, or sorority house. Also referred to as a household." The City defines a dwelling unit as a room or suite of rooms used for sleeping, eating, cooking, and sanitation for no more than one family. The Zoning Ordinance does not distinguish between related and unrelated persons and does not

impose a numerical limitation on the number of people that can constitute a family. Therefore, neither the definition of family nor the definition of dwelling unit is a constraint to supportive or group housing for persons with disabilities in Antioch.

The siting of group homes is another common constraint to housing for persons with disabilities. The Antioch Zoning Ordinance defines residential care facilities as facilities licensed by the State and providing permanent living accommodations and 24-hour primarily non-medical care and supervision for persons in need of personal services, supervision, protection, or assistance sustaining the activities of daily living. Consistent with State law, residential care facilities that provide care for up to six patients are treated as residential uses and subject only to the same requirements as other permitted residential use of the same housing type in the same district. Residential care facilities for seven or more are allowed with a use permit in the following zones: R-10, R-20, R-25, R-35, C-0, C-1, and MCR. Implementation of Program 3.1.5 proposes to establish eligible supportive and transitional housing projects as permitted by-right where multi-family and mixed uses are permitted, consistent with AB 2162. The implementation program will result in a revision to the Zoning Ordinance to bring it into consistency with State law and would remove a potential governmental constraint to housing persons with disabilities.

Reasonable Accommodation

A reasonable accommodation is a change, exception, or adjustment to a rule, policy, practice, or service. The Fair Housing Act makes it unlawful to refuse to make reasonable accommodations to rules, policies, practices, or services when such accommodations may be necessary to afford persons with disabilities an equal opportunity to use and enjoy a dwelling and public and common use areas. In addition, the Fair Housing Act prohibits a housing provider from refusing to permit, at the expense of the person with a disability, reasonable modifications of existing premises occupied or to be occupied by such person if such modifications may be necessary to afford such person full enjoyment of the premises.

The City's current reasonable accommodation process is to have applicants to submit a request to the City for approval by the Zoning Administrator. If the project also requires some other planning permit or approval, then the applicant must file the request for reasonable accommodation together with the application for such a permit or approval. Article 39 of the City's Zoning Ordinance details the formal process for requesting reasonable accommodation. Building Codes and Enforcement

Building and safety codes are adopted to preserve public health and safety and ensure the construction of safe housing. The City has adopted the 2019 California Building Code. The California Building Code has established construction standards for all residential buildings, which provide minimum standards necessary to protect the health, safety and welfare of Antioch's residents.

The City also requires that all new residential construction complies with Title 24 of the California Building Code, which addresses accessibility requirements for certain types of buildings. The City's building inspectors and code enforcement officers are responsible for investigating and abating complaints of violations of building codes, zoning requirements, sign regulations and public nuisance ordinances.

Site Improvements

Site improvements vary depending on the location and existing infrastructure of a specific site. Dedication and construction of streets, alleys, and other public easements and improvements may be required to maintain public safety and convenience. The City's standards and requirements for streets, sidewalks, parkway trees and other site improvements are found in the Municipal Code and are available to the public on the City's website.

4. CONSTRAINTS

The City of Antioch has adopted the following design standards for residential subdivisions:

- Alleys – Alleys shall not be less than 20 feet in width.
- Intersections – All streets shall intersect as nearly as possible at right angles.
- Center lines – Streets entering upon opposite sides of any given street shall have their center lines directly opposite each other, or such center lines shall be offset by at least 200 feet.
- Distance between certain streets – The minimum distance between streets entering a thoroughfare shall be 800 feet where feasible.
- Planting areas and parks – Where a subdivider proposes the creation of planting areas, parks, parked streets, or other parcels of land to be used for subdivision owners or for the public, the approval of such areas shall be conditioned upon adequate provisions for the maintenance of such areas until such time as the maintenance is assumed by a public agency.
- Rights-of-way and similar facilities – If a subdivision borders on or contains a railroad right-of-way, a limited access freeway, or similar type of facility, the Commission may require the street plan be considered in its relation to the probability of grade separation.

Other

The City of Antioch has a voter-approved advisory measure, Measure U, that was approved by 69 percent of voters in 1998. Measure U calls for the City to phase the rate of new development to “provide adequate schools, street improvements, and Highway 4 improvements for a sustained high quality of life, by making new growth pay its own way through maximizing fees, assessment districts, matching fund programs, and any other means effective to expedite the construction of needed infrastructure.”

In addition to Measure U, the City is subject to the Measure J Growth Management Program (GMP) adopted by Contra Costa County voters in 2004. Measure J (2004) is a 25-year extension of the previous GMP (Measure C) approved by voters in 1988. The GMP requires local jurisdictions to meet the following six requirements:

- Adopt a development mitigation program
- Address housing options
- Participate in an ongoing cooperative, multi-jurisdictional planning process
- Adopt an Urban Limit Line
- Develop a five-year capital improvement program
- Adopt a transportation systems management ordinance or resolution

The City of Antioch General Plan’s Growth Management Element implements Measure U and Measure J. The Growth Management Element includes rate of growth policies that set residential development allocations. The policy limits the issuance of development allocations to a maximum annual average of 600 development allocations with the ability to carry over unused allocations provided that the annual average of 600 is not exceeded during any five-year period (i.e., no more than 3,000 development allocations may be issued for any given five-year period). To facilitate the development of special needs groups and ensure consistency with the Housing Element, the General Plan exempts income-restricted affordable housing and special needs housing – whether in single-family or multi-family buildings – from counting towards the maximum development allocation. It also provides exemptions for the following scenarios: dwelling units with vested rights, construction of a single dwelling by or for the owner of the lot of records, ADUs, projects with four or fewer dwelling units, projects in the Rivertown Planning Area (now superseded by the Downtown Specific Plan), and transit-oriented development.

On October 9, 2019, Governor Gavin Newsom signed Senate Bill (SB) 330, known as the “Housing Crisis Act of 2019. SB 330 prohibits cities and counties from implementing certain limits on the number of residential permits issued or enforcing population caps through January 1, 2025. SB 330, and SB 8, which extended the sunset date of SB 330 to January 1, 2030, precludes the City’s ability to implement Measure U and Measure J until 2030 (unless it is extended again). Consistent with State law, the City has suspended enforcement of the development allocations system. If State law is not extended again, local growth management measures could potentially be a constraint to housing production starting in 2030. Growth management ordinances are a unique constraint given local political realities. Measure U would require Antioch citizens to eliminate the measure by a vote. Electoral policies set limitations that can not only constrain housing production but can also create inconsistencies with local policies and State and regional housing goals. State legislation has addressed this constraint for the majority of the current housing element cycle and City staff report that the development allocation system did not previously put a constraint on housing production when it was enforced. However, growth management measures could be a potential housing constraint in the future. The City can continue to exempt affordable housing, ADUs, and other housing typologies that serve low-income households and populations with disproportionate housing needs from growth management allocations in order to facilitate housing production that is the most needed in Antioch and ensure consistency across the General Plan.

DEVELOPMENT FEES

Various development and permit fees are charged by the City and other agencies to cover administrative processing costs and increases in public facilities and services associated with development. These fees ensure quality development and the provision of adequate public services. Fees are calculated based on the type, size and potential impacts on various services and infrastructures. However, because these fees are often passed down to renters and homeowners in the rent/purchase price of the unit, they may affect the affordability of housing. One method of determining whether fees are excessive and represent barriers to affordable housing is by comparing fees to jurisdictions in the region.

Table 4-5 illustrates the total typical development fees for single-family and multi-family applications in Antioch. The County Costa County Planning Collaborative performed an analysis in April 2022 comparing entitlement fees, building fees, and impact fees across all Contra Costa County jurisdictions. Table 4-6 shows the total development fees (inclusive of planning permit/entitlement fees, building fees, and impact fees) for three development scenarios: a 3,100-square-foot single-family home, a 10-unit multi-family project, and a 100-unit multi-family project. The analysis found that Antioch’s development fees are the least in the county for single-family homes and the second least after San Pablo for both small (10-unit) and large (100-unit) multi-family projects. Antioch’s total development fees for a single-family home cost approximately \$22,150 per unit, compared to the countywide average of approximately \$58,330. Antioch’s total development fees for 10-unit and 100-unit multi-family projects of \$103,950 and \$813,910, respectively, are well under the countywide averages of \$290,880 for a 10-unit project and \$2.6 million for a 100-unit project. Finally, Antioch’s fees per unit are not substantially more burdensome for multi-family projects. The fees per unit for a single-family home in Antioch total approximately \$22,150, which is greater than the total fees of approximately \$10,395 per unit for a small multi-family project and \$8,140 per unit for a large multi-family project.

4. CONSTRAINTS

TABLE 4-5 TYPICAL DEVELOPMENT FEES – CITY OF ANTIOCH

Site Information	Single-Family ^a			Single-Family Subdivision ^b			Multi-Family – Large			Multi-Family – Small		
	Unit S.F.	3,100	Unit SF	3,100	Unit S.F.	800	Unit S.F.	800				
	# of Units	1	# of Units	220	# of Units	100	# of Units	10				
	Valuation	\$372,358	Valuation	\$66,119,460	Valuation	\$11,602,641.60	Valuation	\$5,801,320.80				
Fee Classification	Multiplier	Per	Cost	Multiplier	Per	Cost	Multiplier	Per	Cost	Multiplier	Per	Cost
Entitlement Fees^c												
Preliminary Development Plan	N/A	N/A	N/A	\$2,000	Dep	\$2,000	\$2,000	Dep	\$2,000	\$2,000	Dep	\$2,000
Use Permit / Design Review	N/A	N/A	N/A	\$11,570	Set	\$11,570	\$8,510	Set	\$8,510	\$7,659	Set	\$7,659
Plan Review	N/A	N/A	N/A	\$262	Set	\$262	\$262	Set	\$262	\$262	Set	\$262
Total Entitlement Fees			\$0			\$13,832			\$10,772			\$9,921
Building Fees												
Building Permit Fee	Based on Valuation		\$3,049.51	Based on Valuation		\$561,000	Based on Valuation		\$48,861.57	Based on Valuation		\$25,656.28
Building Plan Check Fee	65% of Permit Fee		\$1,982.18	65% of Permit Fee		\$364,650	65% of Permit Fee		\$31,760.02	65% of Permit Fee		\$16,676.58
Green Building Fee	18% of Permit Fee		\$548.91	18% of Permit Fee		\$100,980	18% of Permit Fee		\$8,795.08	18% of Permit Fee		\$4,618.13
Technology Fee	6% of Permit Fee		\$182.97	6% of Permit Fee		\$33,660	6% of Permit Fee		\$2,931.69	6% of Permit Fee		\$1,539.38
Energy Inspection Fee	2% of Permit Fee		\$60.99	2% of Permit Fee		\$11,220	2% of Permit Fee		\$977.23	2% of Permit Fee		\$513.13
Fire Protection Fee	\$951	Unit	\$951	\$951	Unit	\$209,220	\$451	Unit	\$45,100	\$451	Unit	\$4,510
General Plan Maintenance Fee	N/A		N/A	Based on Permit Fee		\$28,050	Based on Permit Fee		\$12,443.08	Based on Permit Fee		\$11,282.81
Total Building Fees			\$6,775.56			\$1,309,780			\$150,868.67			\$64,796.31
Impact Fees												
School District Fee	\$3.79	SF	\$9,854	\$3.79	SF	\$2,584,780	\$3.79	SF	\$303,200	\$3.79	SF	\$303,200
General Admin	\$460	Unit	\$460	\$460.0	Unit	\$101,200	\$292	Unit	\$29,200	\$292	Unit	\$2,920
Public Works	\$445	Unit	\$445	\$445	Unit	\$97,900	\$282	Unit	\$28,200	\$282	Unit	\$2,820
Police	\$1,190	Unit	\$1,190	\$1,190	Unit	\$261,800	\$755	Unit	\$75,500	\$755	Unit	\$7,550
Parks and Recreation	\$3,261	Unit	\$3,261	\$3,261	Unit	\$717,420	\$2,065	Unit	\$206,500	\$2,065	Unit	\$20,650
Administrative Fee	3% of City Impact Fees		\$160.68	3% of City Impact Fees		\$112,893	3% of City Impact Fees		\$10,182	3% of City Impact Fees		\$1,018.20
Total Impact Fees			\$15,370.68			\$3,875,993			\$652,782			\$338,158.20

^a Individual single-family residential developments do not require entitlement applications.

^b Entitlement and Building Permit fee data is calculated using the city of Antioch's 2021 Master Fee Schedule as well as fee data from recent residential development projects of similar type and size.

^c City of Antioch entitlement applications include an initial deposit, dictated as "dep" in the above table, which is supplemented by the actual total cost of staff hours billed to review the application "set." The staff time and therefore the fees vary depending on the complexity and completeness of each application.

Source: MIG, 2022; Urban Planning Partners, 2022 and City of Antioch, 2022.

TABLE 4-6 CONTRA COSTA COUNTY FEE COMPARISON

Jurisdiction	Total Development Fees		
	Single-Family Home	Multi-Family – Small	Multi-Family – Large
Antioch	\$22,146.24	\$103,950.44	\$813,910.78
Danville	\$62,489.24	\$347,075.68	\$3,336,919.50
Lafayette	\$68,946.25	\$370,969.49	\$3,132,049.61
Hercules	\$64,064.99	\$316,813.89	\$2,967,385.44
Clayton	\$39,160.00	\$249,136.00	\$1,669,246.00
Pinole	\$56,665.77	\$216,977.21	\$2,277,370.79
Brentwood	\$113,158.84	\$494,143.76	\$4,766,295.73
Concord	\$47,248.07	\$237,264.81	\$1,765,845.76
El Cerrito	\$57,356.24	\$440,729.35	\$2,927,768.15
Moraga	\$85,109.56	\$434,941.60	\$4,101,720.20
Martinez	\$58,701.86	\$271,214.92	\$2,468,768.76
Oakley	\$70,088.22	\$328,874.26	\$3,572,169.38
Orinda	\$64,627.76	\$376,137.59	\$3,347,953.50
Pittsburg	\$60,830.46	\$331,402.52	\$3,198,202.86
Pleasant Hill	\$30,927.67	\$177,477.61	\$1,670,408.38
Richmond	\$45,694.42	\$238,344.58	\$2,301,117.22
San Pablo	\$29,498.69	\$82,452.38	\$674,051.76
San Ramon	\$100,495.59	\$340,120.27	\$3,318,772.28
Walnut Creek	\$31,004.88	\$168,649.32	\$1,507,627.70
Countywide Average	\$58,327.09	\$290,877.67	\$2,621,978.09

Note: Analysis assumed construction of a 3,100-square foot single-family home, a 10-unit multi-family building with 800 square feet per unit, and a 100-unit multi-family home with 800 square feet per unit.

Source: MIG, 2022.

LOCAL PROCESSING AND PERMIT PROCEDURES

Applications for entitlement review are filed with the Community Development Department. Depending on the type of entitlement required, a development application may be subject to various levels of review, such as public hearings and environmental review. Actual processing time varies according to the size and scope of the project, as well as the time taken by the developer to prepare plans and other project related documents. All residential projects are subject to review by City staff, the Planning Commission, and/or City Council. Single-family residential units, residential additions, and manufactured/modular housing are reviewed by staff and then proceed to plan check for building permit issuance. ADU ordinances have been modified to be in accordance with State law, which has led to an increase in ADU permits. ADUs are now reviewed ministerially without discretionary review or a hearing and are allowed in all single-family or multi-family districts. Other projects requiring a use permit, parcel map, tract map, and/or tentative map are subject to review by the Planning Commission and/or City Council.

4. CONSTRAINTS

Like many California jurisdictions, the City is subject to SB 35 and eligible projects that dedicate at least 50 percent of their units to be affordable to lower-income households are subject to a streamlined, ministerial review process. There have not been any SB 35 project proposed in Antioch. Program 5.1.7 of the Housing Element is included to maintain the City’s commitment to streamlined approvals for SB 35 projects.

The purpose of design review is to promote orderly and harmonious development in the city. Design review plans are required for all new development and additions to existing structures, unless the Zoning Administrator finds that the addition is non-controversial, minor, and does not involve a substantial alteration to the existing structure. Design review is not required for the construction or alteration of a single-family residence unless within a planned development regulating the architectural style of the dwelling.

Developers have suggested that the City could improve the permitting experience through the use of online applicant platforms. This could allow applicants to have a clear understanding of where they’re at within the permit process. Additionally, the permitting process could be improved by assigning a case manager for each project. This manager would be the primary point of contact for the applicant regarding questions about their project. This manager would also be responsible for pulling together information across departments to ensure the timely completion of the project. The City is developing an online permitting software and will launch online permitting in 2023. This is included in Program 4.1.1.

Table 4-7 outlines the estimated time for development review.

TABLE 4-7 PROCESSING TIME FOR RESIDENTIAL PROJECT APPROVAL

Process	Permit Required	Approving Body	Time Frame
Design Review	Design Approval	Planning Commission	8-12 weeks
Single-family Residential	Building Permit	Staff	8-12 weeks
Single-family Addition	Building Permit	Staff	8-12 weeks
Second Dwelling Unit	Administrative Use Permit, Building Permit	Staff	8-12 weeks
Minor Subdivision	Use Permit, Parcel Map	Planning Commission	8-12 weeks
Major Subdivision	Use Permit, Tract Map	City Council	6-12 months
Multi-family Apartments	Use Permit, Building Permit	Planning Commission	6-10 months
Multi-family Condominiums	Use Permit, Tentative Map, Building Permit	Planning Commission	6-10 months
Manufactured/ Modular Housing	Building Permit	Staff	8-12 weeks
Mobile Home Park	Use Permit, Building Permit	Planning Commission	6-10 months
Residential Congregate Care Facility	Use Permit, Building Permit	Planning Commission	6-10 months
Care Facilities	Use Permit, Building Permit	Planning Commission	6-10 months
Family Care Home	Use Permit, Building Permit	Planning Commission	6-10 months
Senior Group Home	Use Permit, Building Permit	Planning Commission	6-10 months

Source: City of Antioch, Community Development Department.

Length of Time Between Application Approval and Building Permit Application

Housing elements are now required to provide an evaluation of the length of time between receiving approval from the city and applying for a building permit. Once a project is approved by the city, such as the Planning Commission or City Council, it is the applicant's responsibility to submit an application for a building permit. The time it takes can vary and is largely determined by the applicant. Factors include the time it takes to prepare the construction drawings and any necessary technical studies, quality and thoroughness of the plans, preparation and recording of subdivision maps (if necessary), retaining contractors, and securing financing. Table 4-8 provides some examples of recent projects and the time it took between application approval and building permits or master home models. The time varies from 42 days to just over 4 years.

TABLE 4-8 LENGTH OF TIME BETWEEN APPLICATION APPROVAL AND BUILDING PERMIT APPLICATION, EXAMPLES

Project	Length of Time
AMCAL Multi-Family	42 Days: 5-14-2019 to 6-25-2019
Almond Knolls Multi-Family	150 Days: 7-25-2017 to 12-22-2017
Oakley Knolls Single-Family	4 Years (1,491 Days): 4-10-2017 to 10-5-2021 *Submitted for site grading 4-13-2021, 1464 days after entitlement.
Quail Cove Single-Family	400 Days: 10-09-2018 to 11-13-2019 *Submitted for site grading 2-27-2019, days after entitlement.
Heidorn Village Single-Family	2 Years (734 Days): 1-26-2016 to 1-29-2018 *Submitted for site grading 5-03-2017, 463 days after entitlement. *The developer who entitled this project was not the developer who built it.

Source: City of Antioch, Community Development Department.

3. OTHER LOCAL CONSTRAINTS

The Residential Development Allocation Ordinance (Article 40 of the Antioch Zoning Ordinance) was adopted by the City Council in May 2002. The ordinance required that allocations for residential units be obtained prior to receiving residential development entitlements and building permits. This growth limitation measure was in place for a decade before the City allowed it to sunset in May 2012; it was not reenacted. The Residential Development Allocation Ordinance was replaced in March of 2014 with a new Ordinance to meter residential growth. The Ordinance that was developed has a trigger put in place at the 500th building permit at which point the City is to develop guidelines for a metering process to be put in place by the issuance of the 600th building permit.

FUNDING

Contra Costa County and the cities of Antioch, Concord, Pittsburg, and Walnut Creek joined together to form the CDBG and HOME Consortium for purposes of developing consistent training, application, and monitoring processes and for participation in the CDBG and HOME programs. In general, lack of funding for affordable housing is a constraint.

Specifically, there is a constraint in the form of funding for affordable housing because Contra Costa County does not have an adequate vehicle for a local match, such as an affordable housing bond or other local resources that can provide a local match for each dollar of HOME funds spent on affordable housing.

4. CONSTRAINTS

Additional constraints include Antioch's grant and loan program requires that a lien be placed on a home for two years for grants over \$15,000. Antioch is the only city in the surrounding area that requires filing a lien in order to issue a grant for homeowner repairs. The lien requirement, and the time it takes to issue the grant, may discourage homeowners from participating.

INFRASTRUCTURE CONSTRAINTS

In order to support growth, it is critical that public infrastructure is able to accommodate new development. The City of Antioch does not anticipate that the provision of public services, such as water, sewer, and storm drains, will be a constraint on the production of new housing. Generally new development is required to pay for its own infrastructure improvements and the City utilizes assessment districts as a means of financing public infrastructure. A 2006 study on the Rivertown Waterfront Development prepared by Arcadis indicated that while most of the current infrastructure network would be able to accommodate the proposed redevelopment for the area, some improvements such as additional booster pumps for taller buildings and an expansion of the water treatment plant might be necessary.

Water

The City of Antioch operates a water treatment, storage and distribution system serving the entire City, as well as unincorporated areas within the city's sphere of influence. Water, diverted from the San Joaquin River and purchased from the Contra Costa Water District, is stored in a municipal reservoir and treated at the Antioch Water Treatment Plant. After treatment, water is then distributed throughout the city. The City also owns and operates 12 storage reservoirs with a combined storage capacity of 22 million gallons, six treated water booster stations, and three raw water pump stations. Additionally, the City has five intertie connections with neighboring water agencies (one with Contra Costa Water District, three with Diablo Water, and one with Pittsburg).

Sewer

The City maintains the sewer lines within Antioch. The City has approximately 300 miles of sanitary sewer system and 28,252 residential and commercial sewer lateral connections. The Delta Diablo Sanitation District (DDSD) provides sewer treatment service to the city, as well as to Pittsburg and Bay Point. The DDSD is responsible for conveyance of wastewater from city pipelines to the Bridgehead and Antioch Pump Stations. The wastewater is then treated at the DDSD Wastewater Treatment Plant, located near the border of Antioch and Pittsburg.

Storm Drains

Stormwater collection and flood control within the city are predominantly operated by the Contra Costa County Flood Control and Water Conservation District (CCCFCWCD). The city has over 110 miles of trunk lines to collect stormwater, independent from the area's wastewater collection system. The stormwater trunk lines discharge to channels owned and maintained by both the City of Antioch and the CCCFCWCD. The City typically works with the CCCFCWCD to ensure that runoff from new development is adequately handled. In addition, the City requires that new development implement best management practices and provide erosion and sedimentation control measures.

B. NON-GOVERNMENTAL CONSTRAINTS

A number of market and non-governmental factors contribute to the feasibility and cost of housing, such as environmental constraints and the costs of land and construction.

1. LAND PRICES

The cost of land directly influences the cost of housing. Land prices are determined by a number of factors, most important of which are land availability and permitted development density. As land becomes scarcer, the price of land increases. In terms of development, land prices have a positive correlation with the number of units permitted on each lot.

Land costs in the San Francisco Bay Area are relatively high as compared with the rest of the nation. The cost of land in Antioch is less than most areas in the San Francisco Bay Area, though higher than property in the Central Valley. Current residential land listings in Antioch and the immediate vicinity range from around \$275,000 to \$400,00 per acre.

2. CONSTRUCTION COSTS

Construction costs can be strongly influenced by a variety of factors and have a direct correlation with the cost of housing. Construction costs are primarily determined by the cost of materials and labor. The cost of construction depends on the type of unit being built. Additionally, some sites have added costs, such as former industrial sites that must deal with remediation, and sites in close proximity to freeways that need to mitigate air quality impacts.

Table 4-9 provides a summary of estimated construction costs in Antioch.

TABLE 4-9 CONSTRUCTION COST ESTIMATES

Development Type	Cost per Square Foot
Single-Family Residential	\$125-150
Townhomes/Condominiums	\$175-190
Multi-Family	\$180-235

Source: BAE Economics, 2022; PlaceWorks, 2022; MIG, 2022; Urban Planning Partners, 2022 and City of Antioch, 2022.

3. FINANCING

Mortgage interest rates have a large influence over the affordability of housing. Higher interest rates increase a homebuyer's monthly payment and decrease the range of housing that a household can afford. Lower interest rates result in a lower cost and lower payments for the homebuyer. Typically, when interest rates rise, the market compensates by decreasing housing prices. Similarly, when interest rates decrease, housing prices begin to rise. Oftentimes there is a lag in the market, so when interest rates rise housing prices continue to stay high until the market can catch up. It is this period when it is the most difficult for lower-income households to purchase a home. As shown in Table 4-10, the percentage of persons denied a home loan increased as the income decreased. Approximately 27.4 percent of very low-income households were denied a loan, which only 7.9 percent of above moderate-income households were denied.

4. CONSTRAINTS

TABLE 4-10 DISPOSITION OF APPLICATIONS BY INCOME, RACE, AND ETHNICITY OF APPLICANT, 2020

Income Group	Total Applications	Loans Originated	Applications Denied	Percentage Denied
<50% MFI	17,024	7,546	4,665	27.4%
50-79% MFI	36,964	23,153	5,117	13.8%
80-99% MFI	14,805	9,834	1,576	10.6%
100-119% MFI	45,461	31,503	4,087	9.0%
>120% MFI	144,802	99,527	11,384	7.9%
Total	259,056	171,563	26,829	10.4%

Note: MSA/MD: 36084 – San Jose-San Francisco-Oakland, CA.
Source: Federal Financial Institutions Examination Council, HMDA Data, 2020.

Figure 4-1 shows the average interest rates between January 2019 and January 2022. During this time, interest rates have been at historic lows and are not likely a significant constraint on constructing or purchasing housing. However, even with the lower interest rates, lower-income households still face significant obstacles to purchasing a home due to the high home prices in the bay area and difficulty meeting down payment requirements.

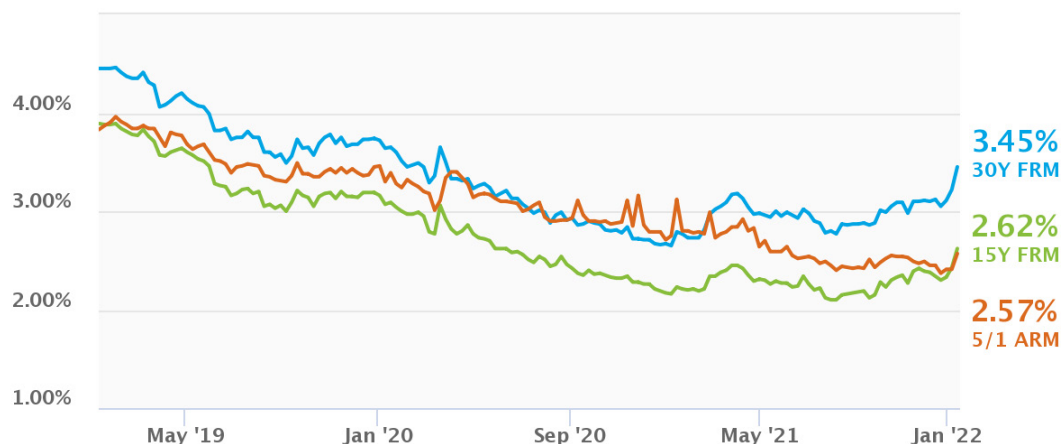


Figure 4-1 U.S. Average Interest Rates: January 2019 – January 2022

Source: Freddie Mac Primary Mortgage Market Survey, January 2022.

4. ENVIRONMENTAL CONSTRAINTS

The City of Antioch has identified areas where land development should be carefully controlled to ensure public health and safety. The following hazards may impact future development of residential units in Antioch.

SEISMIC HAZARDS

Antioch, like other cities in the San Francisco Bay Area, is located in a region of frequent seismic activity. Although the City is located in the vicinity of active faults, no active faults or Alquist-Priolo Special Study

Zones are located within its General Plan planning area. Major active fault zones located in the vicinity of the city include the Hayward, Calaveras, Concord-Green Valley, and Marsh Creek-Greenville faults. The largest regional fault is the San Andreas fault, which is located 45 miles west of Antioch.

The City of Antioch may be subject to ground shaking in the event of a nearby earthquake. The amount of ground shaking would depend on the proximity of the area to the fault, the depth, the location of the epicenter, the magnitude of the earthquake and soil type in the area.

Liquefaction is caused by a shock or strain from an earthquake and involves the sudden loss of soil strength and cohesion and the temporary transformation of soil into a fluid mass. The areas directly adjacent to the San Joaquin River have a high to very high potential for liquefaction. Upland areas away from the river have a very low to moderate potential for liquefaction.

FLOODING

Portions of the city are located within the 100-year and 500-year flood hazard zones as mapped by the Federal Emergency Management Agency (FEMA) and are defined as “flood prone.” Areas subject to flooding are found mainly along the San Joaquin River and tributary creeks. According to USGS data presented by the San Francisco Bay Conservation and Development Commission, it is these same areas that are most vulnerable to potential sea level rise. FEMA defines the majority of Antioch as being subject to minimal or no flooding.

To protect the residents and property in Antioch, the City has adopted six Flood Protection Policies. These policies, found in Chapter 11.0 (Environmental Hazards) of the General Plan, attempt to minimize the potential loss of life, physical injury, property damage, and social disruption resulting from flooding.

FIRE HAZARDS

The risk of both urban and wildland fire exists within Antioch. Fire hazards within the city may be a result of many factors, including type and amount of vegetation and groundcover, combustibility of building materials, adequacy of access for firefighting equipment and personnel, water supply and pressure, and weather conditions. The most common source of urban fires is from home heating systems and electrical appliances. Fire service in Antioch is provided by the Contra Costa County Fire Protection District.

NOISE

Residential areas are the most sensitive to noise in Antioch. Principal noise sources in the city are transportation noise sources including SR 4 and SR 160 freeways, rail lines and major arterial roadways. Given that the General Plan proposes additional housing Downtown, in close proximity to the rail lines, and along SR 4 and SR 160, noise could be an issue for future developments in these areas. Other potential noise sources include industrial development in the northern portion of the city, commercial development and construction activities.

AIR QUALITY

Exposure to emissions from freeways is becoming of increasing concern and will pose a constraint to the development of housing in some areas unless the City requires incorporation of measures to mitigate. One such measure that has been proposed in other cities is requiring air filtration systems for residential developments within 500 feet of a freeway.

4. CONSTRAINTS
