NEWARK CALIFORNIA GENERAL PLAN

ADOPTED December 12, 2013

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INTRODUCTION

OVERVIEW

The Newark General Plan is a comprehensive statement of the goals, policies, and actions that will guide future growth and conservation in the city. It provides a vision for Newark's future and a strategy for achieving that vision. The Plan is intended to help Newark respond to changes in technology, transportation, demographics, the environment, and the economy during the coming decades. It strives to preserve the things that matter the most to Newark residents while proactively shaping the city's future.

The General Plan is long-range, looking 20 to 25 years forward. However, it also includes the provisions necessary to guide short- and mid-term decisions. It is a legally binding document that provides the foundation for zoning, development review, the capital improvements program, housing programs, and other City activities. The Plan is flexible enough to respond to new trends and unexpected changes, but specific enough to provide residents, businesses, and civic leaders with guidance for how individual properties should be used and managed in the future.

The Plan contains Newark's official policies on land use, transportation, housing, natural resources, parks, environmental hazards, economic development, public health, and community services. It also addresses Newark's relationship to the rest of the Bay Area. While the Plan's focus is local, it addresses an array of issues that extend beyond City boundaries.

The General Plan derives its authority from Section 65302 of the California Government Code. The Government Code identifies the mandatory elements of the Plan and indicates how these elements are to be prepared in a way that meets the specific needs of each city and county in the state. The Plan's content is further directed by guidelines prepared by the California Office of Planning and Research. Once adopted, the General Plan will be used by the Planning Commission and City Council to evaluate proposed land use changes and local budget decisions. It will be





used by City staff to evaluate development proposals and structure the delivery of local services. It can be used by private citizens to make investment decisions and to understand the City's plans for different areas.

FORMAT OF THE GENERAL PLAN

The General Plan consists of officially adopted maps and accompanying text. The text is organized to satisfy the requirements of state planning law, but has been tailored to address issues and opportunities unique to Newark. Chapters 1 and 2 of the Plan provide an introduction and set the context for the chapters that follow. Chapters 3 through 10 correspond to the state-mandated General Plan Elements and a number of optional elements as follows:

Newark General Plan	State-Mandated Element
Chapter 3: Land Use	Land Use
Chapter 4: Transportation	Circulation
Chapter 5: Housing	Housing
Chapter 6: Economic Development	
Chapter 7: Conservation & Sustainability	Conservation
Chapter 8: Parks, Recreation, & Open Space	Open Space
Chapter 9: Environmental Hazards	Safety, Noise
Chapter 10: Health & Wellness	
Chapter 11: Community Services & Facilities	

Chapter 5 is included only to provide a bridge to a separate document known as the Newark Housing Element. The Housing Element is part of the General Plan but stands on its own since it is subject to statutory requirements beyond those applying to the other elements. These requirements include review and certification by the State of California, and updates on a fixed schedule set by the state legislature. At the time the General Plan was adopted in 2013, the City's Housing Element covered the period 2007-2014. In late 2014, it is expected that the City will adopt an updated Housing Element covering the period 2015-2022. The Housing Element will continue to be a separately bound document, structured to meet state requirements while ensuring consistency with the other Plan Elements

Chapters 3, 4, 5, 7, 8, and 9 of the General Plan correspond to mandatory elements. The scope of two of these elements has been expanded to address issues of local concern. First, the state-mandated Open Space Element also addresses Parks and Recreation. Second, the state-mandated Conservation Element also addresses Sustainability. Additionally, the state-mandated Safety Element and Noise Element have been combined into a single chapter titled "Environmental Hazards."

Chapters 6, 10, and 11 of the General Plan are considered optional elements, since they are not explicitly required by state law. These elements address economic development, public health, and community services and facilities. They have been included because of the importance of these issues to the future of Newark, and their integral relationship to the topics addressed elsewhere in the Plan. Once adopted, the optional elements carry the same legal weight as the mandated elements.



The General Plan is supplemented by other City plans, including Specific Plans for subareas of the city and systems plans addressing particular topics such as bicycle and pedestrian circulation and climate change. The Specific Plans include the Dumbarton Transit-Oriented Development (TOD) Specific Plan and the Area 3 and 4 Specific Plan.¹ These documents have been formally adopted by the City of Newark, but they are not part of the General Plan per se. Each Specific Plan is internally consistent with the General Plan, and is cross-referenced as appropriate in this document.

Previous iterations of the Newark General Plan included area plans for Old Town Newark and the Four Corners area; these plans are now more than 20 years old and are referenced here for historic purposes only. They are no longer considered part of the adopted General Plan. As appropriate, policy and program recommendations from these two area plans have been integrated into this General Plan.

Starting with the Land Use Element, each chapter of the General Plan has a similar structure. Each chapter begins with an introduction and purpose statement. Background data on existing conditions, projected future conditions, and related issues is provided. Maps and tables are used to supplement the narrative text. The goals, policies, and actions are then presented. These statements are intended to guide the City's actions during the life of the Plan. In cases where additional details are needed to clarify the intent of policies or actions, descriptions are provided beneath the statement.

The goals, policies, and actions are the fundamental basis of the Plan and are further defined below:

- A *goal* is a general, overall and ultimate purpose, aim or end toward which the City will direct its efforts.
- A *policy* expresses the City's commitment and intent on a topic area related to the goal. It is worded to guide day-to-day decisions and provide general direction to City staff and officials.

¹ The "Area 3 and 4 Specific Plan" reflects a naming convention established by prior General Plans in which major development opportunity sites were assigned numbers. The City is moving away from that convention in this General Plan in favor of place-based names. Area 3 and 4 is referred to as the Southwest Newark Residential and Recreational Project throughout this document; this name may be replaced as plans for the area are refined. Most of what was formerly called "Area 2" is located within the Dumbarton TOD Specific Plan Area.

An *action* is a specific program to be carried out in response to an adopted policy. It can be assigned to a specific City department or agency and usually has an associated timeline and cost. Actions include standard operating procedures which are implemented on an ongoing basis.

In addition, the following words are used throughout the General Plan to indicate whether a particular provision is mandatory, advisory, or permitted:

- "Must", "shall," or "will" identify provisions which are mandatory. Verbs such as "require" reflect similar obligatory directives.
- "Should" identifies a provision that is advisory. Verbs such as "encourage" and "support" are also advisory. Stated directives using these words should be followed unless there are compelling, countervailing considerations. More flexibility is intended in the application of such policies than those which are mandatory.
- "May" indicates a permissive provision. This indicates a course of action is permitted, but not required. Considerable discretion can be used when applying such policies to specific issues.

By and large, policies and actions are not repeated in multiple elements. Thus, to find all the policies relevant to a particular subject, the user may need to refer to several parts of the Plan. Cross-references are included in italicized font below some policies and actions to assist in this process. While all General Plan policies are internally consistent, there may be instances where policies appear to provide competing direction; in such instances, detailed policies which reference a particular place, topic or feature take precedence over more general policies.

The General Plan includes numerous references to the "city" and the "City." When lower case is used, the reference is to the geographic area within Newark, or various characteristics of the community. When upper case is used, the reference is to the government of the City of Newark, including actions to be taken by City departments or officials.

GENERAL PLAN PROCESS

The Newark General Plan was initially drafted in the early 1960s, during the first decade after incorporation. A major update occurred in 1968, establishing a land use





plan for the year 1985. New elements, including Open Space, Conservation, Safety, and Noise, were adopted during the early 1970s.

Almost a quarter century after the 1968 Plan, Newark adopted a new General Plan in 1992. That Plan guided the city's development through the 1990s and 2000s, and laid the groundwork for the most recent General Plan effort. The 1992 Plan included 10 chapters and a series of technical appendices. It included a Land Use Map and other maps and policies that complied with California planning law at the time of adoption.

The basic vision established by the 1992 Plan continues to guide this General Plan. This vision seeks to sustain Newark as a high quality community with attractive neighborhoods, great shopping, diverse workplaces, excellent public services and parks, and a healthy natural environment. Many of the areas identified for development by the 1992 Plan continue to be identified for development today—this General Plan provides greater detail on the types of uses and the issues to be addressed as such development takes place.

The effort leading to the adoption of a new General Plan in 2013 was referred to as a General Plan "Tune Up" rather than a major revision. This is because the values represented by the 1992 Plan remained valid and appropriate at the time of Plan adoption. By 2011, however, the 1992 Plan's data and maps were becoming dated and the absence of a discussion of recent planning efforts was becoming more apparent. The 1992 Plan did not reference regional planning initiatives and legislative changes, nor did it address emerging issues such as climate change and sustainability. The intent of the "Tune-Up" was to update baseline data and projections, refresh the narrative text which describes planning issues, and move the planning horizon forward by 20 to 25 years.

An innovative partnership between the City of Newark and California Polytechnic (Cal Poly) State University of San Luis Obispo, California was established in 2011 to undertake the first phase of the project. Under the direction of senior faculty, a team of second-year graduate students in the City and Regional Planning Department prepared a complete inventory of baseline conditions and planning issues in the city. Original data was collected through field work, literature searches, and internet research, and a complete set of digital maps was prepared. Briefing papers were prepared by the Cal Poly students for 12 topic areas.

The Cal Poly students also organized and facilitated community outreach events, including three public workshops in late 2011 and early 2012. Participants in the workshops discussed Newark's strengths, weaknesses, and opportunities, and also identified desired improvements. Participants also considered alternative scenarios for Newark's future and provided feedback that was instrumental in developing General Plan policies.

In September 2012, the City retained the consulting team of The Planning Center | DC&E, Barry Miller Consulting, and Hexagon Transportation Consultants, Inc. to complete the General Plan "Tune-Up," including an Environmental Impact Report. Supplemental data was collected and analyzed, and modeling was conducted to evaluate future traffic, noise, and air quality conditions. A complete audit of all city planning policies was conducted, including those in the existing General Plan and those in more recently adopted and pending plans. This was used to develop an updated set of draft goals, policies, and actions. A revised Land Use Map also was developed, along with revised land use categories.

Three joint study sessions with the Newark City Council and Planning Commission were held between March and May 2013. Additional public input was solicited at these sessions, and feedback from the Council members and Commissioners was used to revise the policy and action language. The revised Plan was also vetted with City staff in various departments during this time.

The Plan was drafted between April and July 2013 and was released for public review in August 2013. Additional public hearings were held before the Planning Commission and City Council in the Fall of 2013, and the document was adopted at the conclusion of that process on December 12, 2013.

ENVIRONMENTAL REVIEW

Adoption of a general plan constitutes a "project" under the California Environmental Quality Act (CEQA). If any aspect of the general plan, either individually or cumulatively, leads to a significant effect on the environment, the community must prepare an Environmental Impact Report (EIR) (Title 14, California Administrative Code, Section 15080). As with all EIRs, the public has the opportunity to review and comment on the environmental document.





In accordance with these requirements, an environmental impact report (EIR) was prepared for the Newark General Plan "Tune Up" in 2013. The EIR explored the impacts of changes to Land Use Map as well as the impacts of new and edited Plan policies. Potential impacts were assessed not only in the context of the City of Newark, but also in a regional context which considered the cumulative impacts of development in the Bay Area over the next 20 years. Specific mitigation measures were identified through the environmental evaluation. As appropriate, these measures have been incorporated into this Plan as policies and actions, enabling the Plan to be largely "self-mitigating."

More detailed environmental review will be required as individual projects are proposed, even if these projects are consistent with the General Plan. However, the required extent and level of detail of environmental review may be lessened as a result of the General Plan EIR. Future projects that are consistent with the Land Use Map and other aspects of the Plan can "tier off" the Plan's EIR—their environmental review can focus on specific project-level impacts such as traffic and noise.

The General Plan EIR includes descriptions of the environmental setting, potential impacts, and mitigation measures for each topic area. Pursuant to state law, the Draft EIR was circulated to various state, regional, and local agencies, as well as the community at large. Following public review, responses were prepared for comments received and the EIR was edited accordingly. The environmental document was considered and approved prior to adoption of the General Plan.

ADMINISTRATION OF THE GENERAL PLAN

The Newark General Plan is a dynamic document and is not intended to remain unchanged through its horizon. State law provides for up to four general plan amendments each year. Such amendments can be made at any time and may include more than one change at a time.

State law further provides that many public actions may only be taken after a finding that the action is consistent with an adopted general plan. This includes a requirement for consistency between the local capital improvement program and the general plan, and a requirement that property acquisition and disposal actions are consistent with the general plan. Decisions about future development also must be consistent with the general plan. The general plan also provides the framework for the local zoning ordinance, subdivision regulations, and site development standards.

A number of actions in the Newark General Plan provide specific direction for how these implementing ordinances should be revised to better achieve the Plan's goals.

Although this plan looks more than 20 years into the future, the City should not necessarily wait until the end of the planning period before updating the Plan. Most communities update their general plans about once every 10 years and conduct other amendments as needed. Keeping the Plan updated makes it more relevant and effective, and more useful as a decision-making tool.

NEWARK GENERAL PLAN INTRODUCTION

PLANNING FRAMEWORK

INTRODUCTION

This chapter provides the context for the Newark General Plan. It includes an overview of Newark's location and history, and a profile of the city's demographics, physical characteristics, and economy. It also includes population, housing, and employment forecasts. The Framework chapter establishes the major objectives of the General Plan and defines the vision for the city's future.

NEWARK AND THE REGION

Newark is located in the San Francisco Bay Area, the fourth largest metropolitan area in the United States and home to over 7.1 million residents in 2010. The city is located at the junction of two Bay Area sub-regions. It is part of the East Bay, which includes Alameda and Contra Costa Counties. It is also part of the South Bay and Silicon Valley, which extends south to San Jose along both sides of San Francisco Bay.

Newark's location at the confluence of these two areas has influenced its growth and development and will continue to shape its future. Like other cities on the East Bay Plain, the city evolved from an agricultural community to a suburban community with a substantial manufacturing base during the mid-1900s. Like other cities in the Silicon Valley, Newark's economy has diversified during the last three decades, with a shift from traditional industry to technology, communications, logistics, and other emerging sectors of the national and global economies.

Figure PF-1 shows Newark's location. Along with Fremont and Union City, Newark is considered to be part of the "Tri-Cities" area. The city is located 35 miles southeast of San Francisco, 25 miles south of Oakland, and 20 miles north of San Jose. It is surrounded by the city of Fremont on all sides. Interstate 880 (I-880) forms the city's northeastern boundary while State Route 84 (SR 84) forms its northwestern boundary. On the southwest, the City abuts the Don Edwards San Francisco Bay National Wildlife Refuge.

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Source Data: City of Newark, 2013; The Planning Center | DC&E, 2013; ESRI, 2010;



Since its incorporation in 1955, Newark has developed a reputation as an ideal place to work, play, and live a quality lifestyle. The city offers the amenities of a smaller community within the context of a large and cosmopolitan region. It is a short commute to Northern Santa Clara County job centers and across the Dumbarton Bridge to Palo Alto, Menlo Park, and Stanford University, but also stands on its own as a major employment center with several million square feet of office and industrial space. Newark is home to one of the largest regional shopping malls in the Bay Area, and has numerous smaller shopping centers and restaurants. It provides diverse housing choices, with median prices well below the communities on the west side of the Dumbarton Bridge. The city has an excellent park system and is close to numerous outdoor recreational areas. Its climate is moderated by its proximity to the Bay, with a 65 to 70 degree mean temperature.



HISTORY

Newark was initially settled by Native Americans, including the Ohlone Indians. Ancient shell mounds in the area suggest a Native American presence as far back as 4,000 BC. The Ohlone people lived by hunting, fishing, and gathering in an area extending from the coastal Bay Area to the lower Salinas Valley. The Ohlone population declined significantly following the arrival of European missionaries and settlers in the late 1700s. Mission San Jose was established in 1796, 6 miles to the east.

In 1821, Mexico gained its independence from Spain. Alta California became a province of Mexico, with Monterey (California) as the capital. The missions were abolished between 1834 and 1836, and the indigenous population continued to decline. Lands around Mission San Jose were gradually parceled out as ranchos to private landowners, and the mission itself was sold to private interests. The Mexican period came to an end in 1846, as American efforts to acquire California accelerated and ultimately led to war. Gold was discovered in California soon after, leading to the first great increase in the Bay Area's population.

By the time California became a state in 1850, landings had already been established on the shore of San Francisco Bay in the Newark vicinity. In 1853, Mayhews Landing included warehouses for wheat, hay, and coal. By 1856, the nearby Mayhew Ranch included 1,500 acres of farmland. The ranch was eventually acquired by the Perrin brothers, who drew up plans for a town site near what is now the intersection of Thornton and Jarvis Avenues. Following several sales of the property to different owners and an unsuccessful land reclamation effort, the town site was moved to coincide with a bend on the newly constructed South Pacific Coast Railroad. Its









owner named the city 'Newark' after the castle "Newark" in Port Glasgow, Scotland. In 1876, the railroad and dairy were purchased by a San Francisco capitalist, Alfred Davis, and a Comstock millionaire, Jim Fair. A railroad station, roundhouse, and railroad shop were erected in the area near Thornton Avenue and Sycamore Street. The railroad was extended south to Santa Cruz and north to Alameda, where it connected to the San Francisco ferry. Service began in March 1878. Completion of the railroad sparked additional development, including a railroad car-building firm, a foundry that manufactured Wedgewood stoves, and salt production facilities. By 1880, Newark had a population of 200 people.

Newark remained a small agricultural and manufacturing center through the late 1800s and early 1900s. The settlement was part of Washington Township, an unincorporated area covering most of southwest Alameda County. In 1953, a group representing the chambers of commerce of Centerville, Irvington, Mission San Jose, Niles, Warm Springs, and Newark commissioned a study to incorporate all six communities into one city. However, participants from other communities asserted that Newark would be the industrial center of the newly formed city, and that its vacant land would receive industrial zoning. The Newark Chamber rejected this push and initiated its own incorporation drive, resulting in the creation of the City of Newark in 1955. The remaining five cities incorporated as Fremont in 1956.

The city grew rapidly in the years following incorporation. The population was 6,033 in 1955. It grew to 9,911 in 1960 and to 27,157 by 1970. The Nimitz Freeway was opened to traffic in 1958, placing Newark within commute distance of the Bay Area's major job centers. New housing tracts such as Lido Faire, Mowry West, Blossom Park, Newark Manor, Parkwood, Los Ranchitos, and the Lake were developed during this time period, and new schools and parks were built to keep pace with growth. Larger industries also began to move in, including Peterbilt truck manufacturing, which became the largest employer in the city by the late 1960s. The Civic Center complex was opened in 1966.

Growth continued at a slower pace through the 1970s and 1980s. NewPark Mall opened in 1980, and much of the remaining vacant land in the city was developed during these two decades. A proposal to build a freeway on the west side of the city was considered during these years. The Shoreline Freeway (Route 61) would have extended north to Oakland and south to San Jose. However, the project was ultimately removed from state and regional transportation plans due its potential environmental impacts.

Chart FR-1 below tracks Newark's population from 1945 to 2010.



Chart FR-1 Population of Newark, 1945-2010

NEWARK TODAY

POPULATION AND HOUSING

As noted in Chart F-1, Newark's population was 42,573 at the time of the 2010 Census. More recent reports from the California Department of Finance estimated the city's population to be 43,342 as of January 1, 2013. The City's population has been relatively stable for the last 15 years, with an average annual growth rate of less than 1 percent. In 2013, Newark's population included about 43,197 persons in households and 145 persons in group quarters. The average number of persons per household was 3.33, which was the second highest among the 14 cities in Alameda County.

Newark's population has become older and more ethnically diverse over the last two decades. Between 1990 and 2010, the number of residents over 65 increased from 5.3 percent of the city's population to 10.6 percent. At the same time, the percentage of youth (residents under 18) decreased from 28.4 percent to 25.4 percent. In 1990,







57.7 percent of the city's residents were non-Hispanic Whites. By 2010, Newark had become one of the most diverse cities in the Bay Area, with 27.5 percent non-Hispanic White residents, 26.8 percent Asian residents, 35.2 percent Hispanic residents, 4.5 percent African-American residents, and 5.9 percent other or multi-racial residents. The most recent available Census data indicated that approximately 54 percent of the city's residents indicated they spoke a language other than English at home, and 21 percent indicated they spoke English "less than very well."

In 2010, the median income in the city was \$81,777. This was slightly below the countywide average of \$87,012, but represented an increase of about 18 percent over the previous decade. About 79 percent of the city's 13,007 households were families, which was substantially higher than the countywide average of 64 percent. Approximately 26 percent of the city's households consisted of married couples with children living at home.

According to recent data from the Department of Finance, Newark had 13,416 housing units in 2013. About 71 percent of these units were single-family homes, 10 percent were townhomes, 4 percent were 2- to 4-plexes, and 15 percent were in multi-family buildings. The vacancy rate was 3.3 percent, which was substantially below the countywide average of 6.4 percent. According to Trulia.com, the median home sales price in the city in Spring 2013 was \$461,500, an increase of over 40 percent in just one year. However, median home prices have not yet returned to their previous peak of \$627,000 in 2006. Roughly 72 percent of the housing units in Newark are owner-occupied and 28 percent are renter-occupied.

The Housing Element of the General Plan may be consulted for additional discussion of Newark's population and housing characteristics.

EMPLOYMENT

The Association of Bay Area Governments (ABAG) reports that Newark had approximately 17,870 jobs in 2010. According to the 2007 US Economic Census, the largest sectors of the city's economy were retail trade (21 percent), manufacturing (21 percent), accommodation and food services (11 percent), professional, scientific and technical services (11 percent), and wholesale trade (10 percent). Public sector jobs, including those relating to schools, utilities, and municipal services, represented 15 to 20 percent of the city's employment base.

ABAG data indicates that the number of jobs in the city declined slightly between 2000 and 2010. However, the city has been recovering from these losses during recent years as the Bay Area emerges from the recession. Newark has become the location of choice for several high-profile corporate tenants in recent years, including Logitech, Membrane Technology and Research, Belectric USA, Theranos, Stemcells, Inc., and Risk Management Solutions. Newark is also a major regional retail center within Alameda County and a major hospitality center, with over 1,700 hotel rooms.

The US Census indicates there are approximately 21,000 employed residents living in Newark, a number that slightly exceeds the number of jobs in the city. Balancing job and housing growth has been an important goal since Newark's incorporation. This is not only important for Newark's fiscal stability, it also creates the opportunity for residents to live and work in the same community, which in turn reduces congestion, time loss associated with commuting, fuel expenses, and air pollution. This General Plan expresses the City's continued commitment to attracting a diverse range of housing, along with jobs that are responsive to the skills of the local workforce.

The Economic Development Element of the General Plan may be consulted for additional data and information on the city's economy.

Land Use

The total area of the City of Newark is 14 square miles. Roughly one-third of this area consists of salt harvesting, refining, and production facilities. Salt harvesting, refining, and production have been important economic activities in Newark since the community was settled and will continue to be a major community asset in the future. About 20 percent of Newark's area consists of residential uses, 10 percent consists of office and industrial uses and just over 4 percent is developed with commercial uses. Streets and transportation features represent about 13 percent of the city's area. The remaining area consists of parks, open space, public land uses, and vacant land.

Newark has directed much of its commercial and industrial growth to locations that are well served by the freeways but at the edge of the city's residential neighborhoods. This has allowed the city to capture the tax benefits of commercial development and provide convenient services to residents while at the same time minimizing the impacts of traffic and noise on its neighborhoods. The primary retail areas are adjacent to the freeway interchanges at Mowry Avenue and Newark





Boulevard. These areas meet the needs of a relatively large market area that extends beyond Newark. The largest industrial areas are west of Cherry Street and along Central Avenue. Newer "technology park" areas have been developed along Jarvis Avenue and Stevenson Boulevard.

The City's major development opportunities are located on the western edge of the city near Willow Street and Enterprise Drive, and southwest of Cherry Street between Mowry and Stevenson Avenues. There are also substantial infill development opportunities in Old Town Newark, in the NewPark Mall vicinity, and on vacant sites in the city's business parks and industrial districts. While development opportunities exist across the city, Newark's residential neighborhoods are mostly built out. The priority in these areas is to maintain neighborhood quality as infill development takes place nearby.

The Land Use Element of the General Plan may be consulted for additional data and information on land use and development in the city.

TRANSPORTATION

Newark is served by two major freeways and a network of arterial, collector, and local streets. I-880 has interchanges at Thornton and Mowry Avenues and Stevenson Boulevard. It is one of the busiest freeways in the Bay Area, carrying approximately 200,000 vehicles a day in the Newark area. SR 84 has interchanges at Thornton Avenue and Newark Boulevard. It carries about 60,000 vehicles a day and connects Newark to the Peninsula via the Dumbarton Bridge. Forecasts prepared by the Alameda County Transportation Commission indicate that daily freeway volumes are expected to increase by 26 percent between 2005 and 2035. Newark's challenge will be to manage higher volumes on its arterials as vehicles divert off the freeway seeking alternate routes to their destinations.

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Bus service is provided to Newark by AC Transit. Most of the routes provide feeder service to the BART stations at Fremont and Union City, located several miles northeast of the city limits. Although Newark does not have a BART station, many residents rely on BART for travel to Oakland, San Francisco, and other points around the Bay. A BART extension to Northern Santa Clara County is under construction, and will provide additional transit access to the South Bay. Newark residents may also access Dumbarton Express buses that cross the Dumbarton Bridge, and Valley Transportation Authority buses that stop at the Fremont BART station. Other passenger rail services in the vicinity include Amtrak's Capitol Corridor and the



Altamont Commuter Express, both of which stop in Centerville about 1 mile east of the city.

Most of Newark was developed between 1955 and 1975, an era when auto convenience and speed was the top transportation priority. Today, transportation planning in the city is influenced by other factors, including environmental quality, public health, and a desire to meet the needs of all travelers and not only those who drive. The City has endorsed the concept of "complete streets," in which roads are planned to accommodate multiple modes of travel, including pedestrians, bicyclists, and transit users as well as cars and trucks. The safety of all travelers will remain a top priority as this shift takes place.

The Transportation Element of the General Plan may be consulted for additional information on transportation and mobility in the city.

Environment

Newark is located on the East Bay Plain, a relatively flat area that drains west to San Francisco Bay. Elevation in the city ranges from 37 feet above mean sea level to 5 feet below sea level. The Bay and its associated wetlands and sloughs are the dominant natural feature of the area.

Upland areas of Newark were used for agriculture, including field crops and dairies, for much of the 19th and early 20th Centuries. These areas are now urbanized, with non-native vegetation and flood control channels handling storm drainage. Views from various locations in the city encompass Mission Peak, Coyote Hills, and hills in the South and East Bay and on the Peninsula, contributing to Newark's sense of place.

Don Edwards San Francisco Bay National Wildlife Refuge, the first urban wildlife refuge in the United States, is located adjacent to the western edge of Newark, primarily within the City of Fremont. The wetland ecosystem of the Refuge extends around the southern perimeter of the Bay, and is an important habitat area for migratory birds and several threatened and endangered species. The Refuge contributes to the open space quality of the area and provides a unique natural resource for the region. Cargill Salt has the perpetual right to utilize salt "evaporator" ponds within the Refuge (and outside the City limits) for its solar salt production system.











Like other communities in the Bay Area, Newark is working to improve and sustain environmental quality. Automobile and truck traffic are the major sources of air pollution and are also a major source of greenhouse gas (GHG) emissions and noise pollution. Water pollution is caused by runoff from urban areas, and point sources such as industry and wastewater plants. The Conservation and Sustainability Element of the General Plan includes policies and actions to reduce pollution and protection natural resources in the city.

Newark is also prone to natural hazards. The city is located 3 miles west of the Hayward Fault and 9 miles east of the San Andreas Fault. Its building codes and land use policies ensure that the public is protected from earthquake-related hazards. The city is also is traversed by flood control channels. Although flood risks are low, the City must plan for sea level rise and other risks associated with a changing climate. A number of agencies also regulate the handling, transport, and disposal of hazardous materials in the city. The Environmental Hazards Element of the General Plan may be consulted for additional information on these subjects.

PUBLIC SERVICES

The City of Newark provides municipal services to residents and businesses, including recreation, senior services, child care, public works, and law enforcement. Other agencies also provide services, either directly or through agreements with the City. Newark Unified School District operates a high school, a middle school, eight elementary schools, and several alternative schools. Ohlone College operates a state-of-the-art community college campus on Cherry Street. Newark's Public Library is part of the Alameda County Library System and is located within the Civic Center complex next to City Hall. The Alameda County Fire Department operates three fire stations in Newark and provides fire and emergency medical services to residents.

Newark is also served by special districts and utility companies. Alameda County Water District provides water services, while Union Sanitary District provides sewage collection and wastewater treatment. The Alameda County Flood Control and Water Conservation District manages the major flood control facilities in the city, including channels and levees. Solid waste collection and recycling are provided by Allied Waste. Gas and electricity are delivered by Pacific Gas and Electric, an investor-owned private utility. There are also telecommunication companies providing cable, internet, and wireless services.

The Community Services and Facilities Element of the General Plan includes additional information on local services. The Parks, Recreation, and Open Space Element focuses on park and recreation services, including City parks, and open spaces managed by other entities. The Health and Wellness Element focuses on public health services in the city.

FORECASTS

Long-range housing and employment forecasts for Newark have been developed by the ABAG. For each city in the Bay Area, ABAG's forecasts consider planned and approved development, local growth policies, the vacant land supply, infrastructure constraints, economic conditions, and other factors that influence the rate and location of growth. The most recent ABAG projections were developed as part of the regional Sustainability Communities Strategy mandated by SB 375 (Plan Bay Area).

The current ABAG forecasts for Newark indicate that the city had approximately 13,410 units of housing in 2010. According to ABAG, the number of housing units is projected to grow by 27 percent between 2010 and 2040, to 17,090 units. Changes made through this General Plan will increase the city's residential capacity, and may result in a faster rate of growth between now and 2040. The analysis prepared for the General Plan presumed a 46 percent increase in housing units by 2035, which would result in a citywide population of roughly 60,000.

The ABAG forecasts further indicate that Newark had approximately 17,870 jobs in 2010. According to ABAG, employment is projected to grow at about the same rate as housing over the next 30 years, increasing by 29 percent to about 23,100 jobs in 2040. A slightly faster rate of growth was used for the General Plan evaluation, resulting in 22,600 jobs by 2035 (and 23,400 jobs by 2040). While Newark could potentially capture an even larger share of the region's jobs, it is important to keep in mind that surrounding communities also are planning for larger numbers of jobs than the regional forecasts. Future plans for the NewPark Mall vicinity, Pacific Research Center, and other employment areas in Newark will be closely monitored to determine the need for new forecasts for Newark that reflect higher employment capture rates.

MAJOR COMMUNITY GOALS

'Newark residents value the community's small size, safety, diversity, mild climate, shopping and dining choices, affordability, reliable services, convenient location,





recreational choices, and involved citizenry. Participants in the General Plan process articulated a desire for more retail choices, higher wage jobs, better health and medical services, additional senior and executive housing options, more public safety resources, continued investment in schools and educational quality, and more reliable public transportation. Participants also expressed a desire to create a stronger "center" within the city—a walkable, gathering place with a variety of restaurants, shops, and services and a distinct sense of place. The General Plan includes policies and actions in pursuit of these objectives.

The vision for Newark's future articulated through the General Plan process is to:

- Maintain a strong sense of shared community among residents and protect the quality of life.
- Guide the timing and location of development to protect sensitive natural environments.
- Concentrate commercial and industrial land uses along the edges of the city to capitalize on freeway access and buffer more sensitive land uses.
- Focus future growth in key areas of opportunity for development and redevelopment while preserving the character of existing residential neighborhoods.
- Meet the regional need for housing, as defined in state legislation and the Bay Area's Sustainable Community Strategy (SCS), and provide a wide range of housing opportunities for all housing types and income levels.
- Provide new, higher density housing options that address the needs of senior citizens and cater to the preferences of younger generations, while maintaining the single-family residential neighborhoods that Newark residents value.
- > Continue to provide adequate and varied recreational opportunities.
- Foster the creation of new high-quality recreational open spaces and the enhancement of existing recreational facilities and open spaces.
- > Promote public health and safety.
- Develop a more sustainable and healthy community and promote walking and biking through focused transit-oriented development (TOD) and focused high-density housing in proximity to commercial uses.



- Sustain NewPark Mall as a regional commercial attraction, while exploring opportunities for redevelopment of the surrounding area with civic and other uses supportive of the Mall.
- Redefine citywide transportation priorities to better balance the needs of all modes of travel.
- > Facilitate cleanup of hazardous contamination sites in the City.
- > Embrace Newark's bayfront location.

As vacant land is developed and existing uses are redeveloped, care must be taken to ensure that change is compatible with the desired high quality and established character of the city. Care must also be exercised to ensure that new development does not result in undue financial burdens on the City. In particular, new development will be expected to pay its fair share for public services and facilities, and to take steps to ensure that it is a good neighbor to the uses around it.

Growth and change will be balanced with the need to provide open space, recreation lands, and the public facilities necessary to maintain the quality of life in the city. The quality of property design and maintenance will continue to be a priority, with an emphasis on enhancing the aesthetics of Newark's residential neighborhoods. Historic and cultural resources will continue to be protected. Continued efforts also will be made to improve the city's circulation system and minimize the impacts of freeway traffic on local streets.

SUMMARY OF MAJOR LAND USE PROPOSALS

In developing the framework for the General Plan, land use decisions were analyzed based on conditions in all parts of the city, with a focus on four areas with the most significant potential for change. The following statements provide an overview of the major General Plan proposals. All of these proposals are discussed in greater detail in the Land Use Element of the Plan. Because the city is surrounded by other jurisdictions, no addition to the incorporated limits of Newark is anticipated during the planning period.

DUMBARTON TOD

The Dumbarton TOD area covers about 200 acres on the west side of Newark. The policy direction provided by the General Plan is supplemented by a Specific Plan for the area adopted in 2011. The Dumbarton TOD includes the site of a proposed









transit station along the planned Dumbarton Rail between Union City and the Peninsula. To leverage the public investment in transit, the Plan calls for up to 2,500 residential units, a new park system, and a neighborhood center with shopping, services, and office uses. The neighborhood will be organized along a grid of pedestrian-oriented streets, connected to established residential areas to the east.

SOUTHWEST NEWARK RESIDENTIAL AND RECREATIONAL PROJECT

The Southwest Newark Residential and Recreational Project covers 636 acres in the area bounded by Mowry Avenue on the west, Stevenson Boulevard on the east, Cherry Street on the north, and Mowry Slough on the south. The 1992 General Plan referred to the area east of the Union Pacific Railroad as Area 3, and the area west of the railroad as Area 4. A Specific Plan for Areas 3 and 4 was adopted in 2010. The Plan calls for up to 1,260 housing units, a major recreational facility such as a golf course, and a new school and neighborhood park. It is expected that a substantial portion of this area will be retained as open space.

OLD TOWN NEWARK

Old Town is the historic center of Newark. It includes a commercial district along Thornton Avenue and a residential area with a variety of housing types and densities. Old Town has been the subject of planning studies for more than 40 years, each with the common goal of strengthening this area as a walkable "town center." This continues to be the vision moving forward, with a focus on the Thornton Avenue corridor. The area presents opportunities for historic preservation, infill development, cultural facilities, and new mixed-use development combining ground floor retail uses and upper story residential uses.

GREATER NEWPARK MALL

Greater NewPark refers to the 125-acre area including NewPark Mall and the commercial uses on its perimeter. The City initiated a visioning process for the Mall vicinity in 2012 and will continue to work with property owners to explore alternatives for making this a more vibrant regional retail center in the future. Options for complementing the retail center with mixed-use development, additional retail and office uses, and new pedestrian-oriented streets and public spaces, are explored in this General Plan.

INFILL AREA

While the four areas above represent the most substantial development opportunities in the City, other parts of Newark also provide opportunities for future growth. Key opportunity areas addressed by the General Plan include:

- Newark Civic Center. The Civic Center on Newark Boulevard is now almost a half-century old and does not fully meet municipal service needs. The General Plan raises the possibility of a new City Hall and Library in this area, built through a public/private partnership that also includes higher density residential and cultural uses.
- Cedar Boulevard Corridor between Mowry Avenue and Central Avenue. This is an area of older commercial and industrial uses, including motels, auto body shops, and heavy equipment service lots. A transition to medium density residential uses is envisioned over the next 20 years.
- Mayhews Landing Road and Newark Boulevard. This intersection is gradually transitioning from commercial to residential uses, with a recently developed single-family subdivision and several vacant or underutilized former commercial sites now designated for housing.
- Newark Unified School District (NUSD) Facilities. A number of sites owned by NUSD may transition to new uses during the coming decades, including the former Ruschin Elementary School.
- Ohlone College. Only a portion of Ohlone College's Newark campus has been developed. Additional opportunities exist on the southern portion of the college property.
- Industrial Sites. The city has several vacant industrially zoned sites, including prime parcels for technology-related development in Pacific Research Center and Stevenson Point Technology Park, and other parcels in the light and general industrial districts.

NEWARK GENERAL PLAN PLANNING FRAMEWORK

LAND USE

OVERVIEW

The Land Use Element sets the direction for Newark's future growth and development. The Element includes the General Plan Land Use Map, which defines the major categories of land use in Newark along with standards for the allowable density or intensity of development in each category. It includes the City's policies for residential, commercial, industrial, resource production, public, and open space land uses. These policies provide direction on how Newark will maintain successful neighborhoods, create a stronger sense of place and civic identity, and make its shopping areas and workplaces more dynamic and vibrant in the future. They guide the development of the City's major vacant sites, and ensure that such development enhances the quality of life in the city.

Land Use is one of the mandatory elements of the General Plan. By state law, the element must "designate the proposed general distribution and general location and extent of the uses of land for housing, business, industry, open space, including agriculture, natural resources, recreation, and enjoyment of scenic beauty, education, public buildings and grounds, solid and liquid waste disposal facilities, and other categories of public and private uses of land" (Government Code 65302(a)). State law further requires that the element "include a statement of the standards of population density and building intensity recommended for the various districts and other territory covered by the plan." In many respects, Land Use is the broadest General Plan element. It provides the foundation which underpins all other elements.

The Element is organized into five sections:

- Land Use Context provides an overview of existing land uses in Newark, and describes the physical form of the city.
- Land Use Plan presents the General Plan Map, including definitions of land use categories as required by state law.





- Focus Areas provides a narrative description of specific areas in Newark where major land use changes are anticipated during the timeframe of the General Plan. The narrative describes the vision for each area and establishes parameters for future development.
- Design and Preservation provides the context for the land use compatibility, community design and historic preservation policies that appear later in the Element.
- Goals, Policies and Actions includes the City's official statements of public policy on land use topics, including growth and development, land use compatibility, community standards, community design and identity, and historic preservation. This section also includes location-specific goals, policies, and actions for the Focus Areas.

LAND USE CONTEXT

INTRODUCTION

Newark's current land use pattern took shape during the 1950s, 60s, and 70s. Prior to 1950, the city's footprint consisted of a commercial district along Thornton Avenue near Sycamore Street, industries along the railroad and near the marsh, and a residential area extending along a grid of streets around the Thornton Avenue commercial district. When the city incorporated in 1955, its population was just over 6,000. Completion of the Nimitz Freeway in 1958 sparked a development boom and led to an increase in population from 7,200 to 21,250 in just seven years. Almost 3,700 housing units were added during the 1960s and 4,200 more units were added in the 1970s. Hundreds of acres of neighborhoods were developed during this time period, along with schools, parks, and community facilities. Much of the industrial area was also developed during this era.

The city's growth options since the 1970s have been more limited. Development in the 1980s and 90s primarily occurred on sites that had been bypassed by development during earlier eras. The 1980s saw development of NewPark Mall and the shopping centers on its perimeter, as well as some of the city's multi-family residential and small lot single-family neighborhoods. Industrial and technology parks were also developed during the 1980s and 90s. Newark experienced very little residential development between 2002 and 2013, in part due to regional economic conditions and in part because of diminishing land supply. There was substantial

employment growth in the first half of this time-period, especially in the technology and service sectors.

Today, Newark's development frontiers include vacant land on the city's western fringe, along Willow Street south of Thornton Avenue, and on the southwestern fringe, between Mowry and Stevenson west of Cherry Street. There are also opportunities to intensify already built-up areas through infill development and the reuse of underutilized property. The regional emphasis on sustainable growth may reshape the existing land use pattern in parts of the city that were originally developed around the automobile. This could lead to more walkable, mixed-use commercial districts, without changing the character of nearby single-family neighborhoods.

DISTRIBUTION OF EXISTING LAND USES

Newark covers 9,000 acres or about 14 square miles. Table LU-1 indicates the acreage in major land use categories within this area. The inventory is based on multiple sources, including a study by Cal Poly San Luis Obispo in 2011, GIS measurements, and approved specific plans for undeveloped portions of the city.

As of 2011, approximately 1,800 acres (20.0%) of Newark's total area was in residential use. About 375 acres (4.2%) was in commercial use and 930 acres (10.3%) was in industrial or office-flex use. Another 270 acres (3.0%) was in public or institutional use and 1,130 acres (12.6%) consisted of roads and other rights of way. The sum of these areas is roughly 4,500 acres, or 50 percent of the land area of the City.

The remaining 50 percent of Newark's land area consists of undeveloped or nonurbanized land. Of this total, approximately 960 acres is vacant and designated for development. The remaining 3,535 acres includes "conservation" open space (280 acres), agriculture (70 acres), public parkland and other "improved" open space (160 acres), and approximately 3,025 acres of land used for salt harvesting, refining, and production. Salt harvesting, refining, and production represents approximately one-third of Newark's land area. It is the largest single land use in the city in terms of its geographic extent.

	Acres (Approx.)	Percent
Residential	1,800	20.0
Commercial	375	4.2
Tech Office/Industrial	930	10.3
Public-Institutional	270	3.0
Transportation (Rights-of-Way)	1,130	12.6
Salt Harvesting, Refining, and Production	3,025	33.6
Conservation Open Space	280	3.1
Parks and Improved Open Space	160	1.8
Agriculture	70	0.8
Vacant, Designated for Development ^a	960	10.6
Total	9,000	100.0

TABLE LU-1 DISTRIBUTION OF EXISTING LAND USES

^a A portion of the vacant, residentially zoned area is likely to be conserved as open space or parkland upon development of adjacent lands due to environmental constraints.

Source: The Planning Center | DC&E, Barry Miller Consulting, 2013

Newark's residential areas are generally located in the northern part of the city. Cherry Street forms a well-defined edge between residential and industrial uses in the eastern part of Newark. The edge is less well defined in the western part of the city, with residential uses abutting open space north of Thornton Avenue and industrial areas along Wells Avenue. Between Thornton Avenue and Newark Boulevard, Jarvis Avenue provides a clear separation between residential and office/technology uses at Pacific Research Center.

The City's residential neighborhoods include a variety of housing types and densities. Single-family neighborhoods predominate, with over 75 percent of the city's residential area developed at densities ranging from 4 to 8 units per acre. Many neighborhoods are characterized by one-story ranch style homes on lots of 5,000 to 8,000 square feet. These homes typically have two-car garages and consistent front, rear and side setbacks. Newer neighborhoods tend to include smaller lots and two-

story homes, often with contemporary California architectural styles. The City's neighborhoods are typically centered around neighborhood schools and parks.

Multi-family housing includes duplexes and triplexes, small apartment buildings, townhome developments, and larger garden apartment and condominium complexes. These tend to be located in and around Old Town Newark, in the Murieta area southeast of NewPark Mall, along Thornton Avenue, near Jarvis Avenue and Haley Street, and in the area near Newark and Cedar Boulevards. Building heights are typically two and three stories. Many of the larger apartment, townhome, and condominium complexes include on-site amenities such as pools, clubhouses, and park-like areas between buildings.

The city's commercial areas are generally located along major arterial streets and close to the freeways. The largest commercial area in located around NewPark Mall. This area includes the Mall itself, plus free-standing commercial uses, auto dealerships, hotels, and shopping centers on the perimeter. Another cluster of commercial uses is located at the "Four Corners" of Jarvis and Newark Boulevards, where several large shopping centers are located. Additionally, Thornton Avenue forms a commercial spine between Old Town Newark and the I-880 interchange. Its frontage has been developed with several shopping centers, offices, service businesses, churches, fraternal organizations, and individual commercial uses. Other commercial nodes include Mayhews Landing Road and Newark Boulevard and Central Avenue north of Cedar Boulevard. With the exception of Old Town Newark, most of the city's commercial areas have been designed for auto convenience, with surface parking lots serving each use.

Industrial areas include technology parks with amenities such as landscaping, public art, and modern architecture, and more traditional areas for manufacturing, production, distribution, and repair. Notable industrial uses include Cargill Salt processing facilities, Full Bloom Baking Company, Matheson Tri-Gas, the World Pac auto parts distribution center, corporate offices for Logitech, and the Evergreen Oil Refinery. The primary industrial areas include the area west of Cherry Street south of Central Avenue and the area along Central Avenue between Willow and Cherry. Other industrial areas include the west side of Thornton near Willow, and the area north of Cedar and Central. In addition to supporting manufacturing and distribution uses, Newark's industrial areas also support activities such as auto repair, building supplies, printers, and other commercial services. Public and institutional uses typically correspond to schools, churches, fire stations, and municipal facilities. These uses are scattered across the city, typically within residential neighborhoods. A majority of the acreage is associated with school campuses, including the Newark campus of Ohlone College.

As noted above, the undeveloped and non-urbanized areas in Newark are principally located in the southern and western parts of the city. The Cargill salt harvesting, refining, and production facilities constitute a majority of this area. However, the City also includes approximately 960 acres of land that is vacant and designated for development. Most of this land is clustered in two areas. About 630 acres is located west of Cherry Street between Mowry and Stevenson. This area has historically been referred to as Areas 3 and 4, and its development is guided by a Specific Plan discussed later in this chapter. About 230 acres is located around the Willow and Thornton intersection. This is the Dumbarton Transit Oriented Development Specific Plan area (referred to as Area 2 in previous General Plans for Newark). There are also several vacant tracts within the Pacific Research Center, in other industrial parks, and in the NewPark Mall vicinity.

In summary, Newark's land use pattern reflects its origins as a railroad town and industrial center, its rapid development as a suburb in the mid-20th Century, and its evolution into a more balanced city where new employment and shopping centers complement residential neighborhoods. The stage is set for the city's continued growth. The next two decades are expected to see development of the remaining large vacant areas on the city's west and southwest sides and continued infill and revitalization of areas developed during the last century. As this development takes place, the priority will be on ensuring the continued quality of the city's existing neighborhoods, and leveraging new development to provide amenities, services, and qualities that are missing in Newark today.

LAND USE MAP AND CATEGORIES

Land Use Map

Figure LU-1 presents the General Plan Land Use Map for Newark. The Map is a statement of the City's intent with regard to public and private development and the future use of property. It is the graphic representation of the written goals, policies, and programs of the General Plan.
NEWARK GENERAL PLAN LAND USE



Source Data: City of Newark, 2012; The Planning Center | DC&E, 2013; Tiger Roads 2010; ESRI, 2010; FTC, 2010.



Residential Designations

- Low Density Residential Low-Medium Density Residential Medium Density Residential
- High-Density Residential

Public - Institutional Designations Public-Institutional

Commercial Designations

Neighborhood Commercial Community Commerical Commercial Mixed Use

Regional Commercial Office Commercial City Limits

1

Resource Production Designations Salt Harvesting, Refining and Production In most cases, the Map presumes a continuation of the existing land use pattern. For example, the City's developed single-family residential areas have been designated "Low Density Residential" on the Map. Most of Newark's commercial and industrial areas have likewise been designated to reflect what is on the ground today, although opportunities to diversify and intensify existing uses have been provided in the NewPark area and in Old Town Newark. The Map identifies the Cargill salt harvesting, refining, and production facilities for continued use as such. It also identifies existing and future parks and recreation areas within the city.

The areas of greatest expected future land use change are in Southwest Newark and on the western edge of the city. This is consistent with existing City policy, as both of these areas have been planned for development for over 20 years. The southwestern area, which is currently mostly vacant, continues to be planned for a combination of residential and recreational uses. The western edge around Willow and Thornton was the subject of a General Plan Amendment in 2011 to facilitate future transitoriented development (TOD) around the future Dumbarton Rail station. Development in these two areas is guided not only by broad General Plan policies, but by more prescriptive standards established in Specific Plans for each area.

The Land Use Map is intended to be a regulatory tool. Future land use decisions must be consistent with the designations on the Map, as well as the definitions and standards in this section. While the Map generally aligns with individual parcels of land, it is not as prescriptive or specific as a zoning map. As the name implies, the Map is intended to be "general" and the spatial extent of each designation is approximate. The City's Zoning Map is more detailed than the General Plan Map and is intended to be parcel specific. Zoning designations include more precise development standards which are consistent with the broad guidelines established here for the corresponding General Plan categories.

There are 16 categories depicted on the General Plan Map. As noted earlier in this chapter, State law requires a standard of density or intensity for each land use category. For residential uses, density is expressed by the number of units per net acre of land. Net acreage *excludes* land used for streets, parks and public open spaces, conservation easements, utility rights-of-way, flood control channels, and similar public improvements. It *includes* driveways, parking areas and private streets in multi-family developments, and common or private open space areas. Residential density can also be expressed in terms of population per acre. To calculate persons

per acre, the number of units should be multiplied by 3.27, which was the average number of persons per household in Newark at the time of the 2010 Census.

For commercial and industrial uses, intensity is expressed through floor area ratios (FARs). FAR is the ratio of building area to lot area on a given parcel of land. For example, a 5,000-square-foot building on a 10,000-square-foot parcel would have an FAR of 0.5. The measurement of floor area typically does not include non-habitable spaces such as parking garages, carports, mechanical rooms, and unfinished basements. FAR is used in the General Plan to describe intensity, but is not intended as a regulatory limit for individual parcels. Other zoning standards, including setbacks (the minimum distance between a building and the front, side, and rear property lines), landscape requirements, height limits, and parking requirements, are typically used to determine the allowable building area. Buildings are also subject to design review, which in some cases may preclude the maximum FAR from being achieved.

Each category is depicted in a different color on the General Plan Land Use Map. There may be multiple zoning districts within each category. This allows finer grained distinctions to be made within each area regarding the specific mix of uses and densities or intensities of development allowed. For example, the "Low Density Residential" category includes the R-6000, R-7000, R-8000, and R-10000 zoning districts, indicating areas subject to a minimum lot size requirement of 6,000, 7,000, 8,000, and 10,000 square feet respectively. Parcels are not automatically "entitled" to the maximum density or intensity in the range indicated for each General Plan category. Individual zoning districts within each category may distinguish where the "top" of the range is acceptable, and where the lower ends of the range are appropriate.

Table LU-2 indicates the land area in each General Plan category. Comparing Tables LU-1 and LU-2, the greatest acreage change is in the residential category. Most of Newark's vacant land supply is designated for residential use, consistent with approved specific plans for the Dumbarton TOD and the Southwest Newark area (formerly Areas 3 and 4). It should be noted that some of the land tallied as "Low Density Residential" in Table LU-2 will be set aside for open space or recreational uses as development plans for vacant areas are finalized (see "Area 4" on the map, shown with a cross-hatched pattern). Thus, "buildout" of the city will result in slightly lower residential acreage than is indicated in Table LU-2, and slightly higher open space acreage. Salt harvesting, refining, and production facilities will remain the single largest land use category in Newark.

TABLE LU-2	Acreage in General Plan Land Use Categories

	Acres (Approx.)	Percent
Residential	2,639	29.3
Low Density	2,004	22.2
Low-Medium Density	195	2.2
Medium Density	305	3.4
High Density	135	1.5
Commercial and Mixed Use	379	4.2
Neighborhood	25	0.3
Community	129	1.4
Regional	195	2.2
Office	10	0.1
Commercial Mixed-Use	20	0.2
Industrial	1,029	11.4
Limited	108	1.2
General	605	6.7
Special	316	3.5
Resource Production	3,024	33.6
Salt Harvesting, Refining, and Production	3,024	33.6
Public/Institutional	280	3.1
Public/Institutional	280	3.1
Open Space	521	5.8
Parks and Recreational Facilities	239	2.7
Conservation Open Space	282	3.1
Total Acreage in Parcels	7,872	87.4
Street and Railroad Rights-of-Way	1,128	12.6
GRAND TOTAL	9,000	100.0

Source: The Planning Center | DC&E, Barry Miller Consulting, 2013.

LAND USE CATEGORIES

RESIDENTIAL DESIGNATIONS

Four residential designations appear on the Map.¹ These are defined as follows:

- Low Density Residential (Less than 8.7 units per net acre). This designation is intended for single-family residential development on lots larger than 5,000 square feet. It corresponds to most of Newark's residential neighborhoods. Multiple zoning districts apply within Low Density Residential areas to distinguish areas with different minimum lot sizes. Other compatible uses, such as schools, childcare centers, parks, and religious facilities may also locate in areas with this designation, subject to appropriate permitting requirements.
- Low-Medium Density Residential (8.7 to 15 units per net acre). This designation is intended for small lot single-family homes, zero lot line and patio homes, mobile home parks, and other areas characterized by a mix of older single-family homes and small multi-unit buildings. These areas have the basic characteristics of single-family neighborhoods, such as front and rear yards, driveways, and garages, but have smaller lots and a wider variety of housing types. Densities in areas with this designation range from 8.7 to 15 units per net acre, but the higher end of this range (e.g. from 11 to 15 units per acre) will only be allowed on properties which have their primary access on an arterial or collector street and which are found to be compatible with the character and intensity of residential development in the immediate area. Other compatible uses, such as schools, childcare centers, parks, and religious facilities may locate in all areas with this designation, subject to appropriate permitting requirements.
- Medium Density Residential (14 to 30 units per net acre). This designation is intended for garden apartments and condominiums, townhomes, row houses, 4 to 8 plexes, and older areas that contain a mix of multi-family and single-family homes within this density range. These areas tend to be multi-family in character but retain some of the characteristics of suburban neighborhoods such as landscaped yards, off-street parking, common open space, and low building heights. Densities in areas with this







¹ To convert the residential density ranges from dwelling units per net acre to population per net acre, the number of units should be multiplied by the average household size, which was 3.27 as of the 2010 census.





designation range from 14 to 30 units per net acre, but the higher end of this range (e.g. from 22 to 30 units per acre) will only be allowed on properties which have their primary access on an arterial or collector street and which are found to be compatible with the character and intensity of residential development in the immediate area.² Additionally, to ensure that land with this designation is used as efficiently as possible, a minimum density standard of 14 units per net acre applies. Other compatible uses, such as schools, childcare centers, parks, and religious facilities may also locate in areas with this designation, subject to appropriate permitting requirements.

High Density Residential (25 to 60 units per net acre). This designation is intended for apartment and condominium complexes that are generally three stories or more. On larger parcels with this designation, common open space and other shared amenities are typically provided. Structured (or basement-level/ podium) parking is also common. Densities range from 25 to 60 units per acre, corresponding to site area allowances of 725 to 1,450 square feet of lot area per each dwelling unit.³ To ensure that land with this designation is used as efficiently as possible, a minimum density standard of 25 units per net acre applies. Other compatible uses, such as schools, childcare centers, parks, and religious facilities may also locate in areas with this designation, subject to appropriate permitting requirements.

COMMERCIAL AND MIXED-USE DESIGNATIONS

Four commercial designations and one mixed-use designation appear on the map. These are defined below.

Neighborhood Commercial. This designation encourages the development and preservation of retail stores, services, and other businesses which meet the day-to-day shopping needs of the surrounding residential neighborhoods. Neighborhood Commercial uses may be found in auto-oriented shopping centers or on individual parcels along collector and arterial streets. Examples include the Newark Square Shopping Center at Thornton Avenue and Newark Boulevard and Mowry Plaza at Mowry Avenue and Cedar Boulevard. Largerscale commercial uses such as department stores and hotels are generally not appropriate in areas with this designation. Neighborhood Commercial areas

² Densities above this range may be permitted with a Density Bonus, as prescribed by zoning. ³ Densities above this range may be permitted with a Density Bonus, as prescribed by zoning.

are also not appropriate for residential use and should be maintained to provide convenient, walkable shopping destinations for nearby residents. FARs are generally in the range of 0.2 to 1.0. The actual intensity of development on any given site is dictated by a number of factors, including height limits, parking and landscaping requirements, and site size and dimensions.

- Community Commercial. This designation encourages the development of services and businesses which meet the comparison shopping needs of the city's residents and workers. Such centers may include supermarkets, home improvement stores, variety stores, pharmacies, restaurants, and similar uses which serve the community. Examples include the Home Depot on Thornton Avenue and the multiple shopping centers around the four corners of Newark Boulevard and Jarvis Avenue. Larger-scale commercial uses such as hotels and office buildings are acceptable in areas with this designation. Community Commercial areas are generally not appropriate for residential use, although housing may be considered as a component of future planned developments within these areas in the event a shopping center is reused. FARs are generally in the range of 0.2 to 2.0. The actual intensity of development on any given site is dictated by a number of factors, including height limits, parking and landscaping requirements, and site size and dimensions.
- Regional Commercial. This designation supports the largest and most complete shopping facilities in the city. The emphasis is on a broad array of goods and services, including department stores, retail shops, restaurants, entertainment facilities, and similar uses which draw patrons from throughout Newark and the surrounding region. This designation is applied to NewPark Mall and some of the commercial areas on the Mall's perimeter. Uses such as hotels and corporate office buildings are acceptable in areas with this designation. Housing at densities greater than 30 units per acre may be included in Regional Commercial areas if such housing is a component of a large-scale planned development which is primarily oriented around regional retail commercial uses. FARs are generally in the range of 0.2 to 4.0. The actual intensity of development on any given site is dictated by a number of factors, including height limits, parking and landscaping requirements, and site size and dimensions.
- Office Commercial. This designation supports local-serving offices accommodating such uses as finance, insurance, and real estate businesses, legal and other professional services, banks, personal services, business-









support activities, and dental and medical services. These uses may form a transition between retail uses and residential areas, or a buffer between arterial streets and residential areas. An example is the area along Thornton Avenue north of Newark Boulevard. Retail uses are discouraged in Office Commercial areas, and housing is only permitted if it is a component of a larger-scale planned development. FARs are generally in the range of 0.5 to 1.5. The actual intensity of development on any given site is dictated by a number of factors, including height limits, parking and landscaping requirements, and site size and dimensions.

Commercial Mixed-Use. This designation supports a combination of office, > residential, and retail use, with an emphasis on specialty commercial uses such as antique stores, boutiques, galleries, cafes, and restaurants. Development standards should foster a walkable, pedestrian-oriented character that emphasizes a fine-grained building scale and streetscape. Structures that are entirely residential or entirely commercial are both permitted, but the optimal development form on larger sites would include housing located above ground level retail shops or services. This designation is used in Old Town Newark, where it recognizes the historic scale, lot pattern, and context of this district. FARs are generally in the range of 0.5 to 2.0. The actual intensity of development on any given site is dictated by a number of factors, including height limits, parking and landscaping requirements, and site size and dimensions. Multiple zoning districts apply in this designation, with one zone focused on ground floor retail uses and the other allowing more diverse ground floor uses, such as offices and housing.

INDUSTRIAL DESIGNATIONS

Three industrial designations appear on the map. These are defined below.

Limited Industrial. This designation is intended to meet the needs of a variety of light industrial and commercial service uses. It serves as a transition between heavier industrial activities and residential neighborhoods. Uses such as light manufacturing, warehouses, sales and offices, auto repair, printers, and contractor's services are typical. An example is the area on the east side of Cedar Boulevard north of Central Avenue. All uses in Limited Industrial areas should be designed to be compatible with nearby uses, including housing. Activities generally occur within enclosed structures, and a high standard of property maintenance, landscaping, and screening is required. Performance



standards may be imposed to reduce or eliminate the potential for off-site impacts. A limited number of office, commercial recreation, and group assembly uses may be considered in this designation, subject to appropriate conditions to reduce potential land use conflicts. FARs are generally in the range of 0.2 to 1.5. The actual intensity of development on any given site is dictated by a number of factors, including height limits, parking and landscaping requirements, proximity to residential areas, and site size and dimensions.

- General Industrial. This designation is intended to accommodate a broad > range of manufacturing, warehousing, wholesaling, and distribution uses. General Industrial areas should not be located next to residential, commercial, or other sensitive uses because they are often characterized by outdoor storage, noise, odors, hazardous materials handling, and heavy truck activity. An example of a General Industrial area is the area around Central Avenue and Willow Street. Performance standards may be imposed in such areas to reduce or eliminate the potential for off-site impacts. Non-industrial uses, such as retail stores, free-standing office buildings, and group assembly uses, are not permitted in General Industrial areas. Buffering and screening may be required to enhance public rights of way, and to ensure compatibility between uses. FARs are generally in the range of 0.2 to 2.5. The actual intensity of development on any given site is dictated by a number of factors, including height limits, parking and landscaping requirements, proximity to residential areas, and site size and dimensions.
- Special Industrial. This designation is intended to foster 21st Century workplaces developed to the highest standards of building design, landscaping, and aesthetic amenities. Allowable uses are typically associated with advanced technology, research and development, manufacturing, and related support facilities. An example is the Pacific Research Center between State Route 84 and Jarvis Avenue. Performance standards are used to ensure that uses and facilities in Special Industrial areas will create minimal off-site impacts and therefore may be appropriate neighbors to residential and other, more sensitive uses. Special Industrial areas include business parks, industrial parks, technology parks, and other master planned industrial subdivisions. Such developments may include complementary uses which support the employee population, such as hotels, restaurants, office buildings, childcare facilities, and business services. FARs are generally in the range of 0.2 to 3.0.







The actual intensity of development on any given site is dictated by a number of factors, including height limits, parking and landscaping requirements, proximity to residential areas, and site size and dimensions.

RESOURCE PRODUCTION DESIGNATIONS

The Land Use Map uses one category for resource production land uses, defined as follows:

Salt Harvesting, Refining, and Production. This designation identifies areas used for salt harvesting, refining, and production, including man-made crystallizer beds used for salt crystallization, and related buildings, facilities, and operations for salt harvesting, stacking, sizing, packaging, and/or distribution. It applies to the privately owned Cargill Salt Company lands on the western side of the city. A standard of development intensity does not apply, as buildings unrelated to salt production are generally not appropriate in these areas. Williamson Act agricultural preserves are permitted in areas with this designation.

PUBLIC DESIGNATIONS

The Land Use Map uses one category for public and institutional facilities, defined as follows:

Public and Institutional. This designation is intended to identify existing and proposed public facilities, such as fire stations, City offices, libraries, corporation yards, pumping stations, and schools and colleges. It also may be used to identify railroad turnouts, junctions, and sidings; pipelines, utility rights-of-way, and storage tanks; transit facilities; and larger institutional uses. FARs are generally in the range of 0.2 to 1.0. The actual intensity of development on any given site is dictated by a number of factors, including height limits, parking and landscaping requirements, site size and dimensions, and the nature of the public or institutional activity on the property.

OPEN SPACE DESIGNATIONS

The Land Use Map uses two categories for open space, defined as follows:

Parks and Recreational Facilities. This designation is intended to identify open space lands whose primary purpose is active recreation. It applies to parks owned and operated by the City of Newark and other land that supports recreational activities such as golf courses, driving ranges, tennis clubs, and





batting cages. Both existing parks and proposed parks are included. Typical uses include playgrounds, picnic areas, and sports fields. As appropriate, this designation may also apply to Newark Unified School District (NUSD) athletic fields and playgrounds subject to joint use agreements and available for public recreation. Buildings for recreation and community purposes are allowed. Height limits vary from 30 to 50 feet, depending on context.

Conservation Open Space. This designation is intended to protect wildlife habitats and wetlands and is applied in areas not used for human habitation or employment. Land with this designation is typically owned by public agencies, such as the U.S. Fish and Wildlife Service. A limited number of recreational improvements such as trails and interpretive nature centers may be acceptable. However, the primary purpose of this designation is to facilitate the restoration and enhancement of native habitat. A standard of development intensity does not apply, as buildings are generally not appropriate in these areas.



FOCUS AREAS

This section of the Land Use Element provides direction for several "Focus Areas" within Newark. Figure LU-2 indicates the location of these areas.

Each Focus Area has unique issues that require more detailed discussion than is provided in this Element for the city as a whole. Two of the Focus Areas have been the subject of recent Specific Plans. A third has been the subject of prior planning studies and evaluations, and another is anticipated to be the subject of an area plan in the coming years. Each Focus Area requires special considerations relative to land use, transportation, housing, urban design, and conservation.

The Focus Area discussions include a description of each area and a summary of key development objectives. The Focus Areas are also the subject of individual goals in the last section of this Element, coupled with policies and actions to guide future land use decisions.



Source Data: City of Newark, 2012; Santa Clara County, 2012; The Planning Center | DC&E, 2012; ESRI, 2010; U.S. Fish and Wildlife Services, 2012.

City Limit Landmarks Railroads

Dumbarton TOD Plan Focus Area Greater NewPark Focus Area

Area

Old Town Focus Area

Southwest Newark Residential and Recreational Focus Area

FIGURE LU-2 FOCUS AREAS

DUMBARTON TRANSIT-ORIENTED DEVELOPMENT

The Dumbarton TOD area covers just over 200 acres on Newark's west side. The site extends along both sides of Willow Street, roughly between the Union Pacific Railroad on the north and Central Avenue on the south. The railroad right-of-way along the northern edge of this area has been designated as the alignment for a potential new transit line linking Southern Alameda County with the Peninsula, with a future station at Willow Street. This creates the opportunity for development around the new station with high-density residential, retail, and office uses that are designed to encourage walking, bicycling, and transit use for most trips.



A Specific Plan for the area was adopted in 2011, providing the City with a mechanism for directing development and ensuring the installation of adequate infrastructure. The Specific Plan includes a Land Use Plan, design guidelines, development regulations, and specifications for new utilities. It also includes provisions for a network of open spaces and pedestrian corridors which provide connections to new transit facilities. The TOD area is envisioned a place where housing, recreation, retail, and employment uses are integrated in a traditional village atmosphere. Because of the area's proximity to premium transit, owning a car should be an option rather than a necessity for those who will live and work here.

On the General Plan Map (Figure LU-1), areas within the Dumbarton TOD Specific Plan boundary have been assigned the "best fit" land use designations using the citywide land use categories. The actual categories and density ranges in the Specific Plan are slightly different than those in the General Plan, given the more detailed nature of the Specific Plan and its intent as a regulatory tool. In the event of a conflict between a General Plan land use definition and a Dumbarton TOD Specific Plan land use definition, the Specific Plan shall prevail.

The Dumbarton TOD area was initially developed with industrial and agricultural uses dating back to the early 20th Century. Much of the area has been vacant for several decades. Prior to 2010, the area had been designated for limited and general industrial uses. The proposal for rapid transit across the Bay provided the impetus to develop a new vision which capitalizes on this proposed public investment. The area is abutted on the eastern side by residential neighborhoods in Newark. The vision is to extend this residential pattern to the west, providing new connections between established neighborhoods and the Bay. The site will continue to be bracketed by salt evaporation ponds and the wildlife refuge on the south and west.

Development of the Dumbarton TOD area will incorporate "smart growth" principles, including the preservation of natural resources, narrower streets and slower travel speeds, an expanded range of transportation options, an emphasis on public health, and a focus on walkable, mixed-use neighborhoods. This vision will be achieved in part through adoption of a form-based zoning code for the area. Such a code establishes development standards which define the building envelope and design without rigidly dictating the allowable activities within each structure. The development will also embrace "green" development principles, including low-flow water fixtures, bay-friendly landscaping, retention of stormwater runoff on-site, minimal use of herbicides and pesticides, reduced impervious surface coverage, green building construction, and renewable energy use.

About six acres have been set aside for the Dumbarton transit station itself, including bus transfer areas, pick up and drop off areas, and parking. The station site should be connected by bus, and at some point in the future by train, to job centers across the Dumbarton Bridge, and to existing rail transit facilities in the Tri-City area. Adjacent to the station, an open area will provide a gathering place for the community and space for outdoor activities and civic events.

The Plan envisions a small neighborhood center adjacent to the station. The center should include a grocery store, restaurants and cafes, personal services, and other local businesses. An area west of the neighborhood center will provide land for up to 195,000 square feet of office and retail uses. Opportunities for high density housing will also be provided in the center, potentially above ground floor retail uses. Design guidelines have been prepared to ensure distinctive architecture and to establish standards for building form, landscaping, lighting, and street furnishings.

The Specific Plan accommodates up to 2,500 new residential units, including a mix of townhomes, apartments, condominiums, and single-family detached homes. Residential areas will generally be organized along a grid of walkable streets. Some homes may face pedestrian-oriented streets, parks, and garden courts. Where individual garages are provided, they would generally be accessed from rear alleys rather than from the street. Design guidelines have been prepared to lay out the desired residential building styles. These range from agrarian and farmhouse styles to arts and crafts and French Country themes.

A park and open space system will help weave the community together, while providing new recreational facilities and features. At least 16 acres of parkland will be provided, including a new neighborhood park west of the transit station and a designated dog park area. Other park amenities might include play fields, picnic areas, and new recreational facilities. New parks will be complemented by new trails, linking the transit station to nearby residential areas and extending the Bay Trail and spur trails through the site. Planting and landscaping palettes have been developed for the community to create a strong sense of place and enhance community aesthetics. An extensive set of lighting standards also has been developed.

New infrastructure will be necessary to facilitate the Dumbarton TOD project. The Specific Plan calls for improving several off-site intersections. It also includes detailed guidelines for the design of local streets, with a focus on maximizing amenities for pedestrians and bicycles.

A Backbone Circulation Plan has been adopted indicating the approximate alignment of future roads. This includes a western extension of Central Avenue and improvements to Enterprise Drive, Willow Street, and Hickory Street. In addition, a Street Standards Table has been adopted indicating street widths and right-of-way treatments (cross-sections) for varying street types. The Circulation Plan includes pedestrian circulation routes, a bike route network, and potential bicycle parking areas. Roundabouts are proposed to accommodate through-traffic at major intersections. Future projects in the Specific Plan area will also be required to contribute to the funding of a new railroad overcrossing of the Union Pacific tracks on Central Avenue. Although this crossing is located one mile east of the Specific Plan area and a new overcrossing is not essential to facilitate the Specific Plan, this improvement will help maintain traffic flow and provide for emergency access as this area is developed.

An expanded network of water, sewer, and storm drainage lines will be required to serve new homes and businesses in this area. While trunk utilities exist throughout the area, extensions and upgrades will be required to provide sufficient capacity and serve individual development parcels. The Specific Plan identifies the backbone utility network, as well as principles for the planning and design of infrastructure. Grading and drainage improvements are particularly important, both to reduce on-site flood risks, and to maintain water quality. Private utilities, such as electrical distribution and cable, are also discussed in the Specific Plan. There is an extensive network of

easements through the site, including pipelines and other transmission facilities requiring relocation.

A range of strategies will be needed to pay for infrastructure construction in the TOD area, potentially including cash, loans, assessment districts, benefit districts, capital improvements, and state and federal grants. A variety of phasing options also may be explored. Since funding of the Dumbarton Rail itself remains uncertain, the City will continue to promote interim high-quality transit service to the area, including bus service to BART and the West Bay.

SOUTHWEST NEWARK RESIDENTIAL AND RECREATIONAL PROJECT

This is the largest area proposed for future development in Newark, comprising 636 acres in the area bordered by Mowry Avenue on the west, Stevenson Boulevard on the east, Cherry Street on the north, and Mowry Slough on the south. The Union Pacific Railroad bisects the area.

Previous General Plans for Newark referred to the land north of the railroad as "Area 3" and the land south of the Railroad as "Area 4." Area 3 was originally 298 acres, but 221 acres of this total has been committed to other land uses, including the Newark campus of Ohlone College, Sportsfield Park, and the Stevenson Point Technology Park. The remaining 77 acres, which is located along the south side of Cherry Street west of Stevenson Boulevard, was vacant as of 2013.

The area south of the railroad tracks is 559 acres. Most of the land is vacant, although the area near the end of Mowry Avenue includes an auto-dismantling yard. The remainder of this area has been disked and graded for agricultural use since the early 1900s. The entire area has been designated for residential use for over 20 years. A ballot measure to change the designation to conservation and open space land uses was rejected by Newark voters in 1999.

A Specific Plan for the 636-acre area was adopted in 2010. The Plan calls for the development of up to 1,260 housing units, a major recreational facility such as an 18-hole golf course, and the dedication of conservation open space on some of the low-lying areas south of the railroad tracks. An area facing Cherry Street just east of Ohlone College has been set aside for a new 600-student elementary school and a new neighborhood park. The rest of former Area "3" has been designated for Low-Medium Density Residential uses on the General Plan Map. The Specific Plan



envisions single-family lots ranging from 3,150 square feet to 4,800 square feet, although the flexibility exists to transfer the allowable density within this area to facilitate multi-family housing construction on a portion of the site.

Development of single-family lots is planned south of the railroad tracks. Some of the area designated as "Low Density Residential" on the Map will be conserved as wetland habitat and some will be improved with recreational facilities. The Specific Plan divides the area south of the tracks into four lettered sub-areas. Of these four areas, one is planned for housing, one may be used for a golf course or similar recreational amenity, one is to be conserved as open space, and one may be used for either recreation or housing.

In the event a golf course is developed, it is envisioned as an 18-hole public course. A golf course could provide an amenity that is lacking in Newark today and would round out the range of recreational opportunities available to those who live and work in the city. It could also be an economic development asset that can attract businesses, executive housing, and higher quality retail uses nearby. Ancillary facilities such as a clubhouse, banquet facility, driving range, and maintenance buildings, could potentially complement such a facility. Construction of a golf course is contingent on its fiscal feasibility, market demand, and other factors. In the event a golf course is not developed, another citywide recreational amenity should be provided here.

The Specific Plan includes residential street and intersection standards, along with plans for a railroad overpass at Stevenson Boulevard. The Stevenson Avenue Bridge should include a 12-foot travel lane in each direction, adjacent to 5-foot bike lanes. One side of the bridge will have a sidewalk for pedestrians. A pedestrian and bicycle bridge across the Alameda County Flood Control Channel is also planned, connecting the site to Ohlone College. A multi-use trail is also proposed across the southern part of the site, providing a component of the Bay Trail.

Elevations within the Southwest Newark area range from sea level to about 20 feet, with a substantial portion of the area south of the railroad located at less than 10 feet above sea level. A grading and fill plan for this area will be prepared to ensure that future development areas are elevated above the base flood elevation. Building pads of occupied structures will be at least 11.25 feet above mean sea level (msl), with the finished floor at least six inches above the building pad. The top of curb grades

for residential streets will be no less than 10 feet above msl. Detailed grading and stockpile management plans will be required before construction is approved and stormwater management plans will be required to contain runoff. A new network of water, sewer, and storm drain lines will be constructed to serve the development, supplemented by related infrastructure such as pump stations.

Landscaping guidelines are included in the Specific Plan. These call for plants which respond to the wind, cooler temperatures, and soil conditions found on the site. A dual water system will be developed so that recycled water and other non-potable water sources may be used for irrigation potable when they become available from the Alameda County Water District.

The Specific Plan places a strong emphasis on conserving remnant natural habitat areas on the site, and restoring the seasonal wetland functions of some of the low-lying areas. Some of the poorer quality wetlands and aquatic habitat areas south of the railroad tracks may be filled, with mitigation provided by restoring wetlands nearby or elsewhere. The exact location and amount of wetlands to be conserved or impacted by development, and the exact location and configuration of residential lots and other recreational uses, will be determined through subsequent entitlement processes and studies.

OLD TOWN NEWARK

Old Town is the historic heart of Newark. Its grid of streets reflects the original the Town Plan from 1878. Its land use pattern was already well-established by the time Newark incorporated in 1955. The area includes a diverse mix of uses, including single and multi-family housing, retail stores, restaurants, service businesses, light industry, public buildings, and churches.

Old Town has been the subject of planning studies dating back to the 1960s. The overarching goal of these studies has been to strengthen the area's role as the commercial and cultural center of Newark. Various studies have sought to revitalize the Thornton Avenue shopping district, promote infill housing opportunities, improve public spaces, and enhance the streetscape. However, there has not been a comprehensive effort to address all of these topics in a single, unified Area Plan in over 20 years. Such a plan is recommended by the General Plan as a way of better achieving the objectives for Old Town.

In 1990, the City adopted the Historic Newark Area Plan (HNAP) as part of the City's General Plan. The HNAP defined a vision of Old Town as a "bustling commercial district" with "modern shopping and services in a setting reminiscent of a turn-of-the-century small town downtown." Key goals included protecting single-family neighborhoods, setting high quality standards for new multi-family housing, revitalizing and beautifying Thornton Avenue, encouraging development on key vacant sites, and preserving historic buildings and historic character. Most of the goals and policies set forth in 1990 continue to be applicable today. However, the growth of the city and recent trends in shopping and housing require new strategies to achieve these goals.

More recent studies for Old Town include an Economic Development Strategy Plan in 1999 and an Infill Housing Study in 2008. Again, the focus of these studies was on improving the streetscape, enhancing public space, and making Old Town a place to drive "to" rather than "through." This was to be achieved in part by creating a municipal parking lot serving the area's businesses and creating a public plaza between Ash Street and the train tracks (where a new fire station now stands). Prior plans for Old Town also called for a public park within the large open railroad junction between Sycamore and Ash Streets.

The City will continue to strengthen the Old Town commercial district as a destination, with a core retail area extending along Thornton from Ash Street to Olive Street, and more limited commercial areas from Olive to Cherry Street on the east and from Ash to Elm Streets on the west. The City strongly encourages mixed-use development in the area between the railroad and Olive, including ground floor retail with housing above. There is particular interest in attracting a grocery store, restaurants and cafes, and additional specialty shops to the area. There would be a greater variety of uses allowed on the blocks of Thornton east of Olive, in order to keep the retail "core" focused on the area between Olive and Ash Streets.

By filling in vacant lots and attracting more active ground floor uses, the area can become more appealing to residents and visitors. This will attract investment and can reduce the number of vacant buildings. Old Town's revitalization should be accomplished without losing the "country" feel of the area, adversely affecting existing small businesses, or using eminent domain. The City should also work with the railroad to improve the appearance and condition of the large railroad-controlled properties within this area, potentially adding new fences or walls.



Because of the age and diversity of its housing stock, Old Town plays an important role in helping Newark meet its housing goals. It has the oldest homes in the city and the greatest variety of housing types, affordability levels, and densities. The City will continue to explore programs which assist residents in older homes with maintenance and rehabilitation, while encouraging high standards of upkeep for rental properties. Existing single-family homes and blocks should be protected from tall or bulky structures through zoning standards and design guidelines. Buildings should be no more than three stories tall, although some exceptions may be considered to achieve other General Plan goals.

Several specific properties in Old Town have been identified as Housing Opportunity Sites in the Newark Housing Element. Further consolidation of these properties is encouraged to create more viable development sites. New housing on such sites should enhance the existing mix of units and should include market-rate and affordable units, and rental and owner-occupied units. Bringing more residents into the area can provide an expanded customer base to support retailers in the Old Town district, and create a stronger sense of Old Town as the heart of the city.

Public investment will be needed to catalyze private investment in the Old Town area. This should include streetscape and façade improvements along Thornton Avenue, improved street lighting, and new street furnishings such as benches and seating areas. Sidewalks and curbs should be improved so they are more consistent and connected, both on Thornton Avenue and along the side streets. Funding for tree planting and landscaping improvements should also be pursued, utilizing a variety of grant and capital improvement program options. In the recent past, several sites have been studied for a pocket park or plaza in this area; alternatives should continue to be evaluated. The plaza should provide a focal point for Old Town and an opportunity to commemorate Newark's history.

Parking and circulation improvements should also be pursued. This could include the development of a shared parking lot for use by area businesses, and opportunities to calm (or slow) traffic on Thornton Avenue. Crosswalks and other improvements should make the area safer for bicyclists and pedestrians. Old Town Newark was designated as a Priority Development Area by the Association of Bay Area Governments (ABAG) in 2007, enhancing its competitive position for attracting regional transportation dollars for such improvements. The area along Thornton Avenue between Cherry Street and Newark Boulevard may provide additional opportunities for new infill development in the next 20 years. Some of the parcels in this corridor are large and contain single story commercial, medical, or institutional buildings surrounded by parking. Other parcels include small residences, some of which have already been converted to commercial use.

GREATER NEWPARK MALL

Greater NewPark Mall includes the 125-acre area bounded by Cedar Boulevard on the north and west, Interstate 880 on the east and Balentine Drive on the south. Approximately half of this area consists of the Mall itself, including the perimeter parking lots. The Mall is ringed by related commercial uses, including restaurants, hotels, office buildings, and shopping centers. There are also several vacant sites and buildings in the area, and the Shirley Sisk Eucalyptus Grove Park.

NewPark Mall includes over 1.1 million square feet of floor space and is anchored by Macy's, JC Penney, Sears, and Burlington Coat Factory. Since it opened in 1980, it has been the largest enclosed retail center in Southwest Alameda County and one of the largest regional malls in the Bay Area. Several of its anchor tenants have closed or changed hands in recent years, including Target which closed in 2012. Changing retail trends and competition from newer centers like Pacific Commons and Union Landing have diminished the Mall's pre-eminence in the region. This has prompted the City to explore new ideas for sustaining the Mall's role as an essential part of Newark's economy. The Mall has been Newark's principal shopping area for three decades and is an important source of revenue and employment.

In 2012, the City began a visioning process for Greater NewPark Mall. The objective was to explore the unrealized potential of the area, along with ways to enhance the success of its retail businesses. Improving the retail climate around NewPark would not only provide economic benefits, it would also create an exciting destination within the city. The General Plan calls for completion of the visioning process, to be undertaken collaboratively with property owners and local businesses, to explore options for achieving these outcomes.

Ultimately, new land uses could be considered in the NewPark area to complement the area's retail focus. Taller buildings may be appropriate in this area to create visual landmarks and accommodate a more intense level of development than would be appropriate in Old Town, Four Corners, and other commercial districts.



The NewPark area also provides an opportunity for high-quality architecture that creates a stronger sense of identity for Newark. Building elevations should incorporate a variety of forms and textures, and building materials should create a cohesive character for the area.

OTHER CHANGE AREAS

In addition to the areas listed above, the Newark Housing Element identified a number of areas where land use changes are expected in the coming years. These are profiled below.

CIVIC CENTER

The Newark Civic Center provides a unique development and place making opportunity. The Civic Center was built in 1966 and includes City Hall, the Public Library, and an adjoining city park. City Hall does not fully meet Newark's modernday administrative and municipal needs and has a number of seismic safety and maintenance deficiencies. It could potentially be rebuilt through a public-private partnership, with the City providing land to offset developer costs. The option of colocating School District administrative offices and/or meeting facilities in this complex has been discussed and should continue to be explored. Other amenities such as a performing arts center and a rebuilt public library could be incorporated in the design plan.

Although the City Hall site is designated as "Public/Institutional" on the General Plan Map, the City strongly supports a design concept which incorporates higher density residential use. Housing with densities of at least 30 units per acre should be included in any future site plan. To the extent feasible, the design of a Civic Center complex should also include plans for the parcels between the Civic Center and Thornton Avenue. Ideally, the area should be planned as a single, phased development, helping link City Hall to Old Town and creating a stronger sense of the entire area as the center of Newark. At least 215 new high-density housing units are anticipated in this area; additional housing units may be included if feasible.

CEDAR BOULEVARD FROM MOWRY TO CENTRAL

Over the next decade, the east side of Cedar Boulevard between Central Avenue and the Greater NewPark area is envisioned as transitioning from commercial and industrial uses to medium and high density residential uses. This area presently



contains two motels, several heavy equipment and machinery service lots, auto service businesses and body shops, a camper repair business, an RV storage lot, an overhead door company, mini-warehouses, and similar businesses. The City has already approved 200 townhomes in this area, and the 2010 Housing Element identified the potential for over 360 more multi-family units on the industrial sites and 257 more units on the motel sites.

The General Plan designation of this area was changed through the 2010 Housing Element. The former industrial sites are shown as Medium Density Residential on the Land Use Map and the motels are shown as High Density Residential. Development in this area will need to incorporate visual and acoustical buffers due to proximity to the Nimitz Freeway. Future air quality studies may be required on a project-by-project basis.

MAYHEWS LANDING ROAD AND NEWARK BOULEVARD

The intersection of these two thoroughfares has historically been developed with commercial uses. Its character has become more residential due to changing market conditions and retail development elsewhere. The 5.4-acre Purity Plaza (Fry's) site has already been redeveloped with housing, and the former gas station on the corner has been closed. The gas station site has been cleaned to residential standards and is designated for Medium Density Residential uses. Across the street is the underperforming Old Town Shopping Center. The 5-acre site is likewise designated for Medium Density Residential use, creating an opportunity for townhomes or garden apartments in the future. A buffer of single-family homes should be included in the rear portion of the development, to provide a transition to the lower density neighborhood to the west.

NEWARK UNIFIED SCHOOL DISTRICT FACILITIES

The NUSD owns a number of properties in Newark which may transition to new uses in the next two decades. Among them are the NUSD administrative offices, which are located on a 3-acre site on Musick Avenue just south of Musick School. Although the property has not yet been declared excess by the School District, it has been designated for Low Density Residential Uses on the Land Use Map. This would permit its reuse for single-family homes in the event the School District offices are relocated.

Several blocks to the west is the 7.7-acre Ruschin School campus. The school was built in the 1970s but has not been operated as an elementary school since 1989. The School Board has discussed the possible sale of the site. It has been designated for Low Density Residential uses on the Land Use Map. In the event the site is redeveloped, a portion of the school playfields should be preserved as a neighborhood park.

The third school property with the potential for change is the 7.3-acre NUSD Corporation Yard, located at the west end of Birch Street. The site is likewise designated for Low Density Residential use on the Land Use Map, and could support an estimated 53 homes. Such a development would only occur if the School District relocates its Corporation Yard to another site and declares the site excess.

Development on any of the NUSD properties would require detailed site planning, environmental, and traffic studies, and would be the subject of subsequent evaluations. These evaluations would include public hearings and opportunities for public comment, as well as specific design proposals for each site. In each case, future development should be comparable in character and density to the surrounding single-family neighborhoods. In the event that these sites are not sold, the existing School District uses are also considered compatible with the Low Density Residential designation.

DESIGN AND PRESERVATION

This section of the Land Use Element addresses the factors that define Newark's character, including its architecture, streets and public spaces, landscapes, and historic buildings. Collectively, these features create a sense of place that distinguishes Newark from other Bay Area cities. One of the goals of the General Plan is to strengthen this sense of place so the city is perceived as more distinctive from neighboring cities. Newark should be a place that people remember and want to return to. The City is especially interested in establishing stronger connections to San Francisco Bay, reinforcing Old Town as a historic community center, and reshaping the NewPark vicinity to make it a more vibrant regional destination.

CREATING A STRONGER SENSE OF PLACE

An important strategy for improving Newark's distinct identity is to strengthen city gateways. Key gateways include the portions of Thornton Avenue and Newark Boulevard between State Route 84 and Jarvis Avenue, and the sections of Thornton



Avenue, Mowry Avenue, and Stevenson Boulevard just west of Interstate 880. The City has invested in gateway signage and landscaping at most of these locations, and has installed banners on light poles to create a sense of arrival. Newark also has an Art in Public Places program, intended to beautify the community and provide space for creative expression. Several outdoor sculptures have been installed at the Silliman Recreation Center and at the intersection of Newark and Jarvis. The potential for additional public art exists throughout the community and should continue to be explored.

Newark's street system also shapes the City's identity. It provides Newark's defining views and vistas and provides a visual connection between the "public realm" and private property. Overall, Newark's streets are attractively landscaped and well maintained. Thoroughfares include planted medians and mature trees, which enhance aesthetics, provide shade, reduce reflected heat, and soften the visual quality of the street environment. Newark has been named a "Tree City" by the National Arbor Day Foundation for the last 25 years. The City has also invested in street furnishings, such as lighting, benches, and trash cans, to improve safety and provide functional benefits for pedestrians, bicyclists, and motorists. Additional investment is encouraged, not only to make the streets safer and more functional, but also to better define commercial districts and make the city more welcoming to pedestrians.

Establishing a stronger sense of place is a neighborhood-level goal as well as a citywide goal. While some of Newark's neighborhoods, such as the Lake District and Old Town, have a distinct identity, others are more homogeneous and are not clearly distinguished from one another. The General Plan supports greater recognition of the different neighborhoods and business districts that comprise the city. This includes shopping centers and technology park areas, as well as residential areas. Areas such as Pacific Research Center, Stevenson Point Business Park, Four Corners, and NewPark Mall will continue to evolve in the future, with high quality contemporary architecture that enhances the city's reputation as a great place to work and do business.

Finally, Newark's location as a bayside city should become a more integral part of its identity. Opportunities to improve connections to the Bay may be realized through development of the Dumbarton TOD and Southwest Newark Residential and Recreational Project, and through continued development of the Bay Trail and spur





trails. The Bay and its sloughs are important visual and recreational resources, and will be more prominently highlighted as community assets in the future.

LAND USE COMPATIBILITY

One of the purposes of the General Plan is to maintain and enhance the character of Newark's established residential neighborhoods. This does not mean that existing neighborhoods will remain exactly as they are today. Property owners will be encouraged to invest in their homes and new projects will be encouraged on vacant lots and parcels that are not developed to their fullest potential. Homes will continue to be expanded and adapted to reflect changing design trends and household needs. The goal is to ensure that alternations and infill development respects its context, enhances neighborhood character, and mitigates impacts on surrounding properties.

Most of Newark is characterized by low-density residential neighborhoods, with most homes constructed between the mid-1950s and late 1970s. Homes are typically one to two stories with front lawns and backyards, creating a suburban character that is valued by residents. Infill development should generally be consistent in scale and character with what is around it, but does not need to match it exactly. Architectural variety and diversity is encouraged. Factors such as privacy, noise, shadows, landscaping, views and the quality of exterior materials will be important considerations in determining what constitutes a compatible structure or addition. Non-residential uses such as churches and large childcare centers will continue to be allowed in residential areas, as they are today. The City will continue to administer permitting procedures which ensure that the public is involved when such facilities are proposed, and that impacts on parking, traffic, noise, and other factors are appropriately mitigated.

Beyond established residential neighborhoods, Newark has an opportunity to introduce new forms of development and new architectural themes that do not exist in the city today. This is particularly true in the Dumbarton TOD area, but it is also true around NewPark Mall, in Southwest Newark, and even in the city's industrial districts. There are opportunities to explore more innovative approaches to community design in these areas. These locations provide opportunities for taller buildings, contemporary architecture, and new landmarks which help define Newark. There may also be opportunities to "reinvent" older neighborhood shopping centers, particularly those that are dated or have high vacancy rates. Such centers can potentially be redesigned so they are more pedestrian-oriented, better connected to nearby neighborhoods, and provide gathering places for the neighborhoods they serve.

HISTORIC PRESERVATION

Newark has had an official Historic Preservation Program since 1989. The City's Municipal Code includes procedures for the designation, modification, and demolition of historic resources. The City also has established criteria to designate historic resources as primary or secondary landmarks depending on such factors as the age of the resource and its relationship to a historic event, person, or architectural style.

The greatest concentration of older buildings is in Old Town, which is the area roughly bounded by Cherry Street on the east, Spruce Street on the west, the Newark Slough (flood control channel) on the north and the railroad on the south. The heart of this area is the Thornton Avenue commercial district between Ash Street and Olive Street. However, the entire Old Town area includes homes and commercial buildings representing a variety of architectural styles including Craftsman Bungalows, Mission Revival and Queen Anne cottages, and traditional "Main Street" style commercial buildings. The 2010 US Census reported that there were 343 homes in Newark built in 1939 or earlier.

When the City of Newark established its preservation program, it identified 42 buildings of historic merit in Old Town. Two of these—St. Edward's Church/Rose of Sharon Chapel (7160 Graham Avenue) and the James Graham residence (7705 A/B Thornton)—were listed on a local register. However, neither these structures nor any of the others have been formally nominated to the National Register of Historic Places or the California Register of Historic Resources. There may be other potentially eligible structures in Newark, including some of the city's older industrial buildings and transportation facilities related to the railroad and Dumbarton Bridge. The railroad has been in place since 1878, and the first rail bridge across the Bay dates to 1910. In addition, much of the city's building stock dates from the mid-20th Century; such structures are now more than 50 years old, and some may meet state and federal criteria for historic significance.



The importance of historic resources will grow as Newark matures and more structures become eligible. Preservation not only provides a link to the past and a reminder of local history, it also is an important part of establishing a unique identity for the city. Preservation can be an economic development tool, a sustainable development tool, the basis for heritage tourism, and a source of civic pride. General Plan policies seek to increase recognition of historic resources and avoid demolition, either purposefully or by neglect through disinvestment. Policies further seek to reinforce the historic character of Old Town by respecting, and where appropriate replicating, traditional architectural styles and elements. Greater awareness of local history is also strongly supported, through educational programs, special events, markers, and walking tours.



GOALS, POLICIES, AND ACTIONS

QUALITY OF LIFE

GOAL LU-1	Maintain a desirable quality of life in Newark by preserving
	a small town, neighborhood-oriented atmosphere and
	sustaining a balanced mix of land uses.

POLICIES

- POLICY LU-1.1 Balance of Uses. Maintain a reasonable balance of land uses in the city so that residents can live close to where they work and satisfy their shopping, educational, personal, health, entertainment, and recreational needs close to home.
- POLICY LU-1.2 Growth Focus Areas. Achieve a future growth pattern which includes new neighborhoods on vacant land along the southern and western edges of the city, and infill development in transit-served areas such as Old Town and the Greater NewPark Mall Area. Zoning and development review decisions should recognize these areas as the priority locations for growth and change over the next 20 years.
- POLICY LU-1.3 Jobs-Housing Balance. Seek to balance housing and job growth. The City should strive to have a roughly equal number of jobs and employed residents, with a mix of housing types that meets the needs of the local workforce.

In 2010, ABAG estimated that the Bay Area had 2,608,000 households and 3,385,000 jobs, or a ratio of 1.30 jobs per household. In Newark, the ratio was 1.33, which is just above the regional average. The City will continue to strive to maintain a jobshousing ratio which is close to the regional average, yielding roughly equal numbers of employed residents and jobs. Job and housing opportunities should be expanded in a complementary manner.

POLICY LU-1.4 Coordinating Land Use and Transportation Decisions. Coordinate land use and development decisions with the capacity of the transportation system and plans for future transportation improvements.

See the Transportation Element for policies about improving bus service to Newark's employment centers.

POLICY LU-1.5 Technology Focus. Promote the city as a good location for technology businesses and clean industry, capitalizing on Newark's location within Silicon Valley.

POLICY LU-1.6 Strengthening the Retail Base. Diversify the retail base of the city to create jobs, generate tax revenue to support City services, and enable residents and workers to find the goods and services they need without leaving Newark.

POLICY LU-1.7 Executive Housing. Develop and maintain a range of housing types in the city, including executive housing which provides residents with opportunities for "move up" housing within the city.

POLICY LU-1.8 Housing Opportunity Sites. Ensure that adequate sites are provided for the private and non-profit sectors to develop housing for seniors, persons with disabilities, and lower income households. Such housing should be well designed and managed, and located in a manner that is compatible with existing uses and neighborhood character.

- POLICY LU-1.9 Park and Recreation Expansion. Expand park and recreational lands and facilities to keep pace with population growth and support the leisure time needs of Newark residents.
- **POLICY LU-1.10** Vacant and Underutilized Sites. Encourage the development of Newark's remaining vacant and underutilized sites for their highest and best use, consistent with the designations shown on the General Plan Diagram. Future growth in the city should generally be directed to the areas identified in this General Plan.
- **POLICY LU-1.11** Centers. Create vibrant centers within Newark that provide focal points and gathering places for neighborhoods, and create identity and a stronger sense of place for the city. Centers may include shopping areas, parks and public facilities, mixed-use districts, and other amenities that meet the diverse needs of Newark residents and visitors.
- POLICY LU-1.12 Large-Scale Development. Plan and design Newark's remaining large-scale development sites in a manner which sensitively integrates these areas with existing uses and adjacent neighborhoods, and which includes a mix of uses that makes these areas more conductive to walking, bicycling, and transit use.

- POLICY LU-1.13 Easements. Limit activities within public utility easements such as the Hetch Hetchy Aqueduct right-of-way to open space, parking, open storage, linear parks, and utility functions only.
- POLICY LU-1.14 Cost Recovery. Ensure that new development generates sufficient revenue and pays its reasonable share to offset its cost impacts on public services and facilities.
- POLICY LU-1.15 Mixed-Use. Provide opportunities for development combining residential and commercial uses (e.g. "mixed-use" development) in areas where the impacts of one land use on the other and the impacts on nearby neighborhoods can be sufficiently mitigated.
- POLICY LU-1.16 Planned Unit Development. Use the planned unit development approach or form based zoning codes to accommodate attractive, creative development on sites where traditional zoning standards do not achieve the best design solution.
- **POLICY LU-1.17** Sustainable Development Emphasis. Ensure that new development incorporates green building and sustainable design principles and encourage renovation of existing development to use water and energy more efficiently. Newark will reduce dependence on fossil fuels by citing homes, jobs, shopping, and services within walking distance of each other, and developing a circulation network that encourages walking, bicycling, and transit use.

Actions

- ACTION LU-1.A Zoning Update. Update the Newark zoning regulations as needed to implement General Plan Map and policy changes. This could include the development of additional mixed-use districts to implement General Plan Map designations and form based zoning codes. Newark's zoning regulations should ensure that the city remains an attractive location for business, while protecting the quality and value of Newark's neighborhoods.
- ACTION LU-1.B Environmental Review. Use established environmental review processes and programs to minimize the potential impacts of any new development to levels that are determined acceptable.

- ACTION LU-1.C Fiscal Impact Studies. Where appropriate, require fiscal impact analyses to evaluate the public facility needs and costs of new development, the likely revenue to be generated by that development, and the sources of financing available for new public facilities.
- ACTION LU-1.D Minimum Densities. Set minimum residential densities in all areas designated on the General Plan Diagram for medium- to high-density residential use, and for mixed-use development. The minimum densities will ensure that this land supply is used as efficiently as possible and will help ensure that the city meets its adopted housing objectives.
- ACTION LU-1.E Civic Center Concept Plan. Develop a concept plan for the Newark Civic Center which seeks to strengthen the area's role as the center of civic life in the City. The concept plan should accommodate a new Public Library, City Hall, the Police Department, a civic plaza and park, and opportunities for other compatible uses such as multi-family housing. The possibility of co-locating School District Offices in this complex, along with joint use of certain facilities such as the City Council and School Board Chambers, should be explored.
- ACTION LU-1.F Strategic Plan and Budget. Continue to maintain a Newark Strategic Plan which identifies specific objectives guiding the five-year forecast and biennial City budget. The Strategic Plan and budget shall be consistent with the goals and objectives of the General Plan.

LAND USE COMPATIBILITY

GOAL LU-2 Ensure compatibility between adjacent land uses.

Policies

- POLICY LU-2.1 Neighborhood Conservation. Protect single-family neighborhoods from substantial increases in density and new land uses which would adversely affect the character of the neighborhood.
- **POLICY LU-2.2** Context-Sensitive Design. Require that new structures, additions, and major renovations are aesthetically compatible with existing structures and the surrounding context, and contribute positively to the visual quality of neighborhoods.

- POLICY LU-2.3 High-Quality Development. Maintain standards for medium-density, high-density, and mixed-use development that ensure high quality development and adequate buffering and screening from nearby lower density uses.
- **POLICY LU-2.4 Buffering from Transportation Facilities.** Ensure that the design of new residential development near rail lines, truck routes, freeways, or major thoroughfares includes setbacks, landscape screening, and other provisions to minimize exposure to negative impacts such as noise and air pollution.
- POLICY LU-2.5 Transitional Land Uses. Incorporate transitional land uses as buffers between land uses which are potentially incompatible. For example, this could include office uses as a buffer between industrial and residential areas, and medium density residential uses as a buffer between high and low density residential uses.
- POLICY LU-2.6 Scale Transition. Avoid abrupt transitions from taller buildings to lowrise buildings, especially where commercial and higher density housing abuts neighborhoods characterized by one-story homes. Buildings taller than three stories should be required to step down in height when located adjacent to single-family lots. Overpowering contrasts in scale and height between adjacent lots should be avoided.
- **POLICY LU-2.7 Design Guidelines.** Maintain design guidelines and a design review process that applies to building and site design throughout the city.
- POLICY LU-2.8 Relating Density to Transit Service. Allow higher residential densities in areas with more frequent and reliable public transit service, and ensure that public transit services are expanded in areas where growth is projected.
- POLICY LU-2.9 Home-Based Businesses. Permit home-based businesses, provided that off-site impacts are minimized and the residential nature of structures and their surroundings is not compromised.

Home-based businesses, also called home occupations, are defined by the Newark zoning code. They include business services provided from an individual's residence, and the hand-crafting of products in an individual's home. Typical home-based businesses might include consulting practices, accountants, artist studios, photographers, music instructors, and similar activities. Home-based businesses are not permitted to have employees other than the resident, must be operated entirely inside the home, and must not alter the exterior appearance of the residence.

POLICY LU-2.10 Second Units. Recognize second units (in-law apartments) as an important part of Newark's housing supply and continue to allow such units, subject to parking, ownership, and size standards that are consistent with State law.

- POLICY LU-2.11 Accessory Uses in Employment Districts. Allow for accessory and secondary activities in Newark's business parks and industrial areas which meet the needs of the local workforce. This includes such activities as banks, cafes, printers, office supply stores, and similar uses that support local business.
- POLICY LU-2.12 Group Home and Day Care Uses. Continue to allow small group homes for disabled persons and seniors in all residential zones, consistent with state housing law. In addition, continue to allow large group homes and large family daycare facilities, subject to use permit requirements which ensure that neighborhood impacts are minimized.

See also Safety Element policies on minimizing exposure to noise and hazardous materials. See the Conservation and Sustainability Element for policies on green buildings.

Actions

- ACTION LU-2.A Development Regulations. Administer development regulations which ensure that infill development and renovation projects are compatible with adjacent uses. This includes application of setback and height requirements, parking requirements, and other standards aimed at creating compatible uses, protecting public safety, and maintaining neighborhood quality.
- ACTION LU-2.B Design Review Process. Use the design review process to consistently apply high standards of design to residential development, and to ensure that such development has adequate landscaping, open space, parking, and recreational facilities.
- ACTION LU-2.C Conditional Use Permits. Use conditional use permits to improve compatibility between uses and to establish limitations on activities which could create potential adverse effects.

ACTION LU-2.D Ecological Protection. When development occurs within 100 feet of wetlands or other ecologically sensitive areas, require mitigation programs which preserve ecological integrity. Such programs may include public education, limitations on off-leash dogs, and other domestic pets, signage along levee pathways, avoidance of excessive night lighting, and setting aside sufficiently large areas as undisturbed habitat.

COMMUNITY STANDARDS

GOAL LU-3 Protect the quality of Newark's residential neighborhoods.

POLICIES

- POLICY LU-3.1 Community Preservation. Encourage high standards of property maintenance and yard care, and rapid abatement of unauthorized exterior storage, illegal dumping, abandoned vehicles, graffiti, weeds, and other forms of neighborhood blight.
- POLICY LU-3.2 Involvement of Homeowners Associations and Neighborhood Groups. Engage Homeowners Associations, Neighborhood Groups, and civic organizations in efforts to abate nuisances and improve the appearance of the community.
- **POLICY LU-3.3 Housing Investment.** Encourage continued investment and improvement in Newark's existing housing stock. Property owners should be encouraged to maintain their properties and bring substandard housing units up to building code standards.
- POLICY LU-3.4 Property Renovation. Upgrade existing structures and sites, particularly those located along major thoroughfares, where deficiencies in appearance can create a negative image of the city and/or impact the value of property.
- POLICY LU-3.5 Non-Conforming Uses. Work toward the eventual replacement or relocation of non-conforming industrial and heavy commercial uses located within areas designated for residential use on the General Plan Diagram.
- POLICY LU-3.6 Multi-Family Property Management. Require responsive, effective management in new multi-family residential projects to ensure that such projects add quality and stability to Newark.

Actions

- ACTION LU-3.A Community Preservation Program. Maintain a Community Preservation Program that identifies and investigates hazards and code violations, notifies property owners of violations, and carries out fair and orderly abatement.
- ACTION LU-3.B Blight Abatement. Continue programs to maintain community standards, including enforcement of illegal dumping regulations, graffiti removal, and other programs to abate blight.
- ACTION LU-3.C Housing Rehabilitation and Repair Programs. Publicize Alameda County's housing rehabilitation and minor home repair programs, and encourage participation in these programs by Newark property owners.
- ACTION LU-3.D Beautification Programs. As funding allows, undertake beautification and revitalization programs which improve the appearance of existing development through landscaping, streetscape improvements, and facade improvements.
- ACTION LU-3.E Boarded-up Homes. Investigate alternatives for addressing problems with houses that are boarded up or have persistent code violations.
- ACTION LU-3.F Multi-Family Code Enforcement. Explore the feasibility of an inspection program to ensure that multi-family properties comply with City building, sanitation, property maintenance, and safety codes.

COMMUNITY DESIGN AND IDENTITY

GOAL LU-4Enhance Newark's identity as a city of high quality
development that is distinctive from other cities in the Bay
Area.POLICIESPOLICY LU-4.1Strengthening Local Identity. Create a more cohesive and unifying
streetscape and design theme in Newark's commercial districts as a
way of strengthening their sense of place and distinguishing them
from each other.
- **POLICY LU-4.2 Connectivity.** Improve connectivity between neighborhoods and commercial districts so that the city's shopping areas function as neighborhood gathering places and focal points. Over time, shopping centers which are oriented exclusively to auto traffic should be redesigned so they are more pedestrian friendly and better integrated with the uses around them.
- **POLICY LU-4.3** Urban Centers. Create locations in Newark which are more urban and pedestrian-oriented in character than they are today. Such areas include the future Dumbarton Transit Oriented Development and Old Town. These areas should be transformed over time into mixed-use centers with retail, office, civic, and higher density housing uses.
- **POLICY LU-4.4** Greater NewPark Area. Modernize the Greater NewPark Area to create a vibrant regional retail location which provides urban amenities and gathering places. A mixture of higher density housing, office, hotel, entertainment, civic, and other uses should be encouraged, to the extent that these uses enhance regional retail as the primary use and assist in the area's revitalization.
- **POLICY LU-4.5** Gateways. Maintain high standards for the design and appearance of development at major gateways into Newark, and along major arterials. Public art, landscaping, paving, lighting, and signage should be used to create a positive visual impression at these locations.

Gateways make an important first impression and can define a city's image for residents, businesses, and visitors. They help define the edges of the city and establish it as a unique place. Design elements such as landscaping, contouring, signage, entry monuments, and lighting can enhance visibility and make city entry points more dramatic and memorable. Newark's gateways should convey an image of high quality and lasting value.

- **POLICY LU-4.6** Streetscapes. Ensure that medians, sidewalks, planting strips and other areas within the right-of-way of major thoroughfares are attractively landscaped and well maintained.
- **POLICY LU-4.7** Lighting. Manage exterior lighting to reduce potential light and glare impacts, improve public safety, and enhance the character of the streetscape.

Exterior lighting includes streetlights for roads and parking areas, pedestrian lighting for sidewalks and walkways, building

illumination, and accent lighting on special architectural and landscaping features. Lighting helps shape the character of the city and its neighborhoods through illumination level, light fixture type, finish, color, height, design, and location.

- POLICY LU-4.8 Signage. Require high quality materials and coordinated, consistent design for signage, including business signs, street signs, public and institutional signs, and wayfinding signs along local streets and trails.
- POLICY LU-4.9 Public Art. Use public art to commemorate Newark's cultural diversity, history, and unique character.
- **POLICY LU-4.10 Civic Space.** Develop spaces in the city which contribute to community building and social interaction. This should include parks, plazas, and other public areas, as well as gathering places within private development that are open to the public.
- **POLICY LU-4.11** Activating the Street. Incorporate streetscape features in the Old Town Newark, NewPark Mall, and future Dumbarton TOD areas that support active street life and a stronger sense of place. This includes wider sidewalks, ground floor retail stores with display windows oriented to pedestrians, outdoor dining areas, special landscaping and lighting standards, street furniture, and other amenities. Streetscape improvements should minimize the impacts of vehicle traffic on adjacent properties and make walking more enjoyable and comfortable.
- POLICY LU-4.12 Fences and Gates. Ensure that fences, gates, railings, walls, and other site elements intended to provide safety, security, and privacy are designed to be compatible with each other, with adjacent structures, and with the neighborhood context. Fence, wall, or hedge designs which obscure lines of sight for motorists, or create potential conflicts between pedestrians and cars, should be avoided.
 - **POLICY LU-4.13 Bayfront Identity.** Reinforce Newark's identity as a bayfront city by orienting new development on the western and southern edges of the city toward the bay and shoreline areas. Future projects in these areas should enhance views to the water and wetlands and be compatible with the area's scenic and recreational qualities. The bayfront identity should be emphasized in gateways and public art as well.

POLICY LU-4.14 View Protection. Protect and enhance panoramic views and vistas of horizon features such as Coyote Hills, Mission Peak, the East Bay and Peninsula Hills, and San Francisco Bay.

Actions

- ACTION LU-4.A Gateway Improvement Plans. Develop special design standards and improvement plans for entry points and gateways into the City, including Thornton Avenue, Newark Boulevard, and Cherry Street, and the existing gateways at Mowry Avenue and Stevenson Boulevard. These standards should provide for enhanced landscaping, signage, and art at these locations in order to reinforce a sense of arrival. Public private partnerships should be explored as a way of implementing and funding these improvements.
- ACTION LU-4.B Reducing Light and Glare Impacts. Use development regulations and design review procedures to reduce light and glare impacts from new development. Design review procedures should encourage less intense lighting where security needs allow, restricting the height and direction of exterior fixtures to minimize light spill, shielding for exterior lights, minimizing the use of highly reflective exterior materials, and restricting hours of non-security exterior lighting for commercial, industrial, and institutional uses.
- ACTION LU-4.C Lighting Improvements. Identify priority locations for lighting improvements along streets, in parks, and in public places to address public concerns about safety.
- ACTION LU-4.D Public Art Program. Continue to implement a public art program which installs art that is accessible or visible to the public. Such art should be conveniently or prominently situated in public places and new developments.

Public art is defined as any work of art displayed in an open area or on the exterior of any facility, public area, lobby, or public assembly area on City or privately owned property. It should be visible or accessible to the public and typically includes such components as sculpture, statuary, fountains, murals, and landscape elements.

HISTORIC PRESERVATION

GOAL LU-5	Identify, preserve, and maintain historic structures and sites to enhance Newark's sense of place and create living reminders of the city's heritage.		
Policies			
Policy LU-5.1	Preserving Important Buildings. Encourage the preservation of historically and architecturally important buildings that help enhance Newark's character and sense of identity. The demolition of historically important buildings is strongly discouraged.		
Policy LU-5.2	Context-Sensitive Design. Ensure that the repair, maintenance, and expansion of Newark's historically important structures uses building materials and architectural details which respect historic context.		
Policy LU-5.3	Adaptive Reuse. Where it is no longer feasible to continue to use an older building for its originally intended use, encourage adaptive reuse of the structure rather than demolition and replacement.		
Policy LU-5.4	Historic Landscapes. Consider the historic value of landscape features, such as trees, gardens, and fences when evaluating the historical significance or importance of a property.		
Policy LU-5.5	Native American Resources. Coordinate with local tribal representatives and the Native American Heritage Commission to ensure the protection of Newark's Native American resources and to follow appropriate mitigation, preservation, and recovery procedures in the event that important resources are identified during development.		
Policy LU-5.6	Preservation Outreach. Provide outreach to Newark residents on the cultural, physical, and social history of the city. Encourage a greater appreciation of the city's history and the benefits of historic preservation.		
Policy LU-5.7	Preservation Events. Encourage efforts to celebrate Newark's history and historic places, such as walking tours, historic markers, festivals, and preservation awards.		

Actions

- ACTION LU-5.A Evaluating Historic Resource Impacts. Evaluate applications for demolition, alteration, or relocation of structures more than 50 years old to determine if the structure has sufficient significance and integrity to merit its designation as a historic resource. In the event alterations to a historic resource are proposed, use the Secretary of the Interior Standards for the Treatment of Historic Properties to guide application review.
- ACTION LU-5.B Historic Building Code. Allow the use of the State Historic Building Code to achieve the preservation of important historic structures.
- ACTION LU-5.C Incentives for Restoration. Work with property owners seeking to use state and federal incentives for the restoration and maintenance of historic properties, including historic tax credits and tax relief programs such as Mills Act preservation contracts.
- ACTION LU-5.D Historic Inventory. Maintain and periodically update a list of Newark's historic sites and structures.
- ACTION LU-5.E State and Federal Register Listings. Work with property owners seeking to place their properties on the National Register of Historica Places, the California Points of Historical Interest, California Historical Landmarks, or the California Register of Historical Resources.
- ACTION LU-5.F Preservation on the Web. Use the City's website to distribute information about Newark's history and historic resources.
- ACTION LU-5.G Preservation Advocacy. Support the creation of local groups that advocate for greater recognition of Newark's history and the preservation of important historic buildings, places, and resources.

DUMBARTON RAIL TRANSIT-ORIENTED DEVELOPMENT (D-TOD)

GOAL LU-6 Develop a sustainable, transit-oriented development (TOD) comprised of residential, retail, office, park, and open space uses around the site of the planned Dumbarton Rail station on Newark's west side.

Policies

POLICY LU-6.1 Dumbarton TOD Land Uses. Plan for the following activities around the intersection of Willow Street and the proposed Dumbarton Rail Service: (1) a future transit station serving the region as well as neighboring residents; (2) a neighborhood center consisting of retail, grocery, visitor-serving, and higher-density residential uses; (3) up to 2,500 housing units with a wide range of unit types and affordability levels; (4) necessary infrastructure to support the development; (5) contribution toward an overpass on Central Avenue over the Union Pacific railroad tracks, and (6) A network of open space and parks, including a bayside trail.

POLICY LU-6.2 Dumbarton TOD Design Guidelines. Apply design guidelines to future development at Dumbarton TOD which support the area's development as a "village" comprised of traditional city blocks, vernacular architectural styles, and a mix of housing types.

- **POLICY LU-6.3 Dumbarton Rail.** Advocate for construction of the Dumbarton Rail project connecting Newark to BART and the West Bay, with a station at Willow Street in Newark. As an interim measure until rail service is provided, advocate for high quality, rapid bus service connecting the Dumbarton TOD station area to BART, VTA, and the West Bay, to ensure that new development in this area can meet the TOD goals for the project.
- POLICY LU-6.4 Minimizing Dumbarton TOD Impacts. Minimize the impacts of the Dumbarton TOD on the natural environment by incorporating native plant species, reducing herbicide and pesticide use, using environmentally friendly construction and waste disposal techniques, and managing stormwater runoff to avoid water quality impacts to nearby wetlands and San Francisco Bay.
- POLICY LU-6.5 Dumbarton TOD Landscaping and Streetscape. Use landscaping and tree planting to enhance the character of the Dumbarton TOD neighborhoods, define the community's edges, provide landmarks and focal points, make streets more pleasant for walking, and create a stronger sense of place. The landscape should reflect climate and soil conditions, as well as the desire to conserve water and create visual appeal.

POLICY LU-6.6 Dumbarton TOD Lighting. Use lighting and illumination which compliments architectural styles, reduces glare and over-lighting impacts, ensures pedestrian safety, and highlights special design elements within the community.

ACTIONS

- ACTION LU-6.A Dumbarton TOD Specific Plan Implementation. Use the Dumbarton TOD Specific Plan as the framework for the area's development. More detailed plans will be required as specific applications for subdivision and development are processed, consistent with the provisions of the Specific Plan.
- ACTION LU-6.B Dumbarton TOD Form-Based Codes. Apply form-based codes in the development of the Dumbarton TOD neighborhood, in order to achieve more pedestrian-oriented building forms and greater mixing of land uses.
- ACTION LU-6.C Dumbarton TOD Pipeline Easements. Require construction and improvement plans to indicate the locations of all service corridors and utility easements, including active and abandoned pipelines. Coordination with all major utilities and private pipeline operators shall be required prior to issuance of grading permits.

Southwest Newark Residential and Recreational Project⁴

GOAL LU-7 Develop the Southwest Newark Residential and Recreational Project⁴ as one of the Silicon Valley's premier new neighborhoods, with executive housing and high quality recreation.

Policies

POLICY LU-7.1 Southwest Newark Residential and Recreational Project (Area 3 and 4 Development). Facilitate the development of the 637 acres formerly known as "The Area 3 and 4 project" consistent with previously approved plans for this area. The residential holding capacity of this area shall be 1,260 units.

⁴ Formerly known as the Area 3 and 4 Project.

- POLICY LU-7.2 Wetland Enhancement. Create or enhance wetland habitat areas within non-developed portions of the Southwest Newark project area to offset loss of wetlands and aquatic habitat and provide additional habitat opportunities for rare plant and wildlife species.
- POLICY LU-7.3 Biological Resource Protection. Maintain, protect, and enhance the natural biological resources of the Southwest Newark Residential and Recreational Project Areas, particularly sensitive habitats and associated rare plants and animals, while integrating development and human activity. Disturbance of wetland and aquatic habitat should be avoided to the maximum extent feasible.
- POLICY LU-7.4 Controlling Invasive Plants. Avoid the introduction and spread of non-native and invasive weeds as a result of development activities in this area. Require management plans to control the population of invasive species prior to grading, fill, and development activities.
- POLICY LU-7.5 Landscaping Palette. Ensure that the choice of plants and landscaping in the Southwest Newark Residential and Recreational Project responds to soil conditions, wind conditions, and the cooler bayside climate. Landscaping should reinforce vista points, create variations in textures and color, define circulation routes and pathways, and include features which provide a strong sense of identity.
- **POLICY LU-7.6 Open Space Amenities.** Include a major open space and recreational amenity within the Southwest Newark Residential and Recreational Project boundary. The preferred amenity is an 18-hole golf course with clubhouse. The former solid waste disposal site at the west end of Mowry Avenue should be considered for inclusion in the Golf Course site. In the event a golf course is deemed infeasible, then another recreational use that is acceptable to the city shall be provided through developer fees. In addition, development in this area shall provide for neighborhood parks consistent with the ratios established by the General Plan.

In the event a golf course is developed, its design should minimize disturbance of sensitive natural resources. To the extent feasible, the golf course should contain natural habitat such as native grassland and native trees rather than non-native grass and non-native vegetation.

- **POLICY LU-7.7** Maintaining Hydrologic Features. Maintain the natural hydrologic features of the Southwest Newark Residential and Recreational Project area to the extent feasible, and maintain or improve the current quality of water leaving the site.
- POLICY LU-7.8 Mitigating Construction Impacts. Avoid and mitigate construction impacts on wetlands, aquatic habitat, wildlife, and water quality as development takes place in the Southwest Newark Residential and Recreational Project. Measures to minimize such impacts should be included in project approvals, consistent with state and federal agency oversight and regulations.
- **POLICY LU-7.9** Inclusionary Housing. Address inclusionary housing requirements consistent with the Area 3 and 4 Development Agreement.

Actions

- ACTION LU-7.A Street and Path Network. Develop an interior street and path network in the Southwest Newark Residential and Recreational Project, consistent with the standards prescribed in previously approved plans. All streets will be public streets.
- ACTION LU-7.B Railroad Overcrossing. Construct a Stevenson Boulevard or Mowry Avenue overpass across the Union Pacific Railroad, including dedicated bike lanes and sidewalk on one side.
- ACTION LU-7.C New School and Park. Work with property owners and the Newark Unified School District (NUSD) in the planning of a new public school within this area. A neighborhood park should be designed on an adjacent site, with the two uses functionally integrated to facilitate joint use.
- ACTION LU-7.D Design Standards. Implement the standards in previously approved plans for this area addressing lot size, height, setback, lot coverage, open space, patios, and balconies, and parking.
- ACTION LU-7.E Grading and Fill. Require grading and fill plans which ensure longterm mitigation of flood hazards, consistent with previously approved plans for the Southwest Newark Residential and Recreational Project area. Building pad and curb elevations shall conform to previously adopted standards.

ACTION LU-7.F Utility Extensions. Work with water, sewer, and other utility districts to facilitate the provision of infrastructure to the Southwest Newark Residential and Recreational Project.

OLD TOWN NEWARK

GOAL LU-8	Strengthen Old Town Newark as a vibrant, cohesive mixed- use district that honors Newark's history while embracing its future.		
Policies			
Policy LU-8.1	Old Town's Economic Niche. Establish a unique economic niche for the Old Town commercial district which recognizes its historic buildings, smaller parcels, and concentration of local-serving family- owned businesses.		
Policy LU-8.2	Main Street Character. Strengthen the blocks of Thornton Avenue between Olive Street and the UP Railroad as Newark's traditional "Main Street." Establish zoning and design standards for properties facing Thornton Avenue which strive for continuous active ground floor uses, pedestrian amenities (such as transparent storefronts, wide sidewalks, and benches), and preservation of existing historic buildings.		
Policy LU-8.3	Thornton Avenue Infill. Encourage development of vacant and underutilized lots along Thornton Avenue in a manner that enhances the area's role as a walkable business district. A mix of office, retail, and upper story residential uses should be encouraged.		
	The City encourages the consolidation of commercial properties along Thornton Avenue to enable development of new commercial and higher density mixed-use projects. Higher densities along Thornton are desired to help support adjacent commercial uses and create a more vital business district.		
Policy LU-8.4	Old Town Architectural Design. Encourage architectural design in Old Town which is compatible with the prevailing styles of the area's older buildings, and if possible, which incorporates architectural elements that were prevalent in Newark in the early 20th Century.		

POLICY LU-8.5 Thornton Avenue Streetscape. Consider streetscape and traffic improvements to Thornton Avenue between the Union Pacific Railroad and Olive Street which improve pedestrian safety and comfort, reduce vehicle speed, and enhance the character of the area as a "walking" street.

Street improvements in this area should balance the needs of cars, bicycles, transit users, and pedestrians and reinforce Old Town's role as a destination rather than a conduit for pass- through traffic. In particular, changes in street design should minimize curb cuts, maximize on-street parking, and accommodate pedestrians without damaging street trees and landscaping.

- **POLICY LU-8.6 Old Town Civic Space.** Create civic gathering places, outdoor seating areas, fountains, and other public spaces in Old Town Newark which contribute to the area's role as the historic center of the city, and make it a more attractive destination for Newark residents, workers, and visitors. Once constructed, such spaces should be programmed for civic events which draw people to the area and create more active street life.
- POLICY LU-8.7 Railroad Heritage. Recognize the railroad as a primary factor in the early development of Old Town, and commemorate its role through architecture, historic preservation, and streetscape design. \
- POLICY LU-8.8 Old Town Residential Area. Beyond Thornton Avenue, create attractively maintained, well lit, tree-lined residential streets that encourage people to walk to Old Town.
- **POLICY LU-8.9** Merchant and Resident Involvement. Encourage the participation of merchants and residents in the Old Town area in the planning process and the review of future use permits and large development project applications.

See also policies under Goal 5 related to historic preservation.

ACTIONS

ACTION LU-8.A Old Town Area Plan. Develop an Area Plan for Old Town Newark which addresses land use, urban design, transportation, economic development, and community service issues. The Area Plan should include a streetscape improvement plan for Old Town and should seek funding to build these improvements. One component of the Area Plan should be a traffic-calming program for Thornton Avenue. The program should slow down traffic and improve pedestrian and bicycle safety, while at the same time making the sidewalks and streetscape more inviting for pedestrians.

ACTION LU-8.B Mixed-Use Zoning. Maintain zoning regulations and permitting procedures for the Old Town District which advance the vision of the area as a historic, walkable, mixed-use neighborhood.

ACTION LU-8.C Old Town Design Standards. Revise standards and guidelines for residential areas around Old Town to ensure protection the area's historic character. Guidelines should promote denser mixed-use development along Thornton Avenue and lower density development in the surrounding neighborhoods which reinforces its historic, low-scale context.

For properties along Thornton Avenue, design guidelines should encourage mixed uses which reflect the traditional massing and scale of Old Town while still allowing for contemporary architecture. For properties in the adjacent residential neighborhood, guidelines should encourage massing and design that maintains a single-family presence on the street, even where mixed densities and housing types are present. This could include allowing larger second units rather than duplexes, and encouraging small multi-family developments on individual lots rather than larger developments on aggregated parcels.

- ACTION LU-8.D Old Town Parking. Develop parking strategies for Old Town which enable the development of small parcels without on-site parking. This could include creation of a parking district and development of a shared or municipal parking lot, allowances for in-lieu parking fees rather than on-site parking, and reduced parking requirements for certain types of commercial uses.
- ACTION LU-8.E Old Town Park/Plaza. Pursue development of a central park or plaza, with the potential to become a focal point for the Old Town area.
- ACTION LU-8.F George Avenue Street and Drainage Improvements. Seek alternative funding sources for street and storm drainage improvements for the Lindsay Tract (along George Avenue).

ACTION LU-8.G Railroad Buffers. Consider the installation of fences or sound walls along the railroad tracks to reduce visual and noise impacts.

NEWPARK MALL

GOAL LU-9	Strengthen NewPark Mall and its environs as a community showcase and quality environment for shopping and other compatible uses.
Policies	

- POLICY LU-9.1 Greater New Park Area Land Use Mix. Diversify the mix of uses in the NewPark Mall vicinity to sustain and expand its role as the premiere shopping and entertainment destination in Southern Alameda County.
- POLICY LU-9.2 High Density Housing in the Greater NewPark Area. To the extent that it contributes to the regional retail focus of the area, consider introduction of high-density residential uses in the NewPark Mall vicinity.
- POLICY LU-9.3 Greater NewPark Area Design. While maintaining the primary focus on regional retail uses, require that the design of future buildings in the NewPark area reflects a long-term vision of a more urban destination. High quality exterior materials should be used to create a welcoming environment for pedestrians. Signage, exterior lighting, landscaping, and other features should facilitate the transformation of this area from a suburban center to an "urban village."

Actions

ACTION LU-9.A Greater NewPark Area Master Plan. Complete a Master Plan for the Greater NewPark Mall Area that explores maintaining its regional retail focus while transforming the area into a dynamic urban center. NewPark should be a contemporary, sustainable, and exciting destination for the entire Bay Area. NEWARK GENERAL PLAN LAND USE

TRANSPORTATION

4

INTRODUCTION

State law requires that local general plans include a Circulation Element. As prescribed by the Government Code, the Element must address "the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the land use element of the plan." The Newark General Plan covers public utilities and facilities in a separate Element, allowing this Element to focus on transportation. The Element also covers broader issues related to travel in and around the city, connections between Newark and the region, and the way that transportation shapes Newark's form and identity.

Newark is served by an interconnected transportation system that connects homes and businesses to local and regional destinations via freeways, roads, trails, rail, and public transportation. The safety and efficiency of this system is essential to Newark's quality of life and the health of the local economy. The Transportation Element provides the policies needed to improve mobility and accessibility as the city grows, and to diversify capital investments so that other modes of travel become more viable. By improving conditions for bicycles, pedestrians, and transit users while also improving conditions for motorists, the city can become safer, more attractive, more connected, and more sustainable.

The shift to a "multi-modal" transportation system recognizes that Newark residents have different mobility needs and physical capabilities. The city's residents include students, disabled persons, and senior citizens who may not be able to drive. Newark also includes commuters seeking alternatives to freeway traffic, a local workforce using public transportation, and many residents who would prefer to walk or bicycle when making short trips, rather than using their cars.

Like other elements of the General Plan, this chapter is organized into two parts. Part One provides an overview of the existing transportation system and the different





modes of travel within Newark. It also includes projections and priorities for the future. Traffic forecasts for the year 2035 are presented, and specific recommendations are made to keep the transportation system operating at acceptable levels.

The second part of the chapter includes transportation goals, policies, and actions. The intent of the policies is to ensure that transportation and land use decisions are coordinated and that transportation services and facilities are improved in a way that serves all Newark residents and businesses. Policies are organized around seven major themes, including:

- Creating a street network that enhances Newark's sense of place, connects the city, protects neighborhoods from high traffic volumes and speeds, and meets the needs of all travelers.
- Providing a citywide pedestrian and bicycle system that can be safely used for day-to-day trips as well as recreational travel.
- Improving the public transportation system, including the development of new services and better access to existing services.
- Reducing the number of vehicle miles traveled by Newark residents and workers by providing more non-automobile travel options and more efficient land use patterns.
- Maintaining vehicle flow and reducing congestion through improvement of roads.
- Leveraging Newark's transportation assets for economic development and job creation.
- > Managing parking in a way that supports local businesses and meets the needs of Newark residents.

CONTEXT FOR TRANSPORTATION PLANNING

REGIONAL CONTEXT

Newark's location at the east end of the Dumbarton Bridge mid-way between San Francisco-Oakland and San Jose has influenced the development of the city and the transportation needs of its residents and businesses. The City depends on the regional transportation network for the movement of people and goods across the region, state, nation, and globe.

Two major freeways link Newark to the rest of the Bay Area and California. Interstate 880 (I-880) is located on the east side of the city and provides a direct connection to San Jose to the south and Oakland to the north. State Route (SR) 84 is a major gateway to the job centers of northern Santa Clara and southern San Mateo Counties on the other side of the Dumbarton Bridge. SR 84 also provides an easterly connection to the Tri-Valley area of Livermore, Dublin, and Pleasanton. Newark is within 20 miles of three international airports and 5 miles of two BART stations. It is crossed by an Amtrak line, an Altamont Commuter Express line, and two Union Pacific freight rail corridors.

REGULATORY CONTEXT

The context for transportation planning in the city is further defined by federal, state, and regional agencies. At the federal level, the US Department of Transportation oversees transportation funding and ensures the safety and efficiency of the nation's highways, airports, rail lines, and ports. At the state level, the California Transportation Commission (CTC) sets transportation priorities and prepares the State Transportation Improvement Program (STIP), a multi-year capital improvement program. The California Department of Transportation (Caltrans) manages more than 45,000 miles of highway and freeway lanes, provides intercity rail services, permits more than 400 public use airports and special-use hospital heliports, and works with local agencies to manage local transportation projects. State regulations also establish design standards for highways, access standards for public roadways, and the requirements for regional transportation planning.

At the regional level, the Metropolitan Transportation Commission (MTC) is tasked with developing a Regional Transportation Plan (RTP) which identifies transportation investments for the next 25 years. The regional plan calls for improving road conditions, retrofitting bridges, upgrading rail stations, expanding the bus network, and providing new pedestrian infrastructure. The Plan also calls for greater transportation efficiency through electronic toll collection, HOV lanes, and ramp improvements. Additionally, in collaboration with the Association of Bay Area Governments (ABAG), MTC adopted a regional Sustainable Communities Strategy (SCS) in July 2013.

Another regional agency with transportation oversight is the Bay Area Air Quality Management District (BAAQMD). BAAQMD's 2010 Clean Air Plan identifies strategies to reduce air pollution through land use and transportation strategies





which reduce the necessity of driving and encourage low-emission transportation modes.

At the county level, transportation planning is guided by the Alameda County Transportation Commission (Alameda CTC). In accordance with State law, Alameda CTC prepares and updates a Congestion Management Program (CMP) every two years. The CMP establishes performance standards for different modes of transportation, a capital improvement program, and a travel demand management (TDM) program for Alameda County. Alameda CTC also manages the County's halfcent transportation sales tax, which is used to support capital projects and operations. It distributes funds to cities and other agencies for streets, transit, special needs transportation, bicycle, and pedestrian safety projects, and transit-oriented development (TOD).

At the local level, the City of Newark is responsible for the planning, maintenance, and operation of the local roadway system. The City has adopted roadway design standards through its Municipal Code. Chapter 16.12 of the Code includes requirements for street width for various roadway types, grading, and access, as well as standards for sidewalks and cul-de-sacs.

MOBILITY CONTEXT

Although Newark has a roughly equal number of jobs and employed residents, a majority of its residents commute to other cities for work each day. Census transportation planning data indicates that only 12 percent of the city's employed residents actually work in Newark. About half of the city's residents work in Alameda County and about half commute elsewhere. Many Newark residents commute west across the Dumbarton Bridge or south along I-880 to job centers in Fremont, Milpitas, San Jose, and elsewhere in Silicon Valley. Likewise, those commuting in to Newark for work begin and end their trips in other parts of the Bay Area, or in locations as far away as San Joaquin and Stanislaus Counties.

The dispersed pattern of jobs and households in the Bay Area creates complex travel patterns on local freeways. According to the Alameda CTC, the segment of I-880 just south of the City between Auto Mall Parkway and Mission Boulevard is one of the ten most congested freeway segments in the county. The heaviest traffic is in the southbound direction in the morning and the northbound direction in the afternoon.

Traffic is also heavy in both directions on SR 84 between I-880 and the Dumbarton Bridge.

Chart T-1 provides information on how Newark residents travel to work, based on 2007-2011 sample data from the US Census. The data indicates 78 percent of the city's residents drove alone to work. About 13 percent of the city's residents carpooled and 4 percent took public transportation. Less than 2 percent of Newark's residents worked at home and less than 2 percent walked or bicycled to work. These statistics are similar to those in nearby communities. In fact, the percent of work trips made by solo drivers is more than 70 percent in almost every city in the region outside of Oakland, Berkeley, and San Francisco.





Source: 2007-2011 American Community Survey; US Census, 2013.

Census data further indicates that the median travel time to work for Newark residents was 26 minutes. About 40 percent of the city's residents had one-way commutes of 30 to 60 minutes, and 5 percent had commutes longer than one hour in each direction.

Chart T-2 indicates the number of vehicles owned per household in Newark. The data provides an indication of the potential number of vehicle trips made per household, and also provides a way to evaluate potential parking demand in the city.



Approximately 46 percent of the city's households have three cars or more, and 90 percent of the city's households have two cars or more. Only 1.3 percent of the city's households do not own a car. The figures reflect Newark's reliance on automobiles as the primary means of transportation, and the challenges of shifting to a more TOD pattern.





Source: 2007-2011 American Community Survey; US Census, 2013.



NEWARK'S STREET NETWORK

Newark's street network consists of a hierarchy of arterial, collector, and local streets. In addition, regional access to the city is provided by freeways. Components of the street network are profiled below. Figure T-1 shows the existing network.

Freeways

Freeways are dedicated exclusively to vehicle movement with no property access. They are typically high speed/high capacity transportation facilities serving regional traffic. Intersections with other roadways are grade separated and are spaced and designed to maintain smooth traffic flow. Newark is served by two freeways, both operated and maintained by Caltrans.

NEWARK GENERAL PLAN TRANSPORTATION



Source Data: City of Newark, 2013; The Planning Center | DC&E, 2013; Tiger Roads 2010; ESRI, 2010; FTC, 2010.



Collector Road



I-880 is an eight-lane north-south freeway with four travel lanes, including a peakhour HOV lane in each direction. I-880 provides access between East Bay cities and San Jose, where it becomes SR 17. Full access interchanges are provided at Thornton Avenue, Mowry Avenue, and Stevenson Boulevard on the eastern edge of Newark. Most of the I-880 interchanges were reconstructed between 1990 and 2010 to handle additional volume. Ramp meters have been installed and capacity has been increased. In 2012, approximately 200,000 vehicles a day traveled on I-880 in the Newark vicinity.

SR 84 is a six-lane east-west freeway with three lanes in each direction and a westbound HOV lane. Full access interchanges are located at Thornton Avenue/Paseo Padre Parkway and at Newark Boulevard/Ardenwood Boulevard along the north edge of Newark. SR 84 becomes the Dumbarton Bridge just west of the city. According to the 2012 Caltrans Traffic Volume Book, the freeway has an average volume of 61,000 vehicles a day at Thornton Avenue.

ARTERIALS

Arterials carry large traffic volumes within and through urban areas. They are designed to operate at efficient speeds and to link neighborhoods, shopping areas, and employment districts to the freeways and to each other. The principal objective for an urban arterial is mobility, rather than access to adjoining properties. To keep traffic moving smoothly, ingress and egress may be limited.

Backup walls are included along some of Newark's arterials to buffer the rear yards of adjoining residences and provide definition to the street right of way. The city has placed a high priority on landscaping the area between the edge of the curb and the backup wall, as these areas are an important part of Newark's visual character. Additional back-up walls are programmed for construction in the coming years along a number of the city's arterials.

Newark's arterials are profiled below.

Stevenson Boulevard is an east-west roadway located on the city's southern boundary. Between I-880 and Cedar Boulevard, Stevenson Boulevard has raised medians, six travel lanes, and turn lanes at major intersections. At Cedar Boulevard, the roadway narrows to four travel lanes. This configuration extends west through Cherry Street/Boyce Road. Stevenson Boulevard provides access to commercial and light-industrial areas and also extends east over I-880 into Fremont.

- Mowry Avenue is an east-west roadway located north of Stevenson Boulevard. Between I-880 and Cedar Boulevard, Mowry Avenue features six travel lanes, raised medians, and turn lanes at major intersections. At Cedar Boulevard, the roadway narrows to four travel lanes. West of Cherry Street, the roadway has two westbound travel lanes and one eastbound travel lane, with a two-way left-turn lane. At the Union Pacific railroad tracks, the roadway has an at-grade crossing and narrows to two travel lanes. Mowry Avenue provides access to commercial, retail, residential, and light industrial areas. It extends east over I-880 into Fremont.
- Central Avenue is primarily a four-lane, east-west roadway that extends from Willow Street in Newark to Fremont Boulevard in Fremont. It is a two-lane arterial with raised medians between Willow Street and Filbert Street. East of Filbert Street, Central Avenue widens to a four-lane arterial street with a combination of raised medians and two-way turn lanes, continuing across I-880 until it terminates at Fremont Boulevard.
- Thornton Avenue crosses Newark on a curved alignment. It enters the city from Fremont on the west at the SR 84 overcrossing, where it provides a continuation of Paseo Padre Parkway. From SR 84, the road curves in a southeasterly alignment to Willow Street. Just before that point, the road turns northeast. Between Willow and Sycamore Streets, Thornton Avenue has one lane in each direction and a two-way left turn lane in the center. It widens to three travel lanes east of Sycamore and then to four lanes east of Cherry Street. The street continues as a four-lane roadway across I-880 and into Fremont on the east.
- Jarvis Avenue is an east-west arterial that extends between Gateway Boulevard and Lake Boulevard. Jarvis Avenue provides access to residential, commercial, and light industrial areas, and has four travel lanes between Gateway Boulevard and Cardiff Street, with a combination of raised medians and twoway turn lanes. The roadway narrows to two lanes as it extends northeasterly to Lake Boulevard.
- Gateway Boulevard is classified as an arterial for the four-lane segment between Jarvis and Thornton Avenues. North of Jarvis, it is a two-lane collector road that extends to Fircrest Street.





- Cedar Boulevard is a major cross-town roadway that extends through most of Newark. Cedar Boulevard begins at Haley Street and extends north and east past Newark Boulevard before turning southeastward at Lake Boulevard. It then continues past Lafayette Avenue in a generally southeasterly direction, crossing Thornton, Central, and Mowry Avenues before terminating at Stevenson Boulevard. Cedar Boulevard is a two-lane roadway between Haley Street and Lido Boulevard, and widens to a four-lane roadway south of Lido Boulevard.
- Cherry Street is generally a four-lane, north-south roadway located between Thornton Avenue and Stevenson Boulevard. Between Thornton Avenue and Mowry Avenue, Cherry Street has a two-way left-turn lane and provides access to commercial, residential, and industrial areas. South of Mowry Avenue, Cherry Street has raised concrete medians and provides access to light industrial and residential areas. South of Stevenson Boulevard, Cherry Street becomes Boyce Road in Fremont.
- Newark Boulevard is a four-lane, north-south roadway that extends from Central Avenue to SR 84, where it becomes Ardenwood Boulevard in Fremont. Newark Boulevard provides access to residential and commercial areas, as well as public buildings such as the City Administration Building, the Newark Library, and the Alameda County Health Center.
- Lake Boulevard is an east-west roadway currently classified as a minor arterial street with two lanes and a raised median. Lake Boulevard connects Cedar Boulevard and Jarvis Avenue and provides access to residential areas and Lakeshore Park.

Marshlands Road, Morton Avenue, and the unimproved segment of Cedar Boulevard are currently listed in Federal Highway Administration (FHWA) Functional Classification System as arterial streets. The City will coordinate with Caltrans to modify the classifications for these streets and to make other adjustments to arterial designations as appropriate.

COLLECTOR STREETS

Collector streets provide access to individual parcels but also move traffic through residential, commercial, and industrial areas. They connect arterials with local streets, and typically serve short trips from homes to activity centers. In some cases, collectors incorporate the design features of an arterial but are shorter in length with lower volumes. In other cases, collectors may resemble local streets, with driveways to abutting properties. Streets currently classified as collectors include Brittany Avenue/Cherry Street (north of Thornton), Carter Avenue/Filbert Street, Edgewater Drive, Enterprise Drive, Fircrest Street, Gateway Boulevard (east of Jarvis Avenue), Haley Street/Sycamore Street, Hickory Street, Joaquin Murieta Avenue, Lafayette Avenue, Lake Boulevard, Lido Boulevard, Mayhews Landing Road (east of Spruce Street), Smith Avenue (east of Cherry Street), Spruce Street (north of Thornton Avenue), and Willow Street (south of Thornton Avenue). Other streets that could be considered as collector streets by the City based on current and future uses include Balentine Drive, Bettencourt Street, Birch Street, Bridgepointe Drive, Moores Avenue, Robertson Avenue, Ruschin Drive, and Wells Avenue.

Figure T-1 identifies all of these segments, although not all were recognized as collectors by the Federal Highway Administration at the time the General Plan was adopted. The City will coordinate with Caltrans to make adjustments to the FHWA collector street designations and overall segment limits.

LOCAL STREETS

Local streets provide access to property. Movement is incidental and involves traveling to and from collector streets. Frequent driveways and curb cuts may be present. Local streets carry relatively low volumes of cars and should be designed to emphasize walking, bicycling, and safe access to abutting parcels. All streets that are not classified as either arterial or collector streets are considered local streets.

MOVING TOWARD "COMPLETE STREETS"

Much of Newark was developed during the 1950s, 60s, and 70s, an era when auto convenience and speed was the highest transportation priority. This system has served the city well, but it will need to evolve to meet new mobility needs and respond to future challenges.

In 2008, the California legislature passed the "Complete Streets Act," requiring transportation planning to consider the needs of all road users. The vision for Newark, as in other California communities, is to transform local thoroughfares by incorporating sidewalks, crosswalks, space for bicycles, and other amenities that make it safer and easier to travel without a car. This concept is applicable to the design of all streets, but it has the most far-reaching effects on the design of arterial and collector streets.





The Complete Streets concept also considers the needs of children, seniors, persons with disabilities, and non-drivers in the design of the transportation system. Complete streets also support complementary General Plan goals, including creating a stronger sense of identity in Newark, enhancing public safety by reducing accident hazards, and improving public health by making the city more walkable.

In March 2013, the Newark City Council adopted a citywide Complete Streets Policy, with the vision that "All transportation improvements in the City of Newark will be planned, funded, designed, constructed, operated and maintained to provide safe mobility for all users appropriate to the function and context of the facility." As part of the policy, the City has established complete streets principles, including:

- Serving all users and modes, including pedestrians, bicyclists, persons with disabilities, motorists, movers of commercial goods and freight, transit riders and operators, emergency responders, seniors, children, youth, and families;
- Responding to context, such that roadway features and amenities are reflective of the surrounding area, working with key stakeholders;
- Addressing complete streets as part of routine procedure for all city departments; and
- Ensuring that all projects and project phases, with appropriate limited exceptions, account for and respond to complete streets policies and requirements.

The City of Newark has also adopted traffic calming measures to reduce traffic and speeding in residential areas and along collector streets. The City offers six potential traffic-calming measures, listed in descending order of preference: (1) resident education and selective speed limit enforcement, (2) street centerline striping, (3) stop signs, (4) chicanes¹, (5) center islands/medians, and (6) speed bumps. Requests may be initiated by residents and are subject to evaluation by the City Engineer based on appropriateness for a specific street. For speed bumps, at least two-thirds of the residents on a street or street segment must sign a petition before they can be considered. Traffic studies may be required to determine the best solution and to mitigate the impacts on nearby streets.

¹ A "chicane" is an artificial feature placed in a roadway which requires extra maneuvering to slow down traffic.

PEDESTRIAN AND BICYCLE TRAVEL

Newark provides an excellent environment for bicycling, including a temperate climate, flat terrain, and a system of low volume streets ideal for novice cyclists. Presently, bicycling in the city is constrained by a lack of continuous bicycle facilities on Newark's major arterials, particularly on north-south routes. The I-880 interchanges are also difficult to navigate for bicyclists and pedestrians, making it challenging to reach nearby designations such as Ardenwood Regional Park and the Fremont or Union City BART stations. In addition, many Newark neighborhoods were developed with cul-de-sacs and looped street networks, with limited connectivity for pedestrians and bicycles. As a result, walking or bicycling from home to school or shopping areas may require long, circuitous routes.

Designing a quality bicycle system requires considering the needs of multiple user groups with varying levels of confidence and experience. Key user groups include students traveling to school, commuters going to work, persons running errands, and those simply riding for leisure and exercise. Each user group requires different amenities. For example, bike improvements for commuters could include showers and bike lockers at work places in addition to bike lanes on local streets. Commuter improvements might also focus on connecting area neighborhoods with particular destinations, such as Pacific Research Center or the BART stations in Fremont and Union City. Increasing the share of trips made by bicycle or on foot in the future will depend on a number of factors such as the as the availability of well-connected facilities, and the location, density, and type of future development

At the time of General Plan adoption, the City was in the process of preparing a *Pedestrian and Bicycle Master Plan* (PBMP). Once adopted, the PBMP will supplement the General Plan and establish a program for building a connected system of on-street and off-street bikeways and support facilities. It will set the framework for improving pedestrian and bicycle access to schools, employment areas, shopping areas, and parks. The PBMP will also establish criteria for different kinds of bike facilities, identify capital projects, establish design standards, and list recommended education and safety programs.

BIKEWAY FACILITIES

Bikeway planning and design in California typically relies on guidelines and standards established by Caltrans. These standards provide for three distinct types of bikeway facilities, as documented below:













- Class I Bikeways (Bike Path or Multi-Use Path) provide a completely separate right-of-way and are designated for the exclusive use of bicycles and pedestrians with vehicle and pedestrian cross-flow minimized. Bike paths are for non-motorized use only. Bike paths often traverse open space areas, such as regional parks.
- Class II Bikeways (Bike Lane) provide a restricted lane at least five feet wide within a road right-of-way that is designated for the use of bicycles. They are designated with a striped lane on a street or highway.
- Class III Bikeways (Bike Route) provide for a right-of-way designated by signs or pavement markings for shared use with pedestrians or motor vehicles. A Shared-Use Arrow (or "Sharrow") can be marked in the outside lane on a Class III route to show the suggested path of travel for bicyclists.

An additional facility type, the Neighborhood Bike Route is proposed for inclusion in Newark, as described below:

Neighborhood Bike Routes are facilities that are designated for shared bicycle and motor vehicle use. They are low volume, low speed residential streets that are central to beginner cyclists to build experience and confidence. They also provide circulation within neighborhoods and connect homes to many of Newark's schools.

The City presently has several arterial and collector streets that provide opportunities to connect Newark with nearby destinations. Bicycle facilities along these routes currently include a combination of Class II and Class III facilities; however, there are significant gaps. Most notably, Cedar Boulevard, Newark Boulevard, and Cherry Street lack sufficient signage and protected space for bicycles, and there are inadequate opportunities to cross the I-880 and SR 84 freeways. This impedes safe access to the nearest BART stations, and to trails connecting to workplaces and regional parks in Fremont and elsewhere. In addition, bike lanes on many of the city's arterials often end in advance of intersections to avoid conflicts with turning cars, and many of the city's intersections are timed for motorists and pedestrians, rather than for bicyclists. The city also lacks a coordinated wayfinding signage system, which makes the bicycle system more difficult to navigate. There are many opportunities to improve safety, comfort, and access for bicyclists on city streets.

The proposed bicycle network for Newark is shown in Figure T-2. In incorporates the existing system, with improvements added to provide safer and more direct travel paths. Key corridors identified for bike travel are Newark Boulevard, Spruce Street, Bettencourt Street, Cedar Boulevard, Cherry Street-Brittany Avenue-Ruschin Drive, Mayhews Landing Road, Thornton Avenue, Willow Street, and Central Avenue. Specific improvements for this network will be identified and evaluated in the City's PBMP. Most of these streets are recommended for Class II bike lanes that are striped and signed on both sides of the roadway. Coordination with the City of Fremont will be important to ensure the continuity of these bike lanes across city boundaries.

The City's bikeway system will be further enhanced by off-street facilities (e.g., Class I routes), including new and upgraded bicycle and pedestrian bridges and other road crossing improvements. This includes development of the Bay Trail within the Dumbarton TOD and Southwest Newark Residential and Recreational Project (formerly Area 3 and 4) and development of a bike path and linear park along land that was previously reserved for an extension of Cedar Boulevard. The Bay Trail project has been the subject of a recent joint planning study with the City of Fremont to identify the best alignment between the Dumbarton Bridge and Santa Clara County. The Cedar Boulevard extension would incorporate a bridge over the railroad tracks, with a possible interim alignment along local streets until the bridge can be funded. Other off-street improvements are planned beside Bunker School (Birch Street) and along the north side of the railroad tracks between Cherry Street and Cedar Boulevard (parallel to Baine Avenue).

New support facilities will also improve the viability of bicycling and walking. These might include short and long-term bicycle parking, showers, lockers, restrooms, and improved lighting. Bike racks presently exist at local schools, in parks, and other civic buildings. The City will work toward the provision of additional bike parking in the future, both at public buildings and in private development through new bicycle parking requirements. Additional wayfinding signage will also be encouraged, to help bicyclists navigate through the city and onward to destinations such as BART and the shoreline.



NEWARK GENERAL PLAN TRANSPORTATION



Source: City of Newark, 2012; The Planning Center | DC&E, 2012; Tiger Roads 2010; ESRI, 2010; FTC, 2010.

Pedestrian Facilities

Sidewalks exist along most streets in Newark, although a few gaps exist in industrial areas. Pedestrian improvements also include crosswalks, some with pedestrianactivated push buttons at signalized intersections. The General Plan provides policy direction to make Newark more "pedestrian-friendly" in the future. On a practical level, this means including more provisions for pedestrians when existing streets are redesigned or new streets are constructed. This could include narrowing the curb-tocurb widths at intersections along Thornton Avenue in Old Town Newark, additional traffic signal timing adjustments to provide more time for pedestrians to cross the street, and providing more countdown crosswalks, more school crossing guards, and other measures which improve conditions for pedestrians.



Pedestrian safety and comfort can also be improved through land use and urban design strategies. For example, locating retail development along the street frontage rather than set back behind large surface parking lots can make walking a more pleasant experience. Providing amenities such as street trees, benches, display windows in retail stores, and outside dining space can also encourage pedestrian activity. In the Dumbarton TOD area, the design of the street system itself will encourage walking by creating a connected grid of streets rather than curvilinear streets and cul-de-sacs.

PUBLIC TRANSPORTATION

BUS SERVICE

AC Transit currently provides local bus service for western Alameda and Contra Costa counties, extending from Pinole on the north to Fremont and Newark on the south. The Transit District has been operating since 1956 and has more than 100 bus lines across the service area. AC routes provide feeder service from Newark to the Fremont and Union City BART stations. Many of the routes include stops at NewPark Mall and several serve Ohlone College. There is also limited service between Lido Faire Shopping Center and Newark Memorial High School at the start and end of the school day. Bus routes in the city as of 2013 are shown in Table T-1 and are mapped in Figure T-3.

AC Transit buses also provide connections to Santa Clara Valley Transportation Authority (VTA) buses at the Fremont BART Station. The VTA buses generally travel to the south and southwest, providing transit access to job centers throughout Silicon







Source: Hexagon Transportation Consultants, Inc., 2013.

Valley. Additionally, the Dumbarton Express provides weekday bus service from Fremont to Santa Clara and San Mateo Counties, including a stop at the Ardenwood Park and Ride just north of the Newark City limits.

AC Transit has developed a *Strategic Vision Plan* that calls for high-frequency enhanced bus routes, new vehicles, on-street rider amenities, signal priority on major streets, and round-the-clock service. However, funding cuts and budget shortfalls have led to service reductions, making it difficult to achieve long-term ridership goals. The City of Newark will continue to evaluate the best arrangement for improving transit service to its residents.

As appropriate, routes and headways should be adjusted to serve new development in the Dumbarton TOD area, and to respond to increased employment at Pacific Research Center, Stevenson Point Technology Park, the NewPark Mall area, and other growth locations. A key objective is to continue improving feeder service to BART, both for Newark-bound commuters and for those who live in Newark who commute elsewhere. Improved service to the West Bay via the Dumbarton Bridge is also a priority.



In addition to the transit services described above, Newark is also served by paratransit for seniors and persons with disabilities. Newark Para-transit is a door-to-door alternative service provided between 8 AM and 5 PM on weekdays and 8 AM to 3 PM on Sundays. Service costs are subsidized by Alameda County Measure B sales tax revenues. Applicants are required to submit a form and go through a review process to be eligible for services. Similar services are provided by East Bay Paratransit and the Tri-City Taxi Voucher program. There is also a VIP Rides program which pairs seniors and disabled residents with local volunteers who provide free transportation to appointments, grocery stores, and other local destinations.

BART SERVICE

Although Newark does not have a BART station, most of the bus lines in the city begin or end at BART stations in Union City and Fremont. In addition, the Fremont BART station has 1,500 parking spaces which are available to commuters from Newark, Fremont, and other nearby cities. BART provides rail access to San Francisco, Oakland, and job centers in other parts of the East Bay and northern Peninsula. The Fremont Station and the Union City Station are within 5 miles of the Newark city limits.







TABLE T-1 AC TRANSIT NETWORK BUS ROUTES

Route	Hours	Headway (Minutes)	Areas Served
212	Mon-Fri 6:45 AM–10 PM	30	Fremont BART to NewPark Mall, via Mowry Avenue, Fremont Boulevard, Pacific Commons, Christy Street, and Cedar Boulevard.
216	Mon-Fri 5:30 AM-8:30 PM	60	Ohlone College Newark Campus to Union City BART via NewPark Mall, Cedar Street, Central Avenue, Fremont Boulevard, Fremont BART, Mowry Avenue, and Niles Boulevard.
232	Mon-Fri 5:30 AM-8:40 PM	60	Fremont BART and NewPark Mall via Walnut Avenue, Mission Boulevard, Union City BART, Paseo Padre Parkway, Ardenwood Boulevard, Lido Faire Shopping Center, and Cedar Boulevard.
242	All Days 6:00 AM-11:30 PM	60	Fremont BART station and New Park Mall via Stevenson Boulevard, Cherry Street, Ohlone College Newark Campus, Mowry Avenue, and Civic Center Drive.
251	Mon-Fri 6:00 AM–8:30 PM	60	Fremont BART station and NewPark Mall via Walnut Avenue, Paseo Padre Parkway, Thornton Avenue, Willow Street, Enterprise Drive, Filbert Street, Central Avenue, Cherry Street, Mowry Avenue, and Civic Center Drive.
264	Mon-Fri 5:15 AM–9:00 PM	60	Union City BART and NewPark Mall via Decoto Road, Paseo Padre Parkway, Thornton Avenue, Fremont Boulevard, Paseo Padre Parkway, Newark Boulevard, Cherry Street, Ohlone College Newark Campus, and Mowry Avenue.
275	All Days 6:15 AM-8:30 PM	60	Union City BART station via Decoto Road, Highway 84, Newark Boulevard, Cedar Boulevard, Lido Boulevard, Haley Street, Sycamore Street, Thornton Avenue, and Fremont Boulevard.
332	Weekends 7:00 AM-8:00 PM	60	Fremont BART and NewPark Mall via Mowry Avenue, Niles Boulevard, Union City BART, Paseo Padre Parkway, Ardenwood Boulevard, Lido Faire Shopping Center, and Cedar Boulevard.
333	Mon-Fri 7:00 PM-12:45 AM	60	Union City BART and NewPark Mall, with flexible service. Passengers can request service to any bus stop in the City of Newark.
345	Weekends 6:00 AM-9:00 PM	60	NewPark Mall and Fremont BART via Mowry Avenue, Cherry Street, Newark Boulevard, Highway 84, Decoto Road, Union City BART, Mission Boulevard, and Walnut Street. Also, Gurdwara Sahib Fremont (Sikh Temple) on Sundays between 9:00 AM and 3:00 PM.
SB	Mon-Fri 5:15-9:00 AM westbound, 4:00- 9:15 PM eastbound	20-30	Stevenson/Cedar to San Francisco via Cedar Blvd, Newark Blvd, Union City Blvd, and Hesperian Blvd.

Note: In addition to the routes listed above, the 626, 628, and 629 buses each make one daily round trip run between Newark Memorial High School and the Lido Faire shopping center, primarily serving high school students going to and from school. Source: AC Transit, 2012. An extension of BART from Fremont station to San Jose and Santa Clara is presently under construction. A new 5.4-mile segment is expected to be operational by 2015, with a station at Warm Springs and a potential station in Irvington. Beyond Warm Springs, the BART extension will continue into Santa Clara County, with stations in Milpitas and Berryessa. Eventually BART would be extended further, with stations at Alum Rock, Downtown San Jose, Diridon, and Santa Clara. The extension includes connections to the VTA light rail system and Caltrain system at a number of locations. The BART extension may increase demand for bus service between Newark and the Fremont stations, as more commuters use BART to travel to jobs in the South Bay.

REGIONAL RAIL SERVICE

The Amtrak "Capitol Corridor" and Altamont Commuter Express (ACE) provide passenger rail service in the Newark vicinity via the Fremont Centerville Train station, located just over a mile northeast of Newark. The Capitol Corridor provides daily service between San Jose and Sacramento, making stops in Santa Clara, Fremont, Hayward, Oakland, Emeryville, Berkeley, Richmond, Martinez, Suisun-Fairfield, and Davis. On both weekdays and weekends, seven southbound Capitol Corridor trains provide passenger rail service to Santa Clara and Downtown San Jose, and seven northbound trains provide service to Oakland, Davis, Sacramento, and the other previously mentioned intermediate communities to the north.

ACE provides service between San Jose and Stockton, with stops in Santa Clara, Fremont, Pleasanton, Livermore, Tracy, and Lathrop-Manteca. On weekdays, ACE offers four eastbound trains from Fremont to Stockton, making stops in Pleasanton, Livermore, Tracy, and Lathrop-Manteca, and four westbound trains from Fremont to San Jose, making two stops in Santa Clara. ACE does not currently offer weekend or holiday service.

DUMBARTON RAIL

A rail bridge was first built across the southern part of San Francisco Bay by the Southern Pacific Railroad in 1910. The line primarily carried freight traffic, but for a period of time before 1920 it also was used for transbay passenger service. In the mid-1990s, a proposal was initiated to re-establish passenger rail service across the South Bay, connecting the Union City BART station to the Peninsula via a new rail bridge. The project was included for funding in Regional Measure 2, passed by the voters in 2004. The train is intended to improve connectivity between the East Bay

and the Peninsula, and reduce roadway, rail, and bridge congestion, as well as improve travel reliability.

The Dumbarton Rail corridor is 20.5 miles long. The project would improve, rehabilitate, and reconstruct the rail tracks, including rehabilitation of a rail bridge across the bay. At the eastern terminus in Union City, an intermodal hub would connect the rail to BART, Amtrak, and the ACE commuter trains. The Fremont/Centerville ACE/Amtrak Station would be upgraded, and new stations would be developed in Newark, Menlo Park, and Redwood City. The Dumbarton line would join the Caltrain line for access to San Jose and San Francisco. Initial service is proposed to consist of six trains across the bridge in the morning commute and six during the evening commute.

In anticipation of Dumbarton Rail, the City of Newark adopted the Dumbarton TOD Specific Plan in 2011. The Specific Plan envisions a walkable, pedestrian-oriented neighborhood developed around the future Newark station at Willow Street just south of Thornton Avenue. A diverse mix of housing types, retail stores, and open space amenities are planned. The transit station itself would include provide connections to local buses, with feeder service provided to Newark neighborhoods.

The Dumbarton Rail will require additional funding to proceed and the timeline for its construction is uncertain. As an interim measure, the City of Newark supports continued improvements to transbay bus service, potentially including bus rapid transit (BRT) type service and/or associated "stations" between Newark and the Peninsula. Passenger capacity should be sufficient to support TOD as planned in the vicinity of the proposed Dumbarton Rail station. Express bus service should be viewed as an interim solution, and not as a long-term replacement for investment in rail.

TRANSPORTATION EFFICIENCY

Transportation efficiency refers to various measures aimed at making the most efficient use of the transportation system. It includes strategies to coordinate land use and transportation decisions, increase the capacity of existing roads without major physical changes, and reduce peak hour demand on the transportation network.


COORDINATING LAND USE AND TRANSPORTATION

One of the basic principles of transportation efficiency is the coordination of land use and transportation decisions. At the most basic level, this means planning for additional transportation capacity when new development is proposed. It also means guiding new development to areas with available transportation capacity. This is the underlying premise behind the idea of TOD, particularly around rail transit stations. The substantial investment made in rail transit can be amortized by using land around the station in a way that will maximize transit ridership and take full advantage of the opportunity for less car-dependent development.

In Newark, the General Plan Map provides for more density and intensity around the future Dumbarton Rail station near Willow Street, anticipating that residents and workers in this area will be able to use rail and/or bus transit for commuting. This General Plan also encourages mixed-use development in areas like Old Town Newark. Such development often combines retail and residential uses and enables residents to walk rather than drive when running errands or traveling to basic services. At a citywide scale, transportation and land use decisions can also be linked by balancing job and housing growth, so that Newark's workers and residents have the opportunity to live and work locally rather than commuting. As noted in the Land Use Element and the Economic Development Element, the City is striving not only to balance jobs and housing, but also to provide a better match between the housing needs of the Newark workforce and the type of housing being planned in the city.

As noted earlier, another fundamental aspect of coordinating land use and transportation is to design new development to facilitate all modes of travel. The goal is not to make it more difficult to drive, but rather to make highways, parking lots, and cars a less dominant feature of the cityscape. Improvements such as street trees, landscaping, lighting, benches, and wider sidewalks on commercial streets are key to this philosophy. This includes gateway features along Thornton Avenue in the Old Town area, and other beautification improvements to the stretch of Thornton between Willow Street and Old Town. It also includes improvements such as curb cuts for wheelchair access, bike lanes, crosswalks, and other changes that are consistent with the Complete Streets concept.

TRAFFIC OPERATIONS AND CONTROLS

One approach to managing congestion is to synchronize the timing of traffic signals. In 2013, there were 43 signalized intersections in Newark. Most are located along



arterial streets, with posted speed limits between 30 and 45 miles per hour. All signals are fully actuated by traffic, but are not currently synchronized to prioritize vehicle flow along major arterial corridors. The City continues to explore opportunities to provide signals at additional intersections where warranted and to adjust the timing of signals to improve the flow of vehicular traffic while balancing pedestrian and bicycle safety and access needs. Traffic signal interconnect projects for Cherry Street, Newark Boulevard, and portions of Thornton Avenue are listed in the current City Capital Improvement Plan as unfunded projects, but may be implemented when warranted. Other measures, such as adding or modifying turning lanes and regulating speeds along City streets can be used to improve traffic flow and balance demands on the system.

Directional signs are also used to guide Newark's motorists to destinations in and around the city and to avoid congestion on busy travel routes. Emerging services such as car-sharing and bike-sharing are also making it easier to forego car ownership, or to reduce the number of vehicles per household. Car-share programs are typically initiated by the private sector, but the public sector plays a role in their success through its parking policies and development review procedures.

TRANSPORTATION SYSTEMS MANAGEMENT

The City of Newark adopted a Transportation Systems Management (TSM) Ordinance in 1992. The intent of the Ordinance is to curb congestion on the local and regional transportation networks through programs by local employers to reduce peak hour trips. The Ordinance supports alternatives to driving alone to work in order to reduce traffic congestion, parking demand, air pollution, gasoline consumption, and time loss. TSM strategies include carpool and vanpool programs, shuttles to BART, flexible work hours and allowances for telecommuting, ridesharing and matching programs, and better provisions for bicycle users (such as bike lockers and showers at the work place). The TSM ordinance requires Newark businesses with more than 50 employees on-site to develop a commute alternatives program and to inform employees about the commute options available to them.

A number of large employers and employment centers in Newark have initiated TSM programs. For example, a private shuttle provides five trips a day between the Union City BART Station and Pacific Research Center during the morning commute and five trips a day in the reverse direction during the evening commute. Some local employers have also adopted flextime and telecommuting programs, preferential



parking programs for carpools, and similar initiatives. Newark residents and workers may also participate in the regional 511.org program that provides ride-matching and carpool services to persons across the Bay Area.

Newark is also served by the Ardenwood Park and Ride facility, located just outside the city limits on the north side of SR 84 at Ardenwood Boulevard. The site has 300 free parking spaces and 50 paid spaces. Bike parking is also available on the site. AC Transit buses and Dumbarton Express buses stop at the Park-and-Ride, providing connections to San Francisco, Stanford University, BART stations, and major employment centers in the West Bay.

VEHICLE FLOW

Preparation of the Newark General Plan included an evaluation of existing vehicle traffic flow and projected flow in the Year 2035 based on planned development and future transportation improvements. The evaluation considered development facilitated by the General Plan, as well as development in nearby cities and growth at the regional level. A computerized transportation model was used to estimate existing and future congestion levels at key intersections around the city and determine the need for physical improvements to ensure that Newark's roads will continue to operate at acceptable levels of service. Traffic volumes and turning movements were measured at intersections throughout Newark to provide a starting point (or "baseline") for this analysis.

The performance of the road system is evaluated through a measurement called level of service (LOS). LOS is a qualitative description of operating conditions in which road segments or intersections are graded on a scale of A to F. LOS A indicates free-flow conditions with little or no delay, while LOS F indicates jammed conditions with excessive delays. The letter grades are based on the time delay to travel through an intersection. Table T-2 provides a narrative description of conditions under each of the six lettered service levels.

For the past several decades, Newark has used a standard of LOS D for its signalized intersections. This means that intersections operating at LOS A, B, C, or D are considered to be performing acceptably, while those operating at LOS E or F are not.

In total, 37 intersections were evaluated as part of the General Plan. Some of these intersections are signalized and some are not. For non-signalized intersections, the



TABLE T-2

Е

Very long traffic delays.

	Unsignalized Intersections	
LOS	Description of Operations	Average Delay Per Vehicle (sec.)
Signaliz	ed Intersections	. /
A	Signal progression is extremely favorable. Most vehicles arrive during the green phase and do not stop at all. Short cycle lengths may also contribute to the very low vehicle delay.	10.0 or less
В	Operations characterized by good signal progression and/or short cycle lengths. More vehicles stop than with LOS A, causing higher levels of average vehicle delay.	10.1 to 20.0
С	Higher delays may result from fair signal progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, though many still pass through the intersection without stopping.	20.1 to 35.0
D	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable signal progression, long cycle lengths, or high-volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	This is considered to be beyond the limit of acceptable delay. High delay values generally indicate poor signal progression, long cycle lengths, and high volume-to-capacity (V/C) ratios. Individual cycle failures occur frequently	55.1 to 80.0
F	This level of delay is considered unacceptable by most drivers. This condition often occurs when arrival flow-rates exceed the capacity of the intersection. Poor progression and long cycle lengths may also be major contributing causes of such delays.	Greater than 80.0
Unsigna	lized Intersections	
А	Little or no traffic delay.	10.0 or less
В	Short traffic delays.	10.1 to 15.0
С	Average traffic delays.	15.1 to 25.0
D	Long traffic delays.	25.1 to 35.0

LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED AND

FExtreme traffic delays.Greater than 50.0

35.1 to 50.0

Source: Transportation Research Board, 2000 Highway Capacity Manual, Washington, D.C., p. 17–20.

potential benefits of installing a traffic signal were evaluated. The actual installation of a signal at any given intersection would require further analysis to evaluate its effects on traffic and safety, and to confirm that the signal is warranted based on State of California criteria.

Table T-3 shows existing LOS at major Newark intersections as of 2012. All of the intersections are meeting the City's standard and are operating at LOS "D" or better.² Most are operating at LOS A, B, or C.

Table T-3 also shows projected LOS at the same intersections in 2035. These projections consider the benefits to traffic flow that will be provided by programmed capital improvements, and planned improvements associated with the Dumbarton TOD, the Southwest Newark Residential and Recreational Project, and other approved developments in the city. They also consider the potential for reduction in traffic volumes due to General Plan policies. For example, the General Plan encourages pedestrian and bicycle travel, transit use, TOD, telecommuting, and other strategies to reduce vehicle trip generation and divert more trips to other travel modes.

The analysis indicates that traffic congestion is expected to increase at most Newark intersections by 2035. Future residential, commercial, and industrial development will result in additional vehicle trips. More significantly, additional population and job growth in the Bay Area will increase traffic on the region's freeways. As freeway congestion on I-880 and SR 84 gets worse, more drivers may divert on to Newark roadways or cut through Newark on their way to other destinations.

The evaluation of future traffic conditions indicates that seven intersections would operate at LOS E or F by 2035 unless additional capital improvements are programmed. Service levels can be restored to acceptable (LOS D or better) conditions at all of these intersections if they are improved. In most cases, this can be accomplished through restriping existing the right-of-way and adding turning lanes, which would not require acquisition of additional right of way. However, two of the intersections are jointly managed by Newark and Fremont, and portions of the area requiring improvement are in Fremont.

² The General Plan EIR may be consulted for detailed information on the traffic study.

TAB	LE T-3 EXISTING AND PROJECTED INTERSECTION LEV	/els of Ser	RVICE						
					Existing (2012)	Projected	(2035)	
#	Signalized Intersections	Existing Control	Peak Hour	Count Date ^ª	Average Delay ^b	LOS	Average Delay⁵	LOS	Increase in Delay
1	Decce Dedre Dives and SD 04 WD Demps	Signal	AM	10/30/12	9.5	А	13.0	В	3.5
I	Paseo Padre Pkwy and SR 84 WB Ramps	Signal	PM	10/30/12	5.9	А	10.1	В	4.2
h	Thereton Ave and SD 94 ED Domes	Signal	AM	10/30/12	16.8	В	20.7	С	3.9
2	Thomfor Ave and SK 64 EB Ramps	Signal	PM	10/30/12	18.7	В	31.6	С	12.9
n	Ardonwood Devloyerd and CD 04 WD Domas	Cianal	AM	10/24/12	35.9	D	95.6	F	59.7
3	Ardenwood Boulevard and SR 84 WB Ramps	Signai	PM	10/24/12	23.4	С	27.5	С	4.1
4	Newark Divid and CD 04 CD Dampa	Cianal	AM	10/24/12	9.6	А	21.1	С	11.5
4	Newark Bivd and SR 84 EB Ramps	Signal	PM	10/24/12	54.2	D	156.4	F	102.2
-	Therefore Automa and Calaura Dud	Cirmal	AM	10/30/12	11.6	В	14.8	В	3.2
5	I normon Avenue and Gateway Bivd	Signal	PM	10/30/12	11.4	В	60.0	E	48.6
,	Finnest Ch. and Jamin Aug	Circul	AM	10/30/12	19.2	В	19.3	В	0.1
0	FIRCESS ST and Jarvis Ave	Signal	PM	10/30/12	19.4	В	19.0	В	-0.4
-	Neural Distance I and an	Classed	AM	H.E.	26.6	С	31.7	С	5.1
1	Newark Bivd and Jarvis Ave	Signal	PM	H.E.	29.9	С	36.4	D	6.5
•	Neural Distance Octor Dist	Circust	AM	H.E.	20.1	С	35.4	D	15.3
8	Newark Bivd and Cedar Bivd	Signal	PM	10/24/12	19.7	В	29.5	С	9.8
•			AM	10/24/12	20.2	С	26.2	С	6.0
9	Newark Blvd and Lafayette Ave	Signal	PM	10/24/12	12.4	В	10.3	В	-2.1
4.0	Newark Blvd and	0. 1	AM	10/24/12	11.6	В	21.4	С	9.8
10	Mayhews Landing Rd	Signal	PM	10/24/12	12.4	В	15.4	В	3.0

TABLE T-3 Projected (2035) Existing (2012) Existing Peak Count Average Average Increase Delay^b Date^a Delay^b **#** Signalized Intersections Control Hour LOS LOS in Delay 15.6 В 1.5 AM 11/01/12 17.1 В 11 Willow St and Thornton Ave Signal ΡM 11/01/12 19.7 16.0 В В 3.7 AM H.E. 26.3 С 23.9 С -2.4 12 Sycamore St and Thornton Ave Signal ΡM H.E. 44.4 20.8 С 23.6 D 09/27/06 С AM 22.9 46.7 D 23.8 13 Cherry St and Thornton Ave Signal ΡM 09/27/06 22.2 С 71.6 Е 49.4 AM 09/27/06 20.1 С С 2.0 22.1 14 Newark Blvd and Thornton Ave Signal PM 09/27/06 С С 21.0 34.1 13.1 H.E. 31.3 С 46.0 14.7 AM D 15 Cedar Blvd and Thornton Ave Signal H.E. PM 33.7 С 41.7 8.0 D AM 10/30/12 10.1 В 10.5 В 0.4 16 I-880 SB Ramps and Thornton Ave Signal H.E. 3.5 ΡM 15.7 В 19.2 В H.E. 14.0 1.8 AM 12.2 В В 17 I-880 NB Ramps and Thornton Ave Signal ΡM H.E. 15.6 В 18.8 В 3.2 AM 10/05/06 С 35.5 D 14.3 21.2 18 Cherry St and Central Ave Signal ΡM 10/30/12 С 49.6 24.8 D 24.8 AM 10/31/12 17.2 34.3 17.1 В С 19 Cedar Blvd and Central Ave Signal 10/31/12 PM В 50.5 D 33.3 17.2 AM 11/01/12 31.1 С 79.4 Ε 48.3 20 Cherry St and Mowry Ave Signal ΡM 10/03/06 24.9 С 32.3 С 7.4

TABLE 1-3 EXISTING AND PROJECTED INTERSECTION	LEVELS OF SER	VICE						
				Existing ((2012)	Projected	(2035)	
# Signalized Intersections	Existing Control	Peak Hour	Count Date ^a	Average Delay ^b	LOS	Average Delay [⊅]	LOS	Increase in Delay
21 Coder Divid and Maurie Aug	Cianal	AM	10/02/06	24.9	С	26.2	С	1.3
	Signal	PM	10/02/06	26.6	С	40.6	D	14.0
22 Algorithms Court and Maurice Aug	Cianal	AM	11/01/12	18.5	В	17.5	В	-1.0
22 Alpenrose Court and Mowry Ave	Signai	PM	11/01/12	20.5	С	23.3	С	2.8
22 L 000 SD Domps and Mours Aus	Signal	AM	10/03/06	10.8	В	10.2	В	-0.6
23 1-860 SB Rallips and Mowly Ave	Signal	PM	10/03/06	12.1	В	12.2	В	0.1
24 L 990 NP Damps and Mours Ave	Signal	AM	10/31/12	10.3	В	9.0	А	-1.3
	Siyilai	PM	10/31/12	11.8	В	12.4	В	0.6
25 Coder Divid and Palantina Dr	Signal	AM	10/31/12	23.1	С	22.5	С	-0.6
		PM	10/31/12	17.4	В	21.2	С	3.8
24 Charry St and Stovenson Blud	Signal	AM	10/31/12	21.3	С	26.9	С	5.6
	Siyilai	PM	10/31/12	26.7	С	83.3	F	56.6
27 Coder Divid and Stovenson Divid	Signal	AM	09/28/06	20.4	С	29.2	С	8.8
	Signal	PM	09/28/06	21.4	С	25.1	С	3.7
20 Delenting Dr and Staugneen Dhud	Signal	AM	10/18/06	20.3	С	21.4	С	1.1
	Siyilai	PM	10/18/06	24.3	С	35.6	D	11.3
20 L 000 SD Domps and Staylonson Divid	Signal	AM	10/18/06	10.4	В	10.1	В	-0.3
27 1-000 SD Kallips alla Stevenson Biva	Signal	PM	11/01/12	11.5	В	11.5	В	0.0
20 L 000 ND Domne and Stowenson Divid	Signal	AM	10/04/06	9.4	А	9.0	А	-0.4
30 1-880 INB Ramps and Stevenson Bivo	Signal	PM	10/04/06	8.6	А	10.7	В	2.1

TABLE T-3 EXISTING AND PROJECTED INTERSECTION LEVELS OF SERVICE

ТАВ	LE T-3 EXISTING AND PROJECTED INTERSECTION	LEVELS OF SER	RVICE						
					Existing ((2012)	Projected	(2035)	
#	Signalized Intersections	Existing Control	Peak Hour	Count Date ^a	Average Delay ^b	LOS	Average Delay [₽]	LOS	Increase in Delay
21	Heley Stand Jamie Ave	TWCC	AM	11/01/12	11.1	В	11.7	В	0.6
31	Haley St and Jaivis Ave	TWSC	PM	11/01/12	12.4	В	12.9	В	0.5
22	Millow Chand Estamatics Dr	TWCO	AM	10/31/12	14.3	В	14.6	В	0.3
32 Willow St and Enterprise Dr	Willow St and Enterprise Dr	TWSC	PM	10/31/12	9.9	А	9.9	А	0
33 Wells Av and Enterprise Dr		7.0.0	AM	10/30/12	8.9	А	8.9	А	0
	Wells Av and Enterprise Dr	TWSC	PM	10/30/12	9.1	А	8.9	А	-0.2
		71400	AM	10/31/12	10.0	В	10.0	В	0
34 Filbert St and Enterprise Dr	Filbert St and Enterprise Dr	TWSC	PM	10/31/12	9.7	А	9.7	А	0
		THOO	AM	10/31/12	10.3	В	11.6	В	1.3
35	Willow St and Central Ave	TWSC	PM	10/31/12	9.8	А	9.9	А	0.1
		THOO	AM	11/01/12	18.3	С	18.7	С	0.4
36	Filbert St and Central Ave	TWSC	PM	11/01/12	16.9	С	17.9	С	1.0
		THOS	AM	H.E.	20.0	С	575.7	F	N/A
37	Cedar Blvd and Smith Ave	TWSC	PM	H.E.	15.9	С	41.6	Е	25.7

^a H.E. = General Plan Housing Element Update Traffic Impact Analysis Report, Prepared by Omni Means Engineers & Planners, April 2009. b At signalized intersections, the delay reported is the average delay experienced by all approaches to the intersection and at unsignalized intersections, the delay reported is the worst delay experienced by the minor street approache. ^c TWSC = Two Way Stop Control.

Source: Hexagon Transportation Consultants, Inc., 2013.

Table T-4 indicates the seven intersections where improvements are required, along with a description of these improvements and potential constraints to their construction. Two of the intersections are associated with the on and off ramps at the Newark Boulevard/SR 84 interchange. The Cherry Street intersections at Thornton, Mowry, and Stevenson also appear in the table. The intersection of Gateway and Thornton, at the west end of Pacific Research Center, is also listed. The last of the intersections listed (Cedar and Smith) is presently unsignalized and would require a traffic signal by 2035.

In addition to the improvements listed in Table T-4, a number of projects are already listed in Newark's bi-annual Capital Improvements Plan. These include a widening of Thornton Avenue between Gateway Boulevard and Hickory Streets, and a grade-separated structure where Central Avenue crosses the Union Pacific railroad tracks. Dumbarton TOD projects will be required to contribute towards the funding of this grade separation structure as discussed at pages LU-19-21. Capacity enhancements are also planned at the Cherry Street/Central Avenue intersection, the Thornton/ Cedar intersection, and the Cherry Street/Mowry Avenue intersection. Signal coordination improvements are planned at the Cherry Street and Stevenson Avenue intersection. These improvements would complement those listed in Table T-4.

The Capital Improvement Program identifies potential new traffic signals at the following intersections, although it is acknowledged that existing volumes do not currently warrant signals in all cases:

- > Central Avenue at Filbert Street
- > Central Avenue at Sycamore Street
- > Cherry Street and Robertson Avenue
- > Jarvis Avenue and Haley Street
- > Jarvis Avenue and Spruce Street
- > Newark Boulevard and Ruschin Drive/Brittany Avenue
- > Willow Street and Enterprise Drive

I-880 is also projected to operate below acceptable service levels by 2035. The segment between Stevenson and SR 84 is projected to operate at LOS F in both directions during both peak periods. However, this scenario is anticipated with or without the Newark General Plan. I-880 is a state-operated facility, and the City's ability to control its traffic volumes and delay levels is limited. The City of Newark will continue to work with Caltrans, the Alameda County Transportation Commission

TABLE T-4 FUTURE IMPROVEMENTS NEEDED TO MAINTAIN LOS D ON NEWARK ROADWAYS

	Projected LOS in 2035 Without		Projected LOS in 2035 After	
Intersection	Improvement	Improvement Needed	Improvement	Constraints
Ardenwood Boulevard and Hwy 84 WB Ramps	LOS F AM peak hour	Converting a through lane to a second left-turn lane on Ardenwood Blvd, south of the Highway 84 westbound ramps. Re-stripe the northbound approach (i.e., Ardenwood Blvd).	С	The westbound ramps are located in Fremont and are beyond Newark's jurisdiction.
Newark Boulevard and SR 84 EB Ramps	LOS F PM peak hour	Adding a right turn lane in addition to the shared through-right lane on the Highway 84 eastbound off-ramp at Newark Blvd. There is sufficient right-of-way for this improvement to be implemented through restriping and widening would not be required	D	Coordination with Caltrans would be required for this improvement.
Thornton Avenue and Gateway Boulevard	LOS E PM peak hour	Adding a through lane on Thornton Av, from north of Gateway Blvd to approximately 1,000 feet south of Gateway Blvd, along with bicycle and pedestrian improvements. Restriping of Thornton Av will be required and additional right of way may be needed.	В	N/A
Cherry Street and Thornton Avenue	LOS E PM peak hour	Adding a through-lane on northbound Cherry St, south of Thornton Av. There is potentially sufficient right-of-way (ROW) on Cherry St south of Thornton for this improvement to be implemented with re-striping of Cherry St. On the north side of Thornton Av, one possible mitigation option would be to widen Cherry St for approximately 450 feet, involving some ROW acquisition.	D	Some right-of-way acquisition required.
Cherry Street and Mowry Avenue	LOS E AM peak hour	Adding a second left-turn lane on the westbound approach (Mowry Av) and realigning the intersection. Since this intersection is in relatively close proximity to a high school, community college, and park, and is located along a road with transit service that is also a Countywide Bicycle Route (component of the Bay Trail), opportunities for improving pedestrian access and bicycle access and accommodating all users through this intersection should be considered.	С	Some limitations to right-of-way on Mowry, such that implementing the improvement through re-striping of Cherry St alone could be difficult, depending on the desired lane widths and precision on the intersection alignment.
Cherry Street/Boyce Road and Stevenson Boulevard	LOS F PM Peak hour	Adding a through lane on the northbound approach of Boyce Rd (Cherry St). There is potentially sufficient roadway right-of-way for this improvement to be implemented with restriping. Realignment of the intersection would be required. North of Stevenson Blvd, Cherry St would need to be restriped for approximately 800 feet.	D	The Boyce Rd segment of this intersection is located in Fremont and is beyond Newark's jurisdiction.
Cedar Boulevard and Smith Avenue	LOS F AM peak hour LOS E PM peak hour	Adding a traffic signal, if supported by signal warrant data	В	N/A

Source: Hexagon Transportation Consultants, Inc. 2013.



(Alameda CTC), and the City of Fremont to manage freeway traffic and promote trip reduction measures at the local level. Many of the traffic management measures in the Alameda CTC Congestion Management Program are also included in the Newark General Plan, including increased telecommuting, promotion of ridesharing, reduction of vehicle use, and incentives for transit use. Proving a better match between jobs and housing is also critical, so that a larger number of Newark residents can work locally and a larger number of those who work in Newark can find housing within the city.

While the General Plan traffic modeling indicated that most roads would operate at LOS D or better in the future, the City will continue to require traffic studies for individual development projects. It is possible that some of these projects could result in LOS E or F at individual intersections. There are a limited number of circumstances where this outcome may be acceptable. For example, in specific locations such as the Old Town Newark commercial district, maximizing vehicular flow through intersections may not be the highest priority. In this area, the City seeks to create a welcoming environment for pedestrians, bicyclists, and transit users, with vibrant local businesses and an attractive streetscape. Slower vehicle travel speeds and longer intersection delays may be acceptable in such locations. The City will determine the need for exceptions to its LOS standards on a case by case basis in the future. New metrics for calculating LOS also may be developed, considering multiple modes of travel and just motor vehicles.

TRAFFIC SAFETY

Major thoroughfares in Newark carry large volumes of traffic, creating the risk of traffic accidents. The Statewide Integrated Traffic Records System indicates that there were 97 injury collisions in Newark in 2010 and 96 injury collisions in 2011. There were 7 pedestrians and 5 bicyclists injured in 2010 and 8 pedestrians and 5 bicyclists injured in 2011.³ The largest number of accidents in the city occurs at the intersections of major arterial streets. Based on California Highway Patrol data, the areas of greatest accident frequency are on Thornton Avenue at its intersections with the I-880 ramps and with Cedar Boulevard, and Newark Boulevard at its intersections with the SR 84 ramps and with Jarvis Avenue. Other areas where accidents are relatively common include the Mowry Avenue corridor near NewPark Mall.

³ The Statewide Integrated Traffic Records System is an on-line database maintained by the California Highway Patrol. As of July 2013, posted data was available through calendar year 2010.

The City continues to pursue measures to make its streets safer for motorists, pedestrians, and bicyclists. Establishing and enforcing speed limits is critical, but must be done in accordance with state requirements. Ongoing maintenance of road surfaces and markings within the rights of way is also important. Other approaches, such as the redesign of intersections, the addition of traffic calming or warning signs, the use of new technologies, and modification of street geometrics, can mitigate accident hazards and reduce accident-related delays.

In addition, future development near any existing or proposed railroad rights of way should be planned with the safety of the rail corridor in mind. New development may result in higher traffic volumes at grade-level crossings, and increased numbers of pedestrians and bicyclists crossing the tracks. As noted later in this chapter, the city is planning for a number of grade separation projects and improvements to atgrade crossings to reduce safety hazards. Other measures such as vandal-resistant fencing and barriers which limit pedestrians on the tracks also may be considered.

Funding

Funding for transportation improvements comes from a variety of sources. Gas tax funds may be used for expenses related to street construction, maintenance, and design. These funds include state gas tax subventions, Measure B revenues, Traffic Congestion Relief Funds (Proposition 42), Transportation Development Act – Article 3 funds, Transportation Fund for Clean Air (TFCA), and Alameda County Vehicle Registration Fee funds. Local tax revenues are the primary source for street maintenance and improvement projects. Funds for smaller capital projects may also be derived from unallocated General Fund dollars. The City also collects development impact fees from private development, but these funds may only be used where a nexus is established between development and the capital project. A General Plan action item has been included to study the current traffic impact fee, and to adjust the fee as appropriate so it more closely reflects the true cost of transportation improvements.

Larger capital projects are typically funded through state and federal grants. For example, federal Community Development Block Grants may be used for street construction and other capital projects. Other grants are authorized through the Federal Transportation Act, the federal Highway Safety Improvement Program, the Highway-Railroad Grade Separation Program, the Safe Routes to School Program, the federal stimulus program, and periodic State transportation bond acts. The







Metropolitan Transportation Commission acts as a clearinghouse for many of the state and federal grants, and allocates funds to local governments in a manner that is consistent with the Regional Transportation Plan.

GOODS MOVEMENT

Air

Newark does not have its own airport, but relies on nearby airports for passenger travel and the shipment and delivery of goods. San Francisco International Airport, the region's largest airport, is located approximately 25 road miles from Newark and can be accessed via the Dumbarton or San Mateo Bridges. Oakland International Airport is approximately 20 road miles north of the city via I-880. San Jose International Airport is approximately 17 road miles south of the city via I-880. Smaller general aviation airfields exist in closer proximity. These include Palo Alto Airport, approximately 10 miles to the southwest and across the Dumbarton Bridge, and Hayward Airport, approximately 10 miles to the north via I-880.

Each of the airports listed above is required by law to prepare an Airport Land Use Compatibility Plan. The Plan includes provisions to ensure the safety of aircraft, passengers, and development in the vicinity of each airport, including structural height limits, land use requirements in different zones around the runways, and regulations on landing and take-off patterns. Newark is beyond the area covered by the Airport Land Use Plan for each of the airports listed above.

There are no heliports for public or private use in Newark. The closest heliports are approximately 2 miles away in Fremont, with one serving Washington Hospital and the other serving the First Interstate Bank Operations Center. Helicopter operations at these locations do not follow a regular schedule.

TRUCKING

Trucks make up a relatively small percentage of the traffic volume on Newark streets, but have a major impact on the transportation system and the local economy. Most Newark businesses depend on trucks for shipping and delivery, and some of the city's larger businesses include trucking operations which connect Newark with markets across the country. Truck movement and parking is regulated by the California Vehicle Code as well as by the Newark Municipal Code. To avoid conflicts with residential traffic and land uses that might be adversely affected by truck traffic, the City has designated certain streets as truck routes. This includes most of Newark's arterials as well as Sycamore, Willow, and Filbert Streets, Clark Avenue, and Enterprise Drive. Figure T-4 highlights the currently designated truck routes in the City.

FREIGHT RAIL

Newark is traversed by two active rail lines, both owned by the Union Pacific Railroad. The Union Pacific Coast Subdivision (formerly the Southern Pacific Mulford Line) runs from northwest to southeast through the city, roughly parallel to Newark Boulevard and Cherry Street. The Union Pacific Niles Subdivision branches off the Coast Subdivision just east of Sycamore Street and runs northeast towards Fremont, roughly midway between Thornton and Central Avenues. The City of Newark was initially laid out around the intersection of these two lines, in the vicinity of Thornton Avenue and Sycamore Street.

In 2011, the Union Pacific Railroad managed 142 freight trains a week through Newark. Major origin and destination points include the Port of Oakland to the north, the Central Valley to the east (via the Altamont Pass), and Southern California to the south.

There are 12 active at-grade railroad crossings in the city, occurring at Jarvis Avenue, Haley Street, Cedar Boulevard, Mayhews Landing Road, Thornton Avenue, Carter Avenue/Filbert Street, Sycamore Street, Cherry Street, Cedar Boulevard, Central Avenue, Mowry Avenue, and Stevenson Boulevard. There are also three inactive atgrade crossings where Ash, Spruce, and Willow Streets cross the former Dumbarton Rail. There are grade-separated railroad crossings at Newark Blvd, I-880, and SR 84.

An important General Plan policy is to replace some of the at-grade railroad crossings with grade-separated rail overpasses. This will enhance safety, reduce travel delays at railroad crossings, and improve emergency access. Grade separations are planned at Central Avenue with a funding contribution from the Dumbarton TOD project and at either Mowry or Stevenson Avenue as part of the Southwest Newark Recreation and Residential project. A grade separation will also be explored at the Filbert/Carter crossing south of Old Town Newark, and a grade separated bicycle and pedestrian crossing is being pursued in the Cedar Boulevard extension right-of-way west of Haley Street.







Source: City of Newark, 2012; The Planning Center | DC&E, 2012; Tiger Roads 2010; ESRI, 2010; FTC, 2010.

PARKING

Parking management is a land use issue, a transportation issue, an economic development issue, and an urban design issue. The availability of an adequate supply of off-street parking spaces is important to local businesses and to the quality of life in Newark's neighborhoods. At the same time, providing too <u>much</u> parking can affect the character of the city and impede the city's goal to encourage alternative means of travel.

Newark will continue to strive for balanced solutions that reconcile these competing objectives. A key part of the city's parking management strategy is to provide a sufficient number of spaces but to locate and design parking areas so they are not a property's dominant design feature. For example, the convention in most Newark shopping centers has been to set retail buildings far back from the curb, with large parking lots facing the street. In the future, a greater focus will be placed on placing retail buildings along the street frontage, with parking to the rear. This can change the look and feel of a shopping district and create a more comfortable and active street environment for pedestrians.

The Newark zoning code indicates parking requirements for different land uses. For example, two off-street covered parking spaces are required for each single-family home. Studio and one-bedroom apartments are required to provide 1.5 spaces per unit, while apartments with two or more bedrooms must provide two spaces per unit. Provisions for guest parking also apply. For larger apartment complexes, flexibility is provided as to whether the spaces are covered or uncovered.

For non-residential uses, different metrics are used to establish the parking requirements. For example, the requirement for churches and theaters is based on the number of seats, the requirement for nursing homes is based on the number of beds, and the requirement for retail stores and offices is based on floor area. The ordinance also establishes standards for the dimensions of parking spaces, including allowances for compact spaces. Design standards for access drives and aisles also are included.

In the past, zoning regulations have prescribed parking requirements for individual land uses but have not allowed reductions for shared parking when land uses with different demand characteristics could use the same spaces. For instance, an office building adjacent to a movie theater might require fewer spaces than an office









building alone, since most of the theater's parking would be used in the evenings and empty during the daytime. Future zoning revisions may consider adjustments to the parking standards to encourage the sharing of spaces in such instances. Likewise, a shared parking lot serving Old Town Newark will continue to be studied. This would provide an important resource for small businesses with inadequate space for off-street parking on their properties.

GOALS, POLICIES, AND ACTIONS

COMPLETE STREETS

GOAL T-1	Plan, fund, design, construct, operate, and maintain all transportation improvements to provide mobility for all users, appropriate to the function and context of each facility.
Policies	
Policy T-1.1	Improving Travel Mobility for All. Create and maintain "complete" streets that provide safe, comfortable, and convenient travel for all categories of users, including pedestrians, bicyclists, transit riders and operators, movers of commercial goods and freight, emergency responders, children, youth, seniors, and persons with disabilities.
Policy T-1.2	Context-Sensitive Design. Maintain sensitivity to local conditions and needs in the design of transportation facilities. The City will work with residents, businesses, and other stakeholders to create a stronger sense of place in the design of roads, streetscapes, and other transportation-related facilities.
Policy T-1.3	Incorporating Complete Streets Elements in Transportation Projects. Incorporate complete streets elements in the planning, funding, design, approval and implementation of all transportation projects. Any construction, reconstruction, retrofit, maintenance, operations, alteration, or major repair of the street network should consider ways to make streets safer for all users. Exceptions to this policy may be considered, consistent with the Complete Streets Resolution adopted by the City Council in March 2013.

- POLICY T-1.4 Connections to the Regional Street Network. Improve the safety, convenience, and connectivity of existing streets across jurisdictional boundaries and to the regional transportation network.
- POLICY T-1.5 Transportation and City Identity. Recognize the importance of City streets to the overall aesthetic quality and character of Newark. Major street rights-of-way should be attractively landscaped and should convey a positive image of the City.
- **POLICY T-1.6 Traffic Calming.** Use traffic design features and traffic calming techniques to improve safety and maintain the quality of life in Newark neighborhoods. Traffic calming should be incorporated into urban design and streetscape plans so that a safer environment is provided for all users.

Actions

- ACTION T-1.A Interdepartmental Cooperation. Require that all relevant City departments work cooperatively toward making complete streets practices a routine part of their daily operations. City departments should approach every transportation-related project and program as an opportunity to improve mobility for all categories of users
- ACTION T-1.B Best Practices in Street Design. Follow the City's adopted standards for the design of streets. As appropriate, update the City's street classification and engineering design standards to ensure that the roadway system accommodates all users.

Modifications to the roadway design standards should be considered to incorporate complete streets principles and to include provisions for roundabouts and other design solutions which make travel safer and more efficient.

ACTION T-1.C Complete Streets Procedures. Take the following steps to implement the City's Complete Streets policy: (a) Maintain, plan, and design future transportation projects so that they are consistent with all adopted local plans; and (b) Develop or clearly define a process to allow for early stakeholder involvement in the design of new transportation projects.

Action T-1.D	Performance Measures. Regularly evaluate how well Newark's transportation network is serving each category of user by establishing performance measures, collecting baseline data, and collecting follow up data on a regular basis.
Action T-1.E	Arterial Beautification. Continue implementation of the City's Arterial Beautification Program as funding allows.
Action T-1.F	Traffic Calming Program. Continue implementation of traffic calming measures consistent with the City's adopted Traffic Calming Policy.

PEDESTRIAN AND BICYCLE CIRCULATION

GOAL T-2	Create a citywide pedestrian and bicycle network that provides safe access to destinations within the city, connects to an integrated regional network, and is accessible to users of all ages, abilities, and means.
Policies	
Policy T-2.1	Promoting Bicycling and Walking. Promote bicycling and walking as viable modes of transportation for everyday trips as well as for recreation to increase the number of people of all ages, abilities, and means who bicycle and walk.
Policy T-2.2	Pedestrian Facilities. Work to close gaps in the pedestrian network and improve sidewalk connectivity between residential and commercial areas. Develop curbs, gutters, sidewalks on all remaining Newark streets not yet fully improved to encourage safe, convenient pedestrian travel. Where appropriate, include marked crosswalks at intersections and install pedestrian countdowns at traffic signals to facilitate safe pedestrian movement across City streets.
Policy T-2.3	Bicycle Network. Maintain and expand an interconnected network of bicycle routes, paths and trails, serving the City's neighborhoods, shopping districts, workplaces, and park and open space areas. The existing bicycle network should be expanded to provide connections to developing areas, including the Dumbarton TOD, the Southwest Residential and Recreational Project, Old Town Newark, and the NewPark Mall vicinity.

POLICY T-2.4 Bicycle and Pedestrian Project Funding. Apply for grants and other funding sources to implement pedestrian and bicycle improvements.

- **POLICY T-2.5 Connecting to the Region.** Develop bicycle and pedestrian facilities that connect across City boundaries, integrate with larger regional systems, and improve intermodal connections to local and regional public transportation systems.
- POLICY T-2.6 Pedestrian and Bicycle Provisions within New Development. Ensure safe and convenient pedestrian and bicycle access to and through new public and private developments. The City will use the development review process to ensure—and where appropriate to require—provisions for pedestrians and bicycles in new development areas.
- POLICY T-2.7 Pedestrian and Bicycle Safety. Improve actual and perceived pedestrian and bicycle safety. Make use of the latest technologies available to provide increased safety measures. Special attention should be given to facilitating the safety of children walking or bicycling to school.
- POLICY T-2.8 Safety Awareness and Health Benefits. Encourage bicycle and pedestrian safety training in schools and through City recreation programs. Such programs should aim to reduce the rate of bicycle and pedestrian accidents while increasing awareness of available facilities and the health benefits of bicycling and walking.
- POLICY T-2.9 Recreational Trails. Develop and maintain trails in parks and open space areas, and between Newark neighborhoods and the City's open spaces.
- POLICY T-2.10 Railroad Crossings. Ensure that any future grade separated railroad crossings include sidewalks and designated lanes for bicycles.
- POLICY T-2.11 Bicycle Parking. Provide secure, adequate, and easily accessible bicycle parking at key destinations throughout the city, including municipal facilities, schools, and new development. The style and design of bike racks should contribute to overall neighborhood and architectural aesthetics.

POLICY T-2.12 Trails Along Railroads and Utilities. Consider the use of railroad, flood control, and utility rights of way for jogging, biking, and walking trails, provided that safety and operational issues can be fully addressed. Such trails may be considered where the right-of-way is sufficiently

Such trails may be considered where the right-of-way is sufficiently wide to address safety considerations, and where a trail project would not interfere with railroad, flood control, or utility operations.

POLICY T-2.13 Bicycle Events. Support special bicycle events and activities which showcase Newark's bike trails and amenities, especially facilities providing access to shoreline trails and open spaces.

Actions

- ACTION T-2.A Pedestrian and Bicycle Master Plan. Adopt the Draft Newark Pedestrian and Bicycle Master Plan, consistent with the alignments shown on Figure T-2 and in the Bay Trail Feasibility Study, and proceed with implementation of its priority projects. Periodically update the list of projects as capital improvements are completed. Update the entire Pedestrian and Bicycle Plan every five years.
- ACTION T-2.B Cedar Boulevard Pedestrian and Bicycle Trail. Convert the linear tract of land formerly reserved for a southerly extension of Cedar Boulevard between Haley St. and Willow St. into a bicycle and pedestrian parkway, including a bicycle and pedestrian bridge over the Union Pacific Railroad. The City will apply for grants and pursue other funding sources to construct this project.
- ACTION T-2.C Safe Routes to School. Apply for grant funding on a regular basis to prepare and implement a comprehensive Safe Routes to School program. Such a program should be developed collaboratively with the Newark Unified School District.
- ACTION T-2.D Utilize Technology to Improve Safety. Evaluate and implement alternative safety measures for bicyclists and pedestrians using the latest technologies available.
- ACTION T-2.E Trail and Bikeway Design Standards. Establish design guidelines for the comprehensive and consistent design of trail and bikeway improvements.

- ACTION T-2.F Pedestrian Facilities and Bikeway Maintenance Program. Continue ongoing maintenance and upgrades of the City's sidewalk and wheelchair accessible ramp infrastructure and bikeway system. Develop a maintenance program for the City's planned off-street trail networks.
- ACTION T-2.G Priority Areas for Pedestrian Improvements. Pursue pedestrian and bicycle access improvements in Old Town and in the NewPark Mall vicinity, and between the Mall area and Newark neighborhoods. The City should identify prospective capital improvements which would facilitate walking and cycling within such areas.
- ACTION T-2.H Wayfinding Signage. Implement a bicycle signage and wayfinding program, including directional signs to indicate major destinations.
- ACTION T-2.1 Bicycle and Pedestrian Improvements at Signalized Intersections. Implement improvements at existing and future traffic signals to accommodate bicyclists and pedestrians, including striping modifications, dedicated bicycle detector loops, pedestrian countdown signal heads, auditory signals, ramp modifications, and improved signage.
- ACTION T-2.J Bicycle Parking Requirements. Consider adopting bicycle parking requirements for residential and commercial projects.

See the Recreation and Open Space Element for policies and actions on the Bay Trail and the recreational trail network. See the Health Element for policies and actions encouraging a more walkable city.

ACTION T-2.K Pedestrian Scale Lighting. Pursue pedestrian scale lighting in areas of high pedestrian activity, such as Old Town.

PUBLIC TRANSPORTATION

GOAL T-3 Support safe, affordable public transportation which provides an alternative means of travel through Newark and convenient access to destinations throughout the Bay Area.

Policies

- POLICY T-3.1 Improving Transit Services. Work collaboratively with BART, AC Transit, VTA, other agencies, and the private sector to provide an improved transit system serving persons who live in Newark, work in Newark, and visit Newark. Transit should have service frequencies (headways) of no more than 20 minutes at high ridership locations.
- POLICY T-3.2 Transit Diversity. Support a variety of transit types within the City, including local bus service within Newark, express bus service linking Newark to regional destinations, and future shuttle or circulator service to BART, ACE, and other rail transit facilities.
- POLICY T-3.3 Connecting to BART. Encourage improved transit connections between Newark and the BART stations in Fremont and Union City. A variety of strategies leveraging public and private resources should be explored to establish more frequent, reliable connections to BART.
- POLICY T-3.4 Transbay Service. Support implementation of the Dumbarton Rail project between Newark and the Peninsula. Continued express bus service across the Dumbarton Bridge should be supported as an interim measure, but not as an ultimate replacement of the rail service.
- POLICY T-3.5 Transit and Special Needs Populations. Ensure that local transit services meet the needs of mobility-impaired populations, including seniors and persons with disabilities. This should include demand-responsive service (e.g., para-transit) and other transportation services for those with special needs and others who are unable to use conventional transit.
- POLICY T-3.6 Service Adjustments. Ensure that local transit routes and service headways are periodically adjusted in response to growth patterns in and around the City.
- POLICY T-3.7 Transit Stops. Coordinate with transit providers to maintain a safe, clean, comfortable, and well-lit waiting environment at all transit stops and bus shelters within the City.

- POLICY T-3.8 Improving Transit Reliability and Speed. Work with transit providers to incorporate features such as real-time information on bus arrival and departures, and other measures which make using transit faster and more reliable.
- POLICY T-3.9 Schedule Integration. Support efforts to synchronize transit schedules to reduce waiting and transfer times, particularly between local transit and BART.

Actions

ACTION T-3.A BART Shuttle. Study the feasibility of a private, public-private, or local transit shuttle that connects Newark's major employment centers, major shopping destinations, and other destinations (such as Ohlone College) with the BART stations in Fremont and/or Union City.

Such a system could also include a connection to the Altamont Commuter Express/Capitol Corridor station in Centerville.

ACTION T-3.B Dumbarton Rail Design and Funding. Continue planning, design, and financing studies for the Dumbarton Rail between the Union City BART station and the Peninsula. Support phased implementation of the project, with Newark to the Peninsula as the first phase.

> The City will continue working with regional transit and transportation planning agencies to advance the Dumbarton Rail project, including a station located in the vicinity of Willow Street and Enterprise Drive. Goals for the design of the station have been established through the Dumbarton TOD Specific Plan. These goals focus on the visibility of the station, its accessibility to bicyclists and pedestrians, its parking areas, its connectivity to surrounding development and other transit modes, and provisions for arriving and departing passengers.

ACTION T-3.C Consultation with Local Transit. Work with the local transit provider to align transit routes in Newark in a way that better achieves the goals of the General Plan. This should include better connections between Newark's neighborhoods and shopping centers, including New Park Mall, Old Town Newark, and the Four Corners area, greater frequency, and more route clarity.

- ACTION T-3.D Public Input. Encourage local transit providers and regional transportation agencies to give the public opportunities for input on transit priorities, routes, and service issues.
- ACTION T-3.E Alternative Transit Service Provision. Work with surrounding cities and the Metropolitan Transportation Commission to evaluate the potential for a different service provider for local transit service. Such service could take the form of contract service to a Joint Powers Agency or a separate transit system that could provide service calibrated for local needs.
- ACTION T-3.F Para-Transit. Continue to support provision of quality para-transit to provide mobility to the disabled.

REDUCING VEHICLE MILES TRAVELED

GOAL T-4	Reduce vehicle miles traveled and dependency on motor vehicles through land use and transportation strategies.
Policies	
Роцсү Т-4.1	Coordinating Land Use and Transportation. Support land use choices and transportation investments which result in a community that is more walkable and serviceable by public transportation. Land use and development decisions should reflect the existing and planned capacity of Newark's transportation system.
Policy T-4.2	Transit-Oriented Development (TOD). Require that the densities and intensities of development in the vicinity of major transit hubs are high enough to capitalize on the investment that has been made in transit and to encourage and support transit use.
Роцсү Т-4.3	Co-Location of Housing and Services. Locate higher density housing and senior housing close to shopping, medical facilities, senior centers, and public transportation as a way of reducing trip lengths and increasing transportation options for residents of such developments.
Роцсү Т-4.4	Mixed-Use Development. Encourage mixed-use development (such as housing over retail uses) as a way of making it easier to live, work, and shop without owning a car, and as a strategy for reducing the number and length of vehicle trips.

- POLICY T-4.5 Home Businesses. Encourage home-based businesses, home occupations, live-work development, and space for shared offices and office support uses as a way to make it easier for Newark residents to work from home or from local facilities, rather than commuting to distant employment centers.
- POLICY T-4.6 Transportation Systems Management. Require new commercial and office development to implement Transportation System Management (TSM) measures to reduce trip generation and/or pay for traffic improvements through impact fees or assessment district financing.

Consistent with State requirements, the City has adopted a Transportation System Management Ordinance to manage employment-related travel demand. Revisions to the Ordinance may be considered in the future to ensure that it reflects current issues and priorities.

- POLICY T-4.7 Car Sharing and Bike Sharing. Promote car sharing and bike sharing as a viable means of transportation and an alternative to private auto and bike ownership.
- POLICY T-4.8 Ridesharing. Encourage Newark employers to provide incentives for employees to carpool, vanpool, or use transit when traveling to work. These incentives could include preferential parking for carpools, employee rideshare and vanpool programs, bike parking areas, and shuttles to transit. It could also include the creation of additional park and ride lots in and around Newark.
- POLICY T-4.9 Telecommuting and Flextime. Encourage Newark employers to reduce peak hour commute volumes by offering flexible work schedules and telecommute options for employees, and by providing facilities such as showers and locker rooms which make it more feasible for employees to bike to work.

Actions

ACTION T-4.A Car Sharing Programs. Work with private car share vendors to explore the feasibility of incorporating car sharing programs and providing preferential car share spaces in business parks, major shopping centers, and higher density residential developments.

Action T-4.B	Regional Bike Share Program. Partner with ABAG, MTC, Alameda CTC, and other entities to implement a regional bike share system.
	In February 2013, a pilot regional bike share program was launched in San Jose, Mountain View, Palo Alto, and San Francisco. Expansion of the program to Newark and other East Bay cities should be explored as ridership grows.
Action T-4.C	511.org Program. Continue to support the "511.org" program and other regional initiatives that help residents and workers find carpools, rides home from work, and other alternatives to driving alone.
Action T-4.D	City Employee Trip Reduction Program. Evaluate ways to reduce driving by City employees, including alternative schedules, work from home programs, and incentives for walking or biking to work.
Action T-4.E	Commuter Benefits Programs. Encourage Newark businesses to develop and implement commuter benefit programs, such as transit passes, eco-passes, and pre-tax transit benefits.
	See the Economic Development Element for policies on maintaining a jobs-housing balance

VEHICLE CIRCULATION

GOAL T-5	A safe, efficient, and well maintained network of roadways that facilitates vehicle travel in and around the City.
Policies	
Policy T-5.1	Road Hierarchy. Maintain a hierarchy of arterial, collector, and local streets in Newark, and adopt revised design and engineering standards which ensure that each of these streets serves their intended functions.
Policy T-5.2	Arterial Standards. Maintain standards for arterial streets that accommodate high volumes of through-traffic and connect Newark to the regional freeway system. Arterial standards should include adequate space for landscaping, signage, lighting, and other features which enhance the experience of the traveler, and protect the qualities of adjoining properties.

- POLICY T-5.3 Collector Standards. Maintain standards for collector streets which ensure that Newark's neighborhoods and business districts have easy access to arterials, while minimizing the intrusion of high traffic volumes into residential areas. Where necessary, collector streets should be improved to better link arterials with the local street system and reduce "cut through" traffic problems without requiring circuitous routes.
- POLICY T-5.4 Level of Service Standards. Strive for Level of Service (LOS) "D" or better at all major intersections in Newark. It is recognized that lower levels of service are projected at some intersections due to future increases in local and regional traffic. Decreases in the desired LOS may be acceptable at certain intersections due to conditions beyond the City's control, or to achieve other mobility and economic development objectives.

These other objectives might include improved conditions for pedestrians and bicycles, slower speeds to improve safety, higher aesthetic quality, more dynamic workplaces and increased employment, and protection of neighborhoods from non-local traffic.

- POLICY T-5.5 Transportation Improvements. Regularly evaluate the need for transportation improvements to maintain satisfactory levels of service on Newark streets. These needs should be expressed in the City's Capital Improvement Plan (CIP) that is updated biennially. The CIP should be considered when determining traffic impact fees and necessary improvements when development takes place.
- POLICY T-5.6 Right-of-Way Reservation. Ensure that adequate right of way is reserved for future transportation projects, consistent with the General Plan Transportation Diagram.

When a property owner along an arterial or collector street requests development approval, the City may require the dedication of public use easements or rights of way to allow for eventual improvement of the road in conformance with adopted City policies and standards. Similarly, when new roads are developed, the City may require landscaped easements along these roads to retain to retain the flexibility for future widening or other transportation improvements.

Роцсү Т-5.7	Connectivity. Encourage connectivity in the street system by avoiding dead-end streets and cul-de-sacs and reducing the distance that must be traveled to reach the arterial and collector street system. Where feasible in new high density developments, City streets should form a grid pattern, or a modified grid that facilitates easy circulation.
Роцсү Т-5.8	Transportation Efficiency. Undertake transportation improvements which manage existing lane capacity more efficiently and reduce the need to widen roads or add travel lanes. Such improvements could include signal interconnect projects along major street corridors, directional signage, left turn restrictions, and similar measures.
Роцсү Т-5.9	Emergency Access. Improve the street system as necessary to facilitate emergency vehicle response and to provide multiple route options in the event a road is blocked by an emergency or is otherwise made impassable.
Роцсү Т-5.10	Pavement Maintenance. Maintain and repair road surfaces based on road condition, hazards, and available funding. Pavement condition should be regularly evaluated to determine maintenance priorities. Funds for repair and maintenance should be allocated on an annual basis.
Роцсу Т-5.11	Hazardous Street Conditions. Identify and correct any hazardous street conditions, including obstructed sight lines, on a regular basis.
Роцсү Т-5.12	Funding. Develop mechanisms for funding the transportation improvements necessary to achieve the City's mobility goals, including grants and local revenue sources such as assessment districts in new development areas.
Роцсү Т-5.13	Inter-City Corridor Planning. Work collaboratively with the City of Fremont on land use and transportation plans for the Mowry Avenue, Thornton Avenue, Newark Boulevard, and Stevenson Boulevard corridors.
Actions	
Action T-5.A	Traffic Study Requirements. Require traffic studies for major new developments to determine projected impacts on the transportation system, and the measures required to maintain adopted levels of service (LOS).

- ACTION T-5.B New Level of Service Measurement. Explore new metrics for measuring LOS which consider variables other than vehicle speed and delay time.
- ACTION T-5.C Findings for Exceeding Adopted Levels of Service. Establish findings for approving development which would result in levels of service which exceed the City's adopted standards, even after mitigation measures are implemented.

Such findings would recognize the City's other mobility objectives, including safety, aesthetics, environmental quality, greenhouse gas reduction, and creating a balanced transportation system that serves all users. The findings would also recognize traffic impacts beyond the City's control, such as those that occur due to increases in regional traffic volumes or development in nearby cities.

ACTION T-5.D Traffic Monitoring. Continue the current traffic count program to monitor traffic on major arterial and collector streets. These counts should be used to verify traffic service levels and to evaluate the traffic impacts of new development projects.

Particular attention should be given to intersections that are approaching LOS D or worse.

- ACTION T-5.E Transportation Impact Fees. Conduct a study to update transportation impact fees to ensure that they are high enough to provide transportation improvements needed to serve new development.
- ACTION T-5.F Signal Interconnect Projects. Install interconnected signal systems on major arterials where practical and beneficial, including Stevenson Boulevard, Cherry Street, Thornton Avenue, Cedar Boulevard, Mowry Avenue, and Newark Boulevard.
- ACTION T-5.G Dumbarton TOD Road System. Ensure that the design of roads in the Dumbarton TOD area conforms to the standards established by the Dumbarton TOD Specific Plan.

These standards include blocks that are generally less than 450-feet in length, mid-block pedestrian crossings on longer blocks, and midblock crosswalks to facilitate pedestrian circulation. Roads in the Dumbarton TOD area should connect with local and regional roadways to ensure that this area is well integrated with the street system serving the rest of the City.

ACTION T-5.H Coordination with Caltrans and Fremont. Coordinate with Caltrans and the City of Fremont to keep Thornton Avenue, Mowry Avenue, Stevenson Avenue, and Newark Boulevard operating at LOS D or better on the Newark side of each of the respective freeway interchanges.

- ACTION T-5.1 Emerging Modes. Monitor emerging modes of travel, such as electric ("plug in") cars, driverless cars, and personal transportation devices (e.g., segways) to evaluate potential impacts on road design and traffic conditions.
- ACTION T-5.J Improvements to Maintain LOS "D." In the event that future traffic monitoring data indicates that the intersections of Cherry Street and Thornton Avenue, Cherry Street and Mowry Avenue, Thornton Avenue and Gateway Boulevard, or Cedar Boulevard and Smith Avenue are operating at LOS E or F, undertake the improvements listed in Table T-4 so that service levels can be restored to acceptable levels at the affected intersection(s). Funding would be provided through the City's Capital Improvements Fee.
- ACTION T-5.K Managing Regional Cut-Through Traffic. Consider signage and other measures to reduce the volume of regional traffic using Newark's arterials and collectors as bypass routes to Interstate 880 and SR 84, particularly along Cherry Street/ Newark Boulevard.

TRANSPORTATION AND THE LOCAL ECONOMY

GOAL T-6	Ensure that the City is well connected to the regional road, rail, air, and port systems, in support of local economic development and mobility goals.
Policies	
Роцсү Т-6.1	Regional Transportation Planning. Support regional transportation planning for Southern Alameda County and the Bay Area to ensure continued mobility between Newark and the region.

- POLICY T-6.2 Freeway Improvements. Support improvements to I-880 and SR 84 which improve Newark's connections to the region and provide the capacity needed for the City's continued economic growth.
- POLICY T-6.3 Airport Improvements. Support federal, state, and regional agency efforts to ensure that airport capacity in the Bay Area continues to grow to meet demand without adding new airports in the Newark area.
- POLICY T-6.4 Regional Passenger Rail Service. Promote improved passenger rail service between the Newark vicinity and other parts of the Bay Area and California, including improved Altamont Commuter Express (ACE) and Amtrak (Capital Corridor) service, as well as the BART extension to San Jose and the Dumbarton Rail project to the Peninsula.
- POLICY T-6.5 Freight Rail Service. Work with the Union Pacific Railroad to ensure the continued viability of freight rail service through Newark, and the availability of rail spurs and sidings to serve Newark's industrial users. Work with the Union Pacific Railroad to assure compliance with adopted standards regarding blocking of roadways. The City supports efforts by the Union Pacific Railroad to improve maintenance, upgrade equipment, and improve the safety of existing railroad grade crossings.
- **POLICY T-6.6** Grade Separations. Reduce the number of at-grade rail crossings in Newark. Grade separations are strongly supported as a way to facilitate emergency vehicle response, improve safety, reduce delays, and improve aesthetics.
- POLICY T-6.7 Truck Routes. Maintain a network of truck routes in Newark to ensure that truck traffic is directed away from residential areas and other sensitive uses, and to avoid congestion at major intersections. Truck traffic should be managed in a way that minimizes the distance that must be traveled between industrial areas and freeway interchanges while keeping commercial vehicles off of local streets and avoiding the potential for trucks to divert off of I-880 and SR 84 to "cut-through" Newark.

Policy T-6.8	Land Use and Truck Traffic. To the extent feasible, locate warehouse
	and distribution centers, heavier industrial facilities, and similar
	activities that generate large volumes of truck traffic in areas where
	ingress and egress can be accommodated without impacting
	residential areas and freeway access can be provided without using
	streets with predominantly residential traffic.

POLICY T-6.9 Service and Loading Areas. Strategically locate and screen truck loading areas so as not to impact the attractiveness and safety of the street system. In general, loading areas should be located to the side or rear of buildings, away from pedestrian areas.

POLICY T-6.10 Construction Traffic. Require that major new construction projects provide traffic control measures which limit major truck trips during peak hours and ensure that the impact of trucks and other heavy vehicles on local streets is minimized and mitigated.

Actions

- ACTION T-6.A Freeway Maintenance. Support continued and on-going maintenance of I-880 and SR 84 by Caltrans.
- ACTION T-6.B Stevenson and/or Mowry Grade Separations. Develop Stevenson Boulevard and/or Mowry Avenue Railroad grade separations in conjunction with the development of the Southwest Newark Residential and Recreation Project. The Stevenson crossing should be designed so that it is located entirely within Newark and does not result in undevelopable property south of the grade separation adjacent to the existing alignment of Stevenson Boulevard.
- ACTION T-6.C Central Avenue Grade Separation. Implement a railroad grade separation (roadway overpass) of the Union Pacific Railroad at Central Avenue between Filbert and Sycamore Streets with a contribution of funding from the Dumbarton TOD project. Pursue state and federal grant funding to carry out this project.
- ACTION T-6.D Truck Route Plan. Amend the City's Truck Route Plan to reflect the Jarvis/Gateway realignment, anticipated development in the Dumbarton TOD area, and other issues related to truck movement in the City.

Action T-6.E	Airport Flight Patterns. Monitor proposed changes to airport flight patterns and airport improvements and for adverse local impacts associated noise and safety.
Parking	
GOAL T-7	Manage parking in a way that balances aesthetic, environmental, economic development, and quality of life goals.
Policies	
Policy T-7.1	On-Street Parking. Provide for on-street parking on non-arterial City streets, unless existing right-of-way widths or safety considerations preclude the presence of dedicated parking lanes.
Policy T-7.2	Parking to Support Local Business. Ensure that adequate off-street parking is provided to promote local business development, and to avoid commercial parking overflow problems in residential areas.
Policy T-7.3	Parking Lot Location. In new or redeveloping commercial development areas, generally locate parking to the side or rear of buildings rather than between buildings and the travel lanes of adjoining streets.
Policy T-7.4	Shared Parking. Encourage the use of shared parking for uses with different demand characteristics as a way to reduce the total land area devoted to parking and maximize the efficient use of parking resources. In the event that parking structures are developed, encourage joint use agreements which enable multiple users to use such structures.
Ροιιςγ Τ-7.5	Parking Lot Aesthetics. In areas of the City with high pedestrian volumes or high visibility to passing traffic, require parking lots to be attractively designed and landscaped. Parking areas in such locations should be appropriately screened and should not dominate street

frontages.

POLICY T-7.6 Sustainable Design. Encourage parking lot designs which contribute to the City's environmental quality goals, including storm water quality control requirements. This could include the use of permeable pavement to reduce the amount of runoff entering surface waterways and reduce the "heat island" effect of new development.

Actions

- ACTION T-7.A Parking Reduction Strategies. Consider strategies to ensure that new development does not provide excessive amounts of parking or provide parking in a way that impedes the City's goals of promoting alternate modes of travel. These strategies could include the use of parking maximums in transit served areas, allowing greater parking exemptions for small establishments or reuse of existing structures, allowing credit for on-street parking spaces, and similar measures.
- ACTION T-7.B Revisiting Parking Regulations. Revisit the parking requirements established through the City's zoning regulations to identify opportunities for parking reductions, shared parking, compact spaces, and other amendments which reduce the land area dedicated to parking in the city while still meeting economic development and convenience goals.
- ACTION T-7.C Municipal Parking in Old Town. Explore public-private funding options to develop a municipal parking lot (or creating a parking district to develop a merchant's parking lot) in the Old Town Newark business district.
- ACTION T-7.D Variable Residential Standards. Establish residential parking standards which consider such factors as the number of bedrooms per unit for multi-family development, the occupancy characteristics of future residents, and the proximity of the development to public transportation. Lower parking requirements could apply to senior housing, studio apartments, and other units where the number of vehicles per unit is expected to be lower than conventional market rate housing.
HOUSING

INTRODUCTION

The purpose of the Housing Element is to ensure that safe, decent, affordable shelter is provided for all Newark residents. The Element places a particular emphasis on lower income Newark residents and residents with special needs, including seniors and persons with disabilities. The Element includes an evaluation of housing needs in the city, based on demographics and housing conditions. As required by state law, it identifies sites sufficient to accommodate the city's share of the region's housing needs over an eight year period. It also evaluates constraints to housing production and establishes measures to mitigate such constraints.

Housing is one of the mandatory elements of the General Plan. Because the Housing Element is subject to specific, prescriptive requirements and must be prepared and updated on a cycle set by the California legislature, it stands on its own as a separate document and is not included in this version of the General Plan. However, it is an integral part of the Plan, has the same legal standing as the other elements, and is internally consistent with the other elements.

Newark's current Housing Element covers the period 2007 to 2014. It is anticipated that a new Housing Element will be adopted in late 2014 covering the next planning period, which runs from 2015 to 2022.

The Housing Element document may be consulted for additional detail.





N E W A R K G E N E R A L P L A N H O U S I N G

ECONOMIC DEVELOPMENT

INTRODUCTION

The Economic Development Element contains goals, policies, and actions to encourage a robust economy, support existing businesses, and attract new businesses that contribute to Newark's quality-of-life and fiscal vitality. While this Element is not required by State law, it is intended to provide policy guidance for Newark's future economic growth. The Element reflects the City's desire to maintain a positive balance between jobs and housing provide pathways to employment for Newark residents, strengthen the City's competitive edge and identity within the Silicon Valley market, make Newark a location of choice for retail and hospitality development, and encourage diverse office and industrial uses. Including these goals in the General Plan can help ensure that economic development considerations are integrated into all aspects of city development.

The goals, policies, and actions of the Economic Development Element reflect the aspirations of Newark residents and businesses. In 2011 and early 2012, residents participated in community workshops to identify priorities and goals, including those related to Newark's economic future. In December 2012 and again in March 2013, the City held Blue Ribbon Panel meetings to receive advice and input for the Economic Development Element from the local business community. Ideas culled from these meetings, together with input from local businesses, the Chamber of Commerce, realtors, and economic development organizations were used to prepare this Element.

OVERVIEW OF NEWARK'S ECONOMY

HISTORICAL PERSPECTIVE

From its inception, Newark was a manufacturing hub serving regional, national, and international markets. A century before incorporation, Newark was the location of orchards, dairies, and farms and served as a shipping point for wheat, hay, and coal. Salt production began in the 1850s. Acquisitions and mergers ultimately resulted in







the Arden Salt Company, predecessor to Leslie Salt and today's Cargill Salt. Completion of the railroad in the 1870s was the impetus for some of the town's first manufacturers, including a railroad car building firm and a foundry which later manufactured Wedgewood stoves.

Following incorporation, the City leveraged its location at the intersection of two major highways (Interstate 880 and Highway 84) and its proximity to Silicon Valley to create an inviting setting for the high technology and electronics industries, as well as the support services that underpin these industries. These services included warehousing and distribution, as well as computer parts manufacturing and assembly. The Cherry Street and Central Avenue industrial areas emerged as important industrial districts during this time period, providing an important link in the supply chain for the Bay Area's technology sector.

Sun Microsystems opened a 1.4 million square foot campus in Newark in the late 1990s, with 4,000 employees at its peak. The facility closed in 2003 when Sun consolidated its real estate holdings, which was a significant loss for the city. The buildings and surrounding vacant properties were transformed into Pacific Research Center (PRC) in 2006, and are now a multi-tenant office, flex, and research and development park. Today, the City has rebounded from the loss of Sun and the 105-acre PRC is one of the premiere business addresses in Southern Alameda County. The City continues to welcome new technology companies. In 2012 alone, Membrane Technology and Research, BioChain Inc., Belectric USA, United Logistics Solutions, Logitech, and Theranos chose to locate in Newark.¹

In the early 1980s, Newark also emerged as a major retail center serving the growing "Tri-Cities" (Newark-Fremont-Union City) market. NewPark Mall opened in 1980, and became the first enclosed super-regional shopping mall in the Tri-Cities, a distinction it retains today. During the 1980s and 1990s, the City saw additional neighborhood and community shopping center development, especially on the perimeter of NewPark and in the Four Comers area around Jarvis Avenue and Newark Boulevard. The City's hotel market also became well established during this period.

¹ City of Newark, 2012, 2012 State of the City Address, http://www.newark.org/departments/ city-of-newark/2012-state-of-city-address/, accessed on March 15, 2013.

NEWARK TODAY

Today, Newark has a multifaceted economy—from robust hotel and retail establishments to a diverse office, manufacturing and warehousing sector. Like cities throughout the Bay Area, Newark's economy suffered during the recession of 2007-2011. The City has higher commercial vacancy rates than other communities in the Silicon Valley, although there are signs of recovery and many positive indicators. Through careful planning and financial management, the City has been able to balance its budget and create the potential for future surpluses at a time when many other cities in California have not.

MAJOR EMPLOYERS AND CORE INDUSTRIES

Figure ED-1 shows the location of industrial and commercially designated areas in the city. Commercial uses are clustered around NewPark Mall, the Four Comers area, and in neighborhood shopping centers along Thornton Avenue. Technology and office park uses are generally located on the northern edge of the City (Pacific Research Center), the southern edge of the City (Stevenson Point Business Park). A band of industrial and warehousing uses extends along the south/west side of the Cherry Street corridor, and along Central Avenue and Wells/Enterprise in the western part of the city.

The most recent comprehensive source of data on the composition of jobs in the city of Newark is the 2007 US Economic Census. Chart ED-1 indicates the distribution of jobs by sector, with exclusions for certain sectors such as public administration. More than half of all jobs tallied by the Economic Census were associated with either retail trade or manufacturing. Another 13 percent were associated with accommodations and food and 14 percent were associated with wholesale trade. Compared to nearby communities in Silicon Valley, there are a relatively large number of moderately paying (e.g., "blue collar") jobs and a smaller number of professional and technical (e.g., "white collar") jobs.

As of 2012, ten employers represented over 16 percent of the total jobs in Newark. These employers included the Newark Unified School District (700 employees), Logitech (689 employees), World Pac (280 employees), Full Bloom Baking Company (280 employees), Risk Management Solutions (270 employees), Smart Modular Technologies (249 employees), Morpho Detection (208 employees), Cargill Salt (182 employees), the City of Newark (176 employees), and Valassis





EXISTING INDUSTRIAL, COMMERCIAL, AND RETAIL LAND USES

(166 employees).² Other large employers included the department stores at NewPark Mall, and retailers such as Home Depot.





Note: Chart is based on North American Industry Classification System Codes 21 through 813990, and excludes public administration and certain other categories of employment (mining, agriculture, forestry). Approximately 80% to 85% of Newark's jobs are represented by this chart. Source: U.S. Census Bureau, 2007, Economic Census, Table 1, elected Statistics by Economic Sector.

NEWARK'S COMPETITIVE EDGE

Newark has a number of locational advantages, including its proximity to three airports (Oakland, Mineta, San Jose, and San Francisco International), and access to two major freeways via five interchanges (two on SR 84 and three on I-880). The City is 25 miles from the Port of Oakland and 15 miles from the Port of Redwood City, has rail-served industrial sites, and has land prices and rents which are far more affordable than those in Santa Clara and San Mateo Counties. Newark is located just less than 10 miles from Menlo Park and Palo Alto, and is within easy reach of the expanding campuses of Google, Facebook, and other major employers on the Lower Peninsula.

 $^{^2\,}$ http://www.ci.newark.ca.us/departments/planning-and-economic-development/economic-development/top-employers/.

While much of Newark's economic development focus has been on its role as a "gateway" to Silicon Valley, the city is also an important part of the I-80/I-880 industrial corridor. This corridor stretches from Berkeley to San Jose, and is the heart of Northern California's transportation, manufacturing and warehouse/distribution economy. In 2005, businesses in this corridor accounted for over 545,000 jobs. Thus, Newark is not only a gateway, it is also a crossroads—a city that offers access both to lower cost general industrial space and to high amenity space for industries in clean technology, bio-technology, health services, and computer manufacturing.

As one of the smaller cities in Silicon Valley, Newark takes prides in providing fast, personalized service to new and existing businesses. Its zoning regulations offer flexibility, with fewer limits on building size and height than nearby communities. The City places a priority on helping businesses negotiate the planning and permitting processes quickly, efficiently, and with ease.³ The process in Newark is simple and clear—within two weeks of plan submittal, applicants receive a letter, tailored to the specific project, providing step-by-step advice on required review, necessary fees, and application requirements. Typically, the City is able to shepherd projects from application submittal to City Council determination within 30 days for smaller projects and 60 days for larger projects.⁴

JOBS-HOUSING BALANCE

According to the Draft ABAG forecasts for Plan Bay Area (2013), there were roughly 17,870 jobs and 12,970 households in Newark in 2010, equating to a jobs-housing ratio of 1.38. By contrast, the average for the Bay Area as a whole is 1.29 jobs per household. Newark has a higher jobs-housing ratio than Fremont (1.27) and Union City (1.00) but a lower jobs-housing ratio than Hayward (1.52). The jobs-housing ratio is substantially higher across the bay in Menlo Park (2.35) and Palo Alto (3.37). This creates strong real estate market pressure on Newark to provide housing for the workforce in northern Santa Clara County and the Peninsula.

In theory, a jobs/housing balance that is close to the regional average (1.29) indicates a sustainable economy with the potential for residents to live and work in the same community. However, because of the city's location near "job-rich" communities and its affordability relative to these communities, much of the Newark



³ City of Newark, Preliminary Plan Review, http://www.newark.org/departments/planning-andeconomic-development/economic-development/preliminary-plan-review/, accessed on March 15, 2013.

⁴ City of Newark, Typical Project Timeline, http://www.newark.org/images/uploads/comdev/pdfs/ProjectTimeLine.pdf, accessed on March 15, 2013.

workforce commutes to jobs in other cities. By contrast, many of those who work in Newark also commute in from other cities, in some cases from places as far away as the Central Valley.

According to the 2009 to 2011 American Community Survey, about 84 percent of Newark residents commute to jobs outside of Newark. This is not unusual for the region: over 80 percent of Union City and almost 70 percent of Fremont residents also commute to work in cities other than the ones where they live.

The City's policies seek to improve this balance by providing more diverse housing choices in the city and by attracting jobs which reflect the labor skills of the Newark workforce. The city seeks both to attract "workforce" housing affordable to lower and moderate income workers and market rate and "executive" housing for those with higher incomes. At the same time, it is working to attract higher-paying jobs, both to provide career opportunities for Newark residents, and to provide those who work in Newark with the incomes needed to live locally rather than commuting in from more affordable housing markets. Economic diversification is a critical part of this strategy, so that the city's jobs continue to provide a variety of wages for those with different educational and skill levels.

Looking forward, the City expects to maintain a jobs-housing ratio which exceeds the regional average. Although housing growth is expected to outpace job growth due to large numbers of units in the Dumbarton TOD and Southwest Newark Residential and Recreational Project, Newark continues to have the capacity for additional industrial and office growth on industrially zoned land, and the potential for commercial infill and intensification. The City will continue to maintain economic development programs which attract prospective employers and retailers to these areas, while providing opportunities to grow existing businesses and promote local entrepreneurship.

ECONOMIC DEVELOPMENT PROGRAMS

Economic development services in Newark are administered by the City's Community Development Department. As a small city, Newark does not have a separate Economic Development Department or Division. The Community Development Department works in partnership with the Chamber of Commerce to facilitate business attraction, retention, and expansion, and to promote Newark to prospective employers and businesses. The Department strives to support the City's







reputation as a business-friendly community by offering personalized service, expedited permitting, and technical assistance. Newark will develop an Economic Development Strategy in the coming years to identify additional programs and initiatives to grow the economy, generate jobs and revenues, and improve the city's position in the region.

THE RETAIL ECONOMY

Retailing is one of the strongest economic sectors in Newark and is one of the two main revenue sources for City government. According to the City's 2012-2017 Five-Year Forecast, sales taxes represented 25 percent of municipal operating revenues in 2011-2012 and are approximately equal to property tax revenues. The City experienced a drop in sales tax revenue between 2008 and 2012 due to the recession. While there are signs of recovery, the closure of major retailers such as Target in 2012 has hindered job and revenue growth. The retail sector is expected to rebound slightly in the coming years, and should grow much stronger as the city's population increases due to new housing development.

RETAIL DISTRICTS

Newark's retail industry is distributed into several different geographic areas: New Park Mall is located just south of the I-880/ Mowry interchange. Nearby shopping centers serve the southern part of the city, as well as adjoining neighborhoods in Fremont and other parts of Newark. The Four Corners area serves the northern part of the city, and to some extent serves the adjacent Ardenwood Technology Park and Ardenwood residential areas in Fremont. In the heart of the city, the Old Town Newark Retail area includes a mix of smaller shopping centers and local-serving businesses. There are also several neighborhood-scale shopping centers along major corridors, and scattered smaller retail businesses on the edges of the city's industrial districts.

New Park Mall occupies over 1,161,000 square feet and includes more than 140 stores. It is home to Macy's, JC Penney, Sears, and Burlington Coat Factory, along with many smaller shops and restaurants. As a regional retail destination, the Mall will continue to bring visitors and shoppers and be a significant revenue source for the city. The perimeter of the Mall includes other shopping centers, including the mostly vacant Mowry Crossings (formerly anchored by Mervyn's), Mowry Plaza (also called the Lion Center), Cedar Village, and NewPark Plaza (home to TJ Maxx and Payless). To the south/east of this area, an adjoining retail district includes several

auto dealerships, other commercial uses such as health clubs and restaurants, and several major hotels.

Four Corners, a retail district in the northern portion of the City, consists of stores and services located around the four corners of Jarvis Avenue and Newark Boulevard. Because of its proximity to offices and business campuses, workers represent a significant part of the market here. The area includes several grocery stores, including Safeway and Raley's Supermarkets and a new Mi Pueblo Supermarket (in a space formerly occupied by Albertsons), and several clothing and general merchandise stores, including a new Ross Dress for Less in the Newark Marketplace Shopping Center. Orchard Supply Hardware is also located in this area. The area also includes a full complement of banks, restaurants, smaller retailers, personal services, and auto-oriented uses.

Old Town Newark is Newark's original shopping district and was the city's major retail area until the 1970s. It presents interesting historic characteristics which could be attractive to retailers and consumers, although it serves a different niche than the larger suburban-style shopping centers. The shopping district has the potential to be a more dynamic, pedestrian-oriented retail district in the heart of the city, and could capture niche uses such as restaurants, antique shops, and boutiques.

Other retail centers in Newark include a small shopping center at Mayhews Landing Road and Newark Boulevard (anchored by Grocery Outlet), the Home Depot on Thornton near I-880, Newark Square (Thornton at Cedar), and a neighborhood shopping center at Central and Timber Lane just west of I-880. Monthly retail rents at these centers and at other neighborhood shopping centers in the Four Comers and NewPark areas were generally in the range of \$2 to \$4 per square foot in 2013.

Along with existing retail districts, there is also a planned retail district near the Dumbarton Transit-Oriented Development (TOD) project. This center will serve future residents and workers in the area. The new TOD retail center will be designed to be more pedestrian and bicycle friendly than the city's existing neighborhood shopping centers and will serve arriving and departing transit passengers as well as those living and working in the area.

HOSPITALITY

Because of Newark's proximity to three international airports, six freeway interchanges, two major universities (Berkeley and Stanford), and one of the most



dynamic employment centers in the world (Silicon Valley), the city has a thriving hotel industry. The City's hotel occupancy tax is an important source of municipal revenue and the hotels themselves generate hundreds of local jobs. Moreover, hotel visitors patronize Newark restaurants and businesses, generating additional revenue for the community and providing additional jobs. Because of the lower cost of land relative to the West Bay, room rates in Newark are generally lower than comparable accommodations in the 101 corridor.

There are over 1,700 hotel rooms in the city. Newark provides a number of top-end hotels but it also provides many more affordable alternatives. Hotels are concentrated in the Gateway area around the two SR 84 interchanges, and in the NewPark area between the Mowry and Stevenson interchanges.

BENEFITS AND TRENDS

Table ED-1 indicates the actual, budgeted, and estimated tax benefits provided by sales taxes and transient occupancy taxes between 2010 and 2014. As the table illustrates, total tax revenue from these sources has consistently been in the range of \$11 million annually.

Sales and Use Taxes, which generally come from retailers, generated roughly \$8.1 million in Fiscal Year 2010-2011. Projections indicate this volume will remain relatively flat for the coming years, although slight increases are projected as the economy recovers and vacancies are reduced. At the regional level, retail sales have seen an uptick and the cost of space is increasing. Between June 2011 and the end of 2012, the median cost per square foot of retail space in the San Francisco-Oakland-Fremont region increased 5.6 percent.⁵

Consumer retail preferences are changing, with a shift toward regional "power" centers such as Union Landing (Union City) and Pacific Commons (Fremont) and "urban mixed use" centers such as Santana Row in San Jose. The latter concept emphasizes active ground floor retail, restaurants, entertainment (such as movie theaters), structured parking, and architectural and streetscape features which

⁵ Loopnet, Market Trend for Newark, California, http://www.loopnet.com/Newark_California_ Market-Trends?Trends=AskingPricesFS,SalePricesFS,TotalAvailableForSaleFS,NumberOfListingsFS,Profile ViewsFS,TotalNumOfUnitsFS,TotalSFAvailableFS,DaysOnMarketFS,AskingRentsFL,NumberOfListingsFL,Pr ofileViewsFL,TotalSFAvailableFL,DaysOnMarketFL&PropertyTypes=Retail, accessed on March 18, 2013.

TABLE ED-1 Tax Revenues – Sales and Use Taxes and Transient Occupancy Tax					
	2010-20 Actual	11 2011-2012 Budgeted	2011-2012 Estimate	2012-2013 Budgeted	2013-2014 Budgeted
Sales & Use Taxes	\$8,073,7	00 \$8,110,000	\$7,880,000	\$7,900,000	\$7,980,000
Transient Occupancy	Tax \$2,785,3	00 \$2,650,000	\$3,000,000	\$3,235,000	\$3,345,000
Total Tax Revenue (including other taxes	not listed) \$23,970,9	00 \$25,299,000	\$26,968,000	\$26,537,000	\$27,055,100

recreate a "traditional" downtown shopping environment. Upper story uses such as housing are often introduced to add vitality to these centers. There may be opportunities to pursue such retail formats in Newark in the coming decades.

Some of the interest in vacant retail spaces in the city has been from discount and dollar stores. While the demand for these uses is a positive sign of a recovering market, there is also a concern that a diverse mix of goods and services continue to be offered. Newark is actively promoting higher quality retail, both to generate revenue and because community members have repeatedly expressed a desire for higher quality shopping and dining choices.

Along with the retail sales revenue, the hospitality tax (Transient Occupancy Tax) is another major revenue source for the City. In Fiscal Year 2010-2011, the hospitality sector brought the City \$2,785,300 in revenue. It is projected to reach more than \$3 million revenue by Fiscal Year 2013-2014, which would be about 11 percent of the City's total tax revenue.

Currently there are no new hotels being built in the city, but several are being renovated. Occupancy rates have continued to improve during the last few years, but average room rates have remained static. The City is working with the Chamber of Commerce and hotel operators to developing marketing tools to attract business travelers to the city, and make Newark the location of choice for the longer-term business traveler to the Silicon Valley market.



THE OFFICE AND INDUSTRIAL ECONOMY

As noted earlier, Newark's location in the northern part of Silicon Valley has contributed to its growth as an office and industrial center. The city's rail and freeway access made it a high-demand location for warehousing, distribution, and manufacturing in the 1960s and 70s. Improvements to the Dumbarton Bridge and State Route 84 made the city a logical expansion area for the tech sector in the Palo Alto-San Jose corridor during the 1980s and 1990s. The city offered lower land costs, large vacant tracts, and proximity to the East Bay workforce, spurring the development of several business parks and technology campuses. These areas attracted businesses in the supply chain serving the tech economy, as well as tech businesses themselves.

Sun Microsystems' decision to develop its Newark campus in the late 1990s was a turning point for the city and heralded Newark's emergence as location for corporate offices as well as manufacturing and distribution centers. Unfortunately, Sun's departure in 2004 left Newark with one of the highest office/flex vacancy rates in the region. As of the fourth quarter of 2012, Kidder Matthews reported the city's vacancy rate was 33.1 percent, compared to a submarket average of 12.8 percent. Rental rates averaged \$1.00 a square foot, compared to \$2.00 in Fremont and \$5.60 in Palo Alto.⁶ Lower rents provide an important competitive advantage for Newark, and make the city well positioned to capture start-up and incubator uses seeking affordable space for their initial operations.

Despite persistent high vacancy rates in some parts of the city, Newark is also well positioned for recovery and continued growth. The city continues to have locational advantages which ensure its resilience as the economy grows and jobs increase. Pacific Research Center (PRC), in particular, offers opportunities for high-quality, amenity-rich office space. The 93-acre Stevenson Point Technology Park at the west end of Stevenson Boulevard, is likewise an attractive location for new and emerging industries, including those in the tech and biotech sectors. The City has made infrastructure investment a priority, and is seeking to provide the information and telecommunication capacity necessary to attract prospective employers.

There are approximately 1,030 acres in the city with an industrial General Plan designation. Approximately 60 percent of this acreage is designated "general

⁶ Kidder Matthews, Silicon Valley Office Real Estate Market Review, 1st Quarter, 2012.

industrial," which is the most permissive of the industrial land use categories and allows the broadest variety of industrial uses. Another 30 percent is designated "special industrial," generally corresponding to the PRC and Stevenson Point Technology Parks. The remaining 10 percent is designated "limited industrial," these areas primarily serve as buffers between general industrial and residential areas, or correspond to small, older pockets of industry within the city. In total, industrially designated land represents 13 percent of Newark's land area. If open space is subtracted out of this equation, industrial land represents 21 percent of the city.

The City's "Special Industrial" areas several sites appropriate for corporate headquarters and large regional campuses. Opportunities for office space also exist within the regional commercial area around NewPark Mall. In addition, some of the city's older industrial sites have low improvement to land value ratios (e.g., few structures and high land values). These sites offer the potential for more economically productive uses in the future, including office, manufacturing, laboratories, research facilities, and other lighter industrial activities.

Newark's more traditional industries will also be strongly supported and encouraged in the future. While the City may attract tech firms and see some increases in employment densities and space utilization, one of Newark's strengths is its affordability relative to other submarkets in the Bay Area. The City wishes to remain a viable location for large scale warehouse and distribution facilities, general industry, and activities requiring areas for outdoor operations and storage. Such activities are expected to remain predominant in the Cherry Street industrial area and in the Central Avenue and Wells/Enterprise areas. Unless compelling reasons and economic benefits exist, zoning for these areas should preclude their conversion to retail uses, housing, and activities which may interfere with industries on surrounding sites.

WORKFORCE CHARACTERISTICS

According to 2007-2011 American Community Survey (US Census) data, there are roughly 23,000 Newark residents in the labor force. Chart ED-2 indicates the types of jobs held by these residents. Education, health care, and social services is the largest single sector, employing 19 percent of the city's workforce. This is followed closely by manufacturing, which employs 18 percent of the workforce. Other large sectors include Professional, Scientific, Technical and Management professions (14 percent), Retail Trade (11 percent).



While manufacturing and retail jobs represent half of the jobs in the city (see Chart ED-1), they represent 29 percent of the jobs held by Newark residents. This suggests that a large number of those employed in these sectors are commuting into Newark from elsewhere.



Chart ED-2 Percent of Employed Newark Residents by Industry, 2010

Source: American Community Survey, 2007-2011, U.S. Census Bureau (2012).



Table ED-2 indicates the educational characteristics of the population and compares these characteristics to Fremont and Union City. Approximately 27 percent of Newark's residents aged 16 or over have a college or graduate degree. This compares to 50 percent in Fremont and 37 percent in Union City. Conversely 11 percent of the city's residents aged 16 or older do not have a high school diploma, which is somewhat higher than Fremont and lower than Union City. About 36 percent of Newark's residents have a high school diploma but no further secondary education. This is substantially higher than the 20.5 percent in Fremont and 25.7 percent in Union City. The statistics point to the important benefits that Ohlone College can provide in preparing Newark adults for higher skilled, higher-paying jobs. Opportunities to partner with other institutions of higher learning, such as the California State University and the University of California, can also help promote lifelong learning in Newark.

FABLE ED-2 Educational Attainment			
	Newark	Fremont	Union City
Less than 9 th Grade	5.9%	4.3%	7.5%
9 th to 12 th Grade, No Diploma	5.4%	5.4%	5.9%
High School Graduate (includes equivalency)	35.8%	20.5%	25.7%
Some College, No Degree	19.9%	13.4%	18.0%
Associate's Degree	6.2%	6.5%	5.4%
Bachelor's Degree	18.5%	27.9%	27.0%
Graduate or Professional Degree	8.3%	22.0%	10.4%

Source: U.S. Census Bureau American Community Survey 2011-2013 3-Year Estimates, Selected Social Characteristics.

The unemployment rate among Newark residents has fluctuated, as it has throughout the Bay Area. Based on monthly data from the Bureau of Labor Statistics, the unemployment rate was 7.6 percent in December 2012, down from a recession high of 10.9 percent in July and August 2010. Unemployment had been as low as 1.8 percent in December 1999 and was 3.1 percent as recently as May 2007. The impact of the recession was most noticeable between September 2008 and July 2009, when unemployment in Newark grew from 4.7 percent to 8.2 percent in just ten months. The city's unemployment rate today is virtually the same as the rate in Union City, slightly higher than Fremont (5.9 percent), and slightly lower than Hayward (9.2 percent).

Income characteristics in Newark are also similar to neighboring cities. The city's median household income is \$83,346, which is slightly higher than Union City (\$80,281) and lower than Fremont (\$95,182). The 2007-2011 American Community Survey indicates that approximately 39 percent of Newark's households have annual incomes above \$100,000, while 11 percent earn less than \$25,000 a year. In order to provide a better match between local jobs and workforce skills and raise the income earning potential of Newark households, this Element supports quality education and job training, and partnerships with local employers and institutions to develop a highly skilled and competitive labor force. Policies and actions also seek to attract small local businesses to create more local employment.



As noted earlier, 84 percent of Newark's workforce commutes to other cities for their employment. The median travel time in 2007-2011 was 25.6 minutes. About 78 percent of the city's employed residents drove alone to work, while 12 percent carpooled. Less than 4 percent used public transportation, and 2 percent worked from home. Moving forward, the city seeks to reduce the percentage of residents who drive alone to work by providing additional options, such as bicycling, BART shuttles, and new premium transit services to the West Bay.

NEWARK'S IDENTITY

One of Newark's economic development and community development goals is to establish a strong positive identity for the city. Over the years, the city has suffered from the lack of a distinct identity, in part because of its lack of a vibrant "Downtown," its flat terrain and absence of strong visual landmarks, and its relatively uniform development pattern. For many Bay Area residents, there is little to distinguish Newark from Fremont and the other communities along the East Bay Plain. San Francisco Bay itself has been the city's "back yard" rather than its "front yard."

Through adoption of this General Plan, Newark aspires to reorient itself to San Francisco Bay to a greater extent than it has in the past and to establish itself as a bayfront city. This can be accomplished while still protecting and even celebrating the active industrial and salt harvesting, refining, and production uses that occur near the shoreline. Construction of the Bay Trail, restoration of wetlands, and development of the Dumbarton TOD and Southwest Newark Residential and Recreational project all provide opportunities to focus on the Bay, and establish stronger connections to the marshes and sloughs that define the city's western flank, while respecting Newark's industrial past, present, and future.

Another key factor in strengthening the city's identity is to attract higher-end and more dynamic retail, restaurant, and entertainment choices to the city. In the coming years, Newark will face growing competition from surrounding cities aiming to create new "downtowns" and provide more sophisticated and contemporary shopping experiences. Newark residents and workers have expressed support for bringing a more vibrant, higher end retail mix to the city, with new restaurants and entertainment venues complementing new retail choices. These kinds of developments can have a tremendous positive impact on the city's image and appeal while generating revenues and creating jobs.

Newark has the opportunity to capitalize on its relatively healthy economic outlook as it looks to the next 20 to 25 years. The city continues to do well in providing diverse job and housing choices, but it must take additional steps to better match available jobs and resident skill levels. Newark needs to attract employers to accommodate its skilled labor pool; at the same time, it must improve the readiness of Newark residents to fill new jobs. Education, job training, job creation, and job placement must be carefully coordinated to fully achieve the City's economic vision.

The goals, policies, and actions below are intended to help the City balance competing priorities while accommodating the diverse needs for a sustainable economic future.

GOALS, POLICIES, AND PROGRAMS

A RESILIENT AND THRIVING ECONOMY

GOAL ED-1	Sustain a thriving and growing local economy that is resilient to economic and financial cycles.
Policies	
Policy ED-1.1	Quality Business Environment. Create a favorable environment for business in Newark, with City policies, tax rates, and regulations that encourage business growth and development.
Роцсу ED-1.2	Newark's Competitive Edge. Maintain and enhance Newark's competitive edge relative to other cities in the East Bay, Silicon Valley, and Peninsula Areas, particularly in the technology sector. This will require competitive fees and fast processing times.
Policy ED-1.3	Revenue Generation. Support continued expansion of the municipal

ipal tax base, including property, transient occupancy, and sales taxes, to ensure adequate funding for public facilities and services. Development should generally have a positive fiscal impact on the City, unless other compelling community benefits will be provided.

> An example of a project with a neutral or slightly negative fiscal impact that provides a "compelling community benefit" might be senior housing or childcare. Such uses help create and sustain a strong community but do not necessarily generate revenue for the city.

POLICY ED-1.4 Core Industries. Continue to support and grow the city's core industries, while remaining flexible as core industries change and evolve. Work with the Chamber of Commerce and property owners to leverage the potential of core industries and emerging industries to provide employment opportunities in related or supporting sectors, such as retail, hospitality, and health care.

Poucy ED-1.5 Managing Land Resources. Ensure the wise use of Newark's available industrial and commercial land supply. The City will plan strategically to ensure that the economic development potential of its commercial and industrial areas is fully realized. Vacant sites in such areas should be viewed as essential assets that can be used to strengthen and diversify Newark's economy. Land uses such as group assembly, which are potentially incompatible with industrial operations and retail vitality, should be discouraged in the city's major employment centers.

The City's zoning regulations should address those business districts where non-industrial uses such as group assembly may be acceptable, and those areas where it should be prohibited or permitted only with a use permit to avoid conflicts with industrial operations nearby.

- POLICY ED-1.6 Business Retention and Recruitment. Work with the Chamber of Commerce and other local businesses and economic development organizations to retain jobs in the city, and to recruit and support new business and business growth.
- POLICY ED-1.7 Flexibility. Ensure that City policies, zoning, and economic development programs are flexible enough to respond to rapid changes in technology, real estate market dynamics, and the workplace. Economic development efforts should be modified and adapted as necessary as local, regional, national, and global economic conditions evolve.
- Policy ED-1.8 Partnerships. Build and strengthen partnerships with the City's economic development partners, particularly the Chamber of Commerce, but also business development organizations, regional economic development associations, Ohlone College, and other entities.

- POLICY ED-1.9 Communications. Strive for frequent and effective communication with the business community. The Chamber of Commerce is a key partner in this regard. The City should provide opportunities for local businesses to communicate their issues and needs to City staff, and should demonstrate responsiveness through follow-up actions.
- POLICY ED-1.10 Infrastructure. Work with local utilities and other partners to maintain the infrastructure needed to support economic development, including water, sewer, storm drainage, power, communications, and other utilities.
- POLICY ED-1.11 Transportation. Plan for sufficient transportation capacity and municipal services to serve the buildout of areas designated for retail, office and industry. Recognize and respond to the special transportation needs of logistics, warehouse, and distribution industries, including provisions for trucks and easy access to Interstate 880 and State Route 84.
- POLICY ED-1.12 Access to Mass Transit. Improve transportation options for those who live or work in Newark. This should include improved linkages between Newark's employment centers and the BART stations in Fremont and Union City, as well as the planned Dumbarton rail service which will provide linkages to the employment centers of the West Bay.
- **POLICY ED-1.13 Funding.** Explore alternative funding sources to provide incentives for economic development activities for which the City lacks sufficient resources.
- POLICY ED-1.14 Jobs-Housing Ratio. Encourage a jobs and housing balance that is based not only on the number of jobs and employed residents in the city, but also the ability of Newark residents to live and work within the city. The City will support the development of housing which corresponds to the wages and employment characteristics of projected employment in Newark.

The City will continue to provide sufficient residentially zoned land to meet its Regional Housing Needs Allocation (RHNA) as defined by ABAG, and will work to provide diverse housing choices for Newark residents. An update of the Housing Element is anticipated in 2014 to demonstrate the City's commitment to meeting its housing needs through 2022 and beyond. Actions

- ACTION ED-1.A Comprehensive Economic Development Strategy. Prepare a comprehensive economic development strategy which reflects the land use and transportation pattern envisioned by the Newark General Plan. Development of the strategy should engage a broad range of existing businesses, commercial and industrial property owners, the general public, other stakeholders, and economic partners.
- ACTION ED-1.B Communication Strategies. As funding allows, implement communications strategies which keep local businesses informed, enable businesses to communicate with staff, and provide a unified and positive image of Newark. Communications strategies should achieve a variety of economic development objectives, including business retention and expansion, business attraction, and business creation. Communication should be interactive, with dialogue going both outward and inward.
- ACTION ED-1.C Identifying Regulatory Barriers. Periodically seek input from existing businesses, commercial and industrial property owners, and other stakeholders to identify burdensome land use regulations and permitting processes, if any, and to prioritize strategies to ameliorate or eliminate the impact of such regulations and processes.
- ACTION ED-1.D Web Resources. Improve the City of Newark's website to better meet the needs of existing and prospective businesses. Improve the "Business" links on the website to ensure that businesses are being provided with the information they need.
- ACTION ED-1.E Zoning Code Update. Update the Newark Zoning Code to ensure that desired economic activities are permitted with a minimum of regulatory approvals.
- ACTION ED-1.F BART Connections. Continue to work with local businesses and transit providers to explore the feasibility of regularly scheduled (or demand-responsive) shuttle bus service to BART, and better transit access across the Dumbarton Bridge for Newark residents and workers.
- ACTION ED-1.G Development Agreements. On a case by case basis, allow the use of development agreements to mitigate the potential costs or projected negative fiscal impacts of proposed business development.

ACTION ED-1.H CEQA Streamlining. Consider ways of streamlining CEQA review for projects which are consistent with the General Plan or other adopted plans. Projects which fall within the development assumptions made by the General Plan EIR should tier off that EIR to the greatest extent possible.

VIBRANT RETAIL DISTRICTS

GOAL ED-2 Create vibrant retail districts that provide first class shopping, entertainment, and dining opportunities for Newark's residents, workforce, and visitors.

Policies

- Policy ED-2.1 Old Town. Continue to enhance Old Town Newark as a walkable retail, dining, and entertainment destination. Facilitate its transformation into a vibrant mixed use area with high and medium density residential uses above ground floor retail and service businesses. Leverage the historic resources of this District to attract new businesses and patrons to the area.
- **POLICY ED-2.2** Greater NewPark Mall Area. Guide the revitalization of the NewPark Mall area so it becomes a world-class retail and entertainment destination. Additional uses such as offices, hotels, and housing should be supported only to the extent that they support retail revitalization.
- POLICY ED-2.3 Existing Neighborhood Commercial Districts. Maintain Newark's existing retail centers as dynamic commercial districts that meet the needs of local residents and generate sales tax revenue. Non-retail businesses should be discouraged from locating in areas that are specifically planned for tax-generating retail uses.
- POLICY ED-2.4 New Retail Districts. Create additional shopping opportunities in newly developing neighborhoods, such as Dumbarton TOD, to meet the needs of new residents and workers, and reduce the loss of retail dollars to nearby communities. New commercial districts should be designed as integral parts of the neighborhoods they serve, so that patrons can easily walk or bicycle from home or work to shopping.

See the Health and Wellness Element for a discussion of access to grocery stores and fresh food.

POLICY ED-2.5 Employee-Serving Retail. Encourage and facilitate linkages and improved accessibility between Newark's employment centers and retail centers to provide more day-time spending support for Newark's retail businesses and to reduce retail leakage to nearby cities.

- Poucy ED-2.6 Hospitality. Continue to grow Newark's hospitality sector, including high-quality business hotels, restaurants, and entertainment venues. These activities should be focused in the areas where they currently exist, particularly around Greater NewPark, Four Corners, and in the Pacific Research Center area. Partner with Newark hotels to market the advantages of staying in Newark to business travelers and travel planners.
- Poucy ED-2.7 Public Investment in Retail Districts. Where appropriate, use public investment to improve the quality of Newark's business districts, particularly in the Old Town Newark area along Thornton Avenue. Programs to improve facades, signage, landscaping, lighting, and streetscapes should be considered as funds and resources allow.
- POLICY ED-2.8 Retail Business Attraction. Collaborate with real estate brokers, property owners, the Chamber of Commerce, and other stakeholders to market Newark to potential new retail businesses through a variety of means, such as direct contact, media, and attendance at industry conferences and retail conventions.
- POLICY ED-2.9 Retail Destination Marketing. Partner with the Chamber of Commerce and other stakeholders to market Newark as a regional retail destination for the southern East Bay region. Recognize the important role that quality retail and dining establishments play in attracting quality employers and good paying jobs to the city.
- POLICY ED-2.10 Incentives. Explore incentives and public-private partnerships which encourage investment in Newark and which will draw regional shoppers and boost retail sales capture. Such incentives may include sales tax revenue sharing agreements and development fee credits or waivers.

Actions

- ACTION ED-2.A Retail Needs Assessment. Periodically evaluate the condition of the city's retail centers and business districts in order to determine the need for changes to zoning regulations or other strategies which improve retail performance. Similarly, periodically evaluate the local retail market, consumer preferences, and local buying power to determine where retail gaps may exist.
- ACTION ED-2.B Non-Retail Businesses. Periodically evaluate the impact of non-retail businesses on the vitality of retail centers. Zoning for retail centers should be revised to require a conditional use permit for non-retail uses and to establish thresholds for the maximum amounts of space that may be used by non-retail businesses.
- ACTION ED-2.C Code Enforcement. Focus code enforcement efforts on retail areas to improve the business environment. Code enforcement should be conducted in a spirit of partnership with businesses.
- ACTION ED-2.D Zoning Review. Review Newark's zoning regulations, including the parking standards and use permit requirements, to ensure that they respond to contemporary retail needs and categories and do not impede the City's ability to meet its retail development objectives.
- ACTION ED-2.E NewPark Master Plan. Complete a Master Plan for the Greater NewPark area to explore future revitalization.
- ACTION ED-2.F Old Town Strategic Plan. Prepare a strategic plan to address the transformation of Old Town into a vibrant mixed use district. The plan should address streetscape improvements, lighting, pedestrian mobility, parking, and public open spaces as well as tools to encourage private development.

HIGH QUALITY OFFICE AND INDUSTRIAL EMPLOYMENT

GOAL ED-3 Provide a diverse mix of industrial and office-based businesses that generate high quality, high paying jobs and a positive revenue stream for the City.

POLICIES

- POLICY ED-3.1 Industrial Land Supply. Maintain a sufficient supply of land for office and industrial uses to generate high quality, high paying jobs and to meet the city's economic development goals. Focus office and industrial development on technology uses and other activities that will generate high wage employment.
- Poucy ED-3.2 Office Growth. Continue to promote Pacific Research Center, the Stevenson Point Technology Park, and other established office districts as premier locations for corporate offices and compatible facilities. Encourage the development of "signature" office buildings in these areas which strengthen the city's reputation as a location of choice for higher-end tenants in the Silicon Valley.
- POLICY ED-3.3 Local-Serving Offices. Encourage the development of secondary, lower-cost office space in districts such as Old Town Newark to meet the needs of small local businesses and service providers.
- POLICY ED-3.4 Affordable Industrial Space. Continue to support and foster the growth of general industrial uses, such as warehouse and distribution centers and manufacturing, in the Cherry Street and Central Avenue corridors and other areas designated for "General Industrial" uses on the Land Use Diagram.
- POLICY ED-3.5 Health Care Sector. Provide additional space for health care services and medical offices to meet the needs of Newark residents.

See the Health Element for additional policies on attracting health care facilities to Newark.

POLICY ED-3.6 Industrial Fidelity. Maintain the character and value of heavier industrial areas by discouraging the encroachment of non-industrial uses in those areas. Zoning should distinguish those business districts where non-industrial uses may be acceptable, and those areas where such uses should be prohibited due to their potential to adversely impact nearby business operations.

- POLICY ED-3.7 Industrial Redevelopment. Encourage property owners to redevelop industrial sites and buildings when the proposed redevelopment will generate high-quality and high-paying jobs. Likewise, support the refurbishing of such spaces for continued use as general industrial properties.
- POLICY ED-3.8 Business Attraction. Collaborate with real estate brokers, property owners, the Chamber of Commerce, Silicon Valley Economic Development Alliance, East Bay Economic Development Alliance, Bay Area Council, and the Northern Silicon Valley Partnership to market Newark to potential new office and industrial businesses.

See Goal 5 for additional policies and actions on attracting businesses to Newark

- POLICY ED-3.9 Start-Ups. Capitalize on the high rate of start-up businesses in Southwest Alameda County by making Newark a more attractive option for such businesses. Start-ups should be viewed as an important part of sustaining Newark's future economic growth.
- POLICY ED-3.10 Industry Clusters. Recognize opportunities to leverage Newark's major industries to attract businesses in the supply chains which serve those industries. In addition, provide technical support to serve other businesses in the Silicon Valley market which may benefit from ancillary facilities or support services within Newark.
- POLICY ED-3.11 Vacant Building Reuse. Strive for an economically healthy industrial and office vacancy rate, and seek creative solutions to reduce the number of long-term vacant industrial and office buildings in the city. The reuse of such buildings with higher value employment-generating land uses is encouraged, provided such reuse does not adversely affect the ability of surrounding properties to continue their operations.
- Poucy ED-3.12 Protection of Heavier Industrial Uses. Ensure that Newark's existing heavier industries can continue to operate within the city, and are not adversely affected by higher value or more sensitive land uses located nearby. This should be achieved through zoning, buffering requirements, and the development review and environmental review processes.

POLICY ED-3.13 Innovation. Promote Newark as a city that welcomes innovation and strongly supports emerging businesses and contemporary business trends.

ACTIONS

ACTION ED-3.A Regulatory Flexibility. Review Newark's industrial zoning regulations to ensure that they respond to the needs of contemporary industry and office development. Opportunities to allow additional uses by right or subject to performance standards should be explored, if appropriate.

ACTION ED-3.B Electric Power Improvements. Work with PG&E and other entities as needed to ensure that Newark has sufficient electric power capacity and distribution systems to meet its economic development needs.

- Action ED-3.C Attracting Start-Ups. Work collaboratively with the Chamber of Commerce to develop programs and incentives so that start-up businesses view Newark as their preferred location in the greater Silicon Valley. The City should explore the development of incubators where start-ups are provided with low cost space and access to office amenities and support services.
- ACTION ED-3.D Attracting Health Care. Work collaboratively with local hospitals to promote Newark as a potential location for expansion for their facilities. The City should also encourage innovative medical facilities which recognize emerging trends in the health care industry, including medical "hotels."

WORKFORCE DEVELOPMENT

GOAL ED-4 Improve the skills and income earning capacity of Newark residents so they may find and keep jobs within Newark and surrounding Bay Area cities.

POLICIES

POLICY ED-4.1 Educational Quality. Recognize the importance of an excellent public education system and high quality public school facilities to achieving the City's economic development goals. The City should encourage the Newark Unified School District's efforts to modernize and invest in its facilities and enhance the quality of public education.

- Policy ED-4.2 Preparing Newark's Students. Encourage the School District to offer curricula which place Newark students on a path to college and provide them with the skills needed to find jobs in the local economy. Encourage partnerships between local employers, the School District, and Ohlone College which improve vocational training and job readiness among Newark's youth and adult workforce.
- **POLICY ED-4.3** Job Training. Encourage local job training and workforce development programs which assist Newark residents with finding jobs in and around the City, and which match those looking for work with those looking to hire.
- POLICY ED-4.4 Small and Disadvantaged Businesses. Support the continued growth of small and disadvantaged businesses through local, state, and federal programs and incentives.
- POLICY ED-4.5 Access to Jobs. Continue to support transportation improvements between Newark and major regional job centers, including better access to Caltrain and BART.

Actions

- ACTION ED-4.A Economic Development Strategy. Address workforce development, vocational training, and job placement measures in the City's Economic Development Strategy
- ACTION ED-4.B Identify Partners. Identify potential partners for workforce development and training programs, including Ohlone College, Mission Valley ROP, the California State University System, and the Alameda County Workforce Investment Board. The presence of Ohlone College in Newark should be leveraged to create new job and business opportunities for Newark residents.
- ACTION ED-4.C Small Business Growth. In coordination with the Chamber of Commerce, explore programs to support small business growth in Newark, including incubators, shared offices, tax incentives, and technical assistance.

Newark's economy is bolstered by the presence of numerous small businesses, including "mom and pop" retailers, family-owned restaurants, and entrepreneurs. The City strongly supports retention of such businesses, and the creation of new small businesses in the future.

ACTION ED-4.D Reducing Commute Times. In coordination with the Chamber of Commerce, explore programs that result in reduced commute times and a higher percentage of residents who both live and work within Newark. This could include employer-assisted housing, incentives to hire locally, and improved provisions for bicycles at local work places.

See the Transportation Element for actions on the Dumbarton Rail extension and the promotion of bicycle and pedestrian travel within the city.

PROMOTING NEWARK

GOAL ED-5	Establish higher visibility and a positive public image of Newark.
Policies	
Роцсу ED-5.1	Business-Friendly Reputation. Promote Newark's reputation as a business-friendly community, with a regulatory and tax structure that is conducive to business establishment and growth.
Роист ED-5.2	Service Delivery. Provide high quality City services in a responsive, cost-effective manner that supports the image of Newark as a probusiness community.
Policy ED-5.3	Code Enforcement. Conduct code enforcement as necessary to neutralize nuisances that detract from the business environment or that diminish the public image of Newark.
Роцсу ED-5.4	Promotion. Collaborate with business and property owners, the Chamber of Commerce, and regional economic development partners to promote a positive image of Newark.
Policy ED-5.5	Media Relations. Garner positive media coverage that promotes Newark as a livable city with great weather, a central location, quality shopping and dining choices, diverse housing choices, excellent schools and parks, and an accessible City government.

POLICY ED-5.6 Bayfront Location. Promote the public image of Newark as a bayfront city, with amenities such as trails to the shoreline, open space, wildlife refuges, and bay vistas.

The City's natural features and connections to San Francisco Bay are a "selling point" that should be leveraged to attract new employers.

- POLICY ED-5.7 Cultural Diversity as an Amenity. Leverage Newark's cultural diversity and large international population as an amenity to draw quality restaurants, businesses, and visitors to the city.
- POLICY ED-5.8 Gateway Improvements. Ensure that the major gateways into Newark—especially Mowry Avenue, Thornton Avenue, Stevenson Boulevard, Newark Boulevard and Cherry Street—communicate a positive image of the city. Encourage private and public investment in these areas to enhance their visual quality and aesthetics.

Actions

- ACTION ED-5.A Branding and Marketing Plan. Work with the Chamber of Commerce to develop a branding study and marketing plan to identify the appropriate brand identity for Newark, and to develop strategies for marketing the City to prospective businesses.
- ACTION ED-5.B Regulatory Environment. Periodically evaluate the City's regulations applicable to businesses to identify if there are opportunities to make regulations more consistent and transparent, to expedite plan checking and permitting procedures, or to reduce or eliminate restrictions.
- ACTION ED-5.C Staff Training. Provide periodic training to City staff to enhance customer service skills and ensure that the City is consistently perceived as professional and business friendly.
- ACTION ED-5.D Visitor Guides. Work with the Chamber of Commerce to develop visitor guides and other media which highlight Newark's amenities and assets, showcase the city's shoreline and wildlife refuges, promote local businesses, and advertise the city to visitors. Where possible, these guides should be translated into Spanish, Chinese, Japanese, and other languages to meet the needs of international visitors.

- ACTION ED-5.E Community Special Events. Work with the Chamber of Commerce to promote local special events and festivals which draw visitors to Newark, such as the annual Newark Days, summer concerts in the grove, the NewPark Farmers Market, SummerFest, and other arts and crafts events.
- ACTION ED-5.F Business Recognition. Continue efforts with the Chamber of Commerce to honor and recognize outstanding Newark businesses and to promote events and social gatherings where local businesses can network and gather.

See the Land Use Element and the Recreation and Open Space Element for additional policies on connecting Newark to the bayfront, improving trails and wayfinding signs, and identifying important bay vistas.

CONSERVATION AND SUSTAINABILITY

INTRODUCTION

This Element of the General Plan addresses the preservation and conservation of natural resources in Newark. It meets the Government Code requirement for a "Conservation" Element which presents the City's policies for soils, minerals, wetlands, wildlife, water, and other natural resources. The City of Newark has expanded the required scope of the Conservation Element to also address sustainability. This provides an opportunity to express the City's policies on tree protection, greenhouse gas (GHG) reduction, green building and low impact development, water and energy conservation, and waste reduction and recycling.

Like other elements of the General Plan, this chapter is divided into two sections. The first section provides background information on the City's natural resources, as well as its sustainability programs. The second section provides goals, policies, and actions on conservation and sustainability issues.

NEWARK'S NATURAL LANDSCAPE

Newark is located on the edge of San Francisco Bay, one of California's most important natural features. The city sits on an alluvial plain that slopes gently toward the Bay. Newark's terrain is relatively flat with ground elevations ranging from 5 feet below sea level within diked pond areas near the Bay to 37 feet near the northern edge of the city. San Francisco Bay itself has been significantly altered during the past 200 years as a result of diking and filling for agriculture, resource extraction, and urban uses.

Approximately 46 percent of the city, or 4,126 acres, is categorized as non-urbanized land. This includes 521 acres of open space, including 239 acres designated for Parks and Recreational Facilities and 282 acres designated for Conservation.







The Don Edwards San Francisco Bay National Wildlife Refuge (originally called the San Francisco Bay National Wildlife Refuge) lies immediately adjacent to the western edge of the city. The Refuge was created in 1974 and was the first urban national wildlife refuge in the United States. The continuing mission of the Refuge is to preserve natural resources, including habitat for migratory birds, harbor seals, and threatened and endangered species; to provide environmental education and wildlife interpretation opportunities; and to preserve open space and wildlife-oriented recreation. Although most of the Refuge is in Fremont, it contributes to the open space quality of the area and provides a unique natural resource for Newark residents.

Cargill has the perpetual right within the Refuge (and outside the Newark city limits) to utilize evaporator ponds, commonly referred to as "salt ponds" or "evaporators" for its solar salt production system. The Refuge's mission to protect natural resources co-exists well with Cargill's solar salt system. As noted by the San Francisco Bay Conservation and Development Commission in its October 2005 Staff Report on Salt Ponds, in connection with the *San Francisco Bay Plan* (Bay Plan), "[s]alt ponds [within the Refuge] provide a variety of aesthetic, economic and biological values," and "the Bay Plan salt pond policies should support ongoing salt production."¹

Beyond the bayfront, most of Newark consists of urbanized uses where natural features have been altered. However, even in these areas, the city's parks, residential yards, landscaped areas, and open spaces provide habitat for native and non-native birds and animals. The city's trees and green spaces define the character of the city, add visual beauty, and enhance environmental quality. Newark's physical setting is an important component in guiding future development, and protection of its natural resources must be considered when making land use decisions.

SOILS AND AGRICULTURAL RESOURCES

Newark's soils are composed of sand, silt, and clay deposited over thousands of years by streams flowing from the East Bay Hills to the Bay. Historically, the agricultural capacity of these soils was limited by poor drainage, excessive amounts of salt that are toxic to most plants, and poor quality water for irrigation. Soil

¹ San Francisco Bay Conservation and Development Commission, San Francisco Bay Plan at 6-7 (Staff Report - October 2005).

suitability for field crops is rated on a scale of I to VIII, with I being the best and VIII being the most limited. Newark's soils range from Class III to VIII, but even the Class III soils are classified by the Soil Conservation Service as having "severe" limitations. With proper irrigation, Class III soils can be made productive; however, they occur in parts of Newark that are already urbanized.

There are two areas in Newark that have been designated as Urban Prime Agricultural Lands, including a conservation area east of the Thornton/Jarvis intersection (designated as Conservation Open Space) and a 90-acre area west of Stevenson Boulevard on the west side of the Union Pacific Railroad. In addition, most of the land used by Cargill salt for the harvesting, refining, and production of salt within the city of Newark (separate and apart from Cargill's solar salt pond system within the Refuge within the city of Fremont) is zoned for agricultural use and is covered by Williamson Act Agricultural Preserve contracts. The Williamson Act provides a lower tax rate for these properties in exchange for a legal agreement to retain them in agricultural use.

Soil conditions also affect the suitability of land for construction. Many of Newark's soils have a high clay content, which tends to shrink and swell as the level of moisture in the soil changes. When the soil is dry, it becomes brittle and develops cracks in the surface. When it is wet, it becomes elastic and weak. The continuous expansion and contraction of the soil is sufficient to crack foundations and pavement. Because much of Newark's development is built in such soils, proper drainage facilities, which divert water away from building sites and road bases, are essential. Engineering solutions have been developed to compensate for site-specific soil characteristics and reduce the risk of damage.

MINERAL RESOURCES

OVERVIEW

There are no mining operations within the city of Newark itself. There is one mining operation commonly referred to as the Dumbarton Quarry just west of the City limit line and south of SR 84. This is a gravel quarry within the city of Fremont. It closed in 2007 and is not expected to reopen.

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Areas of Salt Production

Many of the original tidal marsh areas along the Bay shoreline were originally sold and leveed for land development purposes under the federal Swamp Act of 1850 and the State of California Green Act of 1868. Although minor salt production was initiated in the late 19th Century, large scale salt production was not initiated until the beginning of the 20th Century. The salt evaporation ponds were largely located in former tidal areas; however, the crystallizers and salt production facilities were constructed in upland areas bordering the tidal marsh. Salt from the South Bay ponds is used for a variety of purposes, including the California dairy industry, pharmaceutical companies, and retail consumption.

The South Bay Restoration Project is a joint effort by the state and federal governments to restore 15,100 acres of salt ponds in the southern part of the Bay, known as the Ravenswood Ponds (near Redwood City), the Alviso Ponds (near San Jose) and the Eden Landing Ponds (near Union City). These ponds were sold and donated by Cargill in 2003. Although outside Newark's city limits, the Project will provide improved habitat for wetland species in the area.

Another 12,000 acres of salt ponds sold and donated by Cargill were placed into the Don Edwards National Wildlife Refuge in the City of Fremont. The Refuge is managed by the United States Fish and Wildlife Service to provide for natural resource and habitat preservation. As noted above, Cargill has retained perpetual rights to utilize the salt ponds within the Refuge (and outside the City of Newark) for its solar salt production system. These operations will continue for the foreseeable future.

Within the Refuge, Cargill's solar salt operation consists of a series of evaporator ponds (also referred to as "salt ponds" or "evaporators") where bay water is introduced. Solar evaporation increases the salinity of the brines in these evaporators. The brines are then pumped or transferred by Cargill sequentially through a series of evaporators over a period of years. Each subsequent evaporation pond is more saline due to the closed nature of the system and natural evaporation.

After about five years, the resulting hypersaline brines from the salt evaporators within the Refuge (within the City of Fremont) are pumped or transferred to Cargill's salt harvesting, refining and production facilities within the western portion of the City of Newark (the Newark Plant Site). Brines are placed within "crystallizers" at the Newark
Plant Site, which are large, man-made, engineered beds. Salt is precipitated within the crystallizers, where it is mechanically harvested by Cargill using heavy equipment and sent to an on-site processing facility. In contrast to the low salinity salt ponds within the Refuge, the crystallizers are inhospitable to vegetation and wildlife due to the high salinity of brines transferred into the crystallizers and the mechanized harvesting process. Operations within the Newark Plant Site are also completely closed to the public, due to the high salinity of the crystallizers and the presence of heavy machinery and equipment. Hence, while some of the salt evaporators within the Refuge (and outside the City of Newark) provide habitat for specific species of wildlife, the Newark Plant Site contains very limited or no vegetation or biological characteristics or habitat to support species use.²

VEGETATION AND WILDLIFE

REGULATORY FRAMEWORK

The management of Newark's vegetation and wildlife is governed by federal and state laws. Relevant federal laws include the Endangered Species Act, the Clean Water Act (CWA), and the Migratory Bird Treaty Act. Applicable state laws include the California Endangered Species Act, the Fish and Game Code, the Native Plant Protection Act, the Marine Life Protection Act, and the Porter Cologne Water Quality Protection Act. Collectively, these laws require that state and federal agencies are consulted before changes that could affect fish and wildlife are approved.

The Federal Endangered Species Act protects fish and wildlife species that are listed as threatened or endangered, including the habitats of these species. "Endangered" species are those that are in danger of extinction in all or a significant portion of their range. "Threatened" species are those that are likely to become endangered in the near future. Federal agencies must consult with the US Fish and Wildlife Service and the National Oceanic and Atmospheric Administration if they determine that a project may affect a listed species. The Act also prohibits the "take" of any fish or wildlife species listed as endangered, including the destruction of habitat that prevents the species' recovery. It also prohibits the unlawful removal, damage, or destruction of endangered plants. Other federal laws govern actions that could affect migratory birds and their nests, and the discharge of materials into surface water or wetland areas.



² San Francisco Bay Conservation and Development Commission, *San Francisco Bay Plan* at 27-28 (Staff Report - October 2005).



At the State level, the California Fish and Game Code requires protection for a variety of species. The California Endangered Species Act mandates that if a development project would result in the 'take" of a threatened or endangered species, then mitigation must be provided as part of an Incidental Take Permit issued by the Department of Fish and Wildlife. The State Code also requires a Streambed Alternation Agreement before allowing any changes to shorelines, channels, or creek banks. State law also prohibits the destruction of active raptor nests, including those that relate to tree removal or nearby human activity, that causes nest abandonment. California also has laws that protect native plants, including those listed as plants of special concern by the California Native Plant Society (CNPS).

In addition, the Bay Conservation and Development Commission (BCDC) was established in 1965 to promote responsible planning and regulation of San Francisco Bay, and specifically to prevent unnecessary filling of the Bay. BCDC's jurisdiction covers the Bay, managed wetlands, salt ponds, and sloughs and channels. BCDC also has "salt pond" jurisdiction under California Government Code Section 66610(c). BCDC requires permits to fill, extract materials, or make substantial changes in the use of land, water, or existing structures in areas under their jurisdiction. The San Francisco Bay Plan, a BCDC planning document, includes a range of policies on public access, water quality, fill, and project design. It designates shoreline areas that should be reserved for water-related purposes like ports, industry, public recreation, airports, and wildlife refuges.

HABITAT TYPES

Newark's habitat can be broadly divided into wetlands and uplands. The wetland areas are primarily comprised of open space along San Francisco Bay, while the uplands are primary urbanized, with scattered areas of undeveloped grassland.

Wetlands. Wetlands are defined for regulatory purposes as areas "inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances support, a prevalence of vegetation typically adapted for life in saturated soil conditions." Indications of wetland habitat include the presence of particular plant species such as cordgrass and pickleweed. Much of the area within Newark's city limits was once wetland, but that area has been diminished over the years by human activity.



The US Army Corps of Engineers regulates the discharge of fill materials into wetlands, as well as sloughs, streams, and San Francisco Bay itself. Discharge into these waters is also regulated by the California Regional Water Quality Control Board (RWQCB). When development is proposed in areas where wetlands may be present, detailed on-site surveys are required and mitigation must be provided for any potential habitat impacts. If there will still be a possibility of impacts once a development is built, long-term agreements are required to ensure that wetlands are permanently protected.

There are a variety of wetland types within the city, including:

- Saline emergent wetlands, which are located along the Bay and contain salt or brackish marshes.
- Lacustrine areas, which include inland depressions or channels with standing water.
- Fresh emergent wetlands, which are located along the shore and inland. These areas form the transition between hydric and non-hydric soils are among the most productive wildlife habitats in California. They provide food, cover, and water for numerous bird, mammal, reptile, and amphibian species.
- Uplands. Upland areas in Newark consist primarily of urbanized land. These areas include tree groves (including non-native Eucalyptus groves), street trees, parks, and front and back yards throughout the city. Wildlife in the urbanized areas consist primarily of species that have adapted to urban conditions, including mice, skunks, foxes, and opossums. The city also contains pockets of annual grasslands, which provide foraging and breeding grounds for birds and other mammals and reptiles.

Special Status Species

Newark's upland and wetland areas support numerous plant and animal species. A number of these species are considered by state and federal governments to have human activities. An overview of these species is provided below, based on a review of the California Natural Diversity Data Base (CNDDB). Special steps are required when making land use decisions in areas where rare, threatened, or endangered species may be present. These can range from seasonal limitations on construction to prohibitions on development altogether or the creation of replacement habitat to



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offset the loss of any habitat that is disturbed. The General Plan Environmental Impact Report may be consulted for further detail.

Special status plants that are potentially present in Newark include Contra Costa goldfields (*Lasthenia conjugens*), San Joaquin spearscale (*Atriplex joaquinana*), alkali milk-vetch (*Astragalus tener var. tener*), saline clover (*Trifolium hydrophilum*), and Congdon's tarplant (*Centromadia parryi ssp. condonii*). Of these species, Contra Costa goldfields is listed as endangered by the federal government and is considered seriously threatened by the CNPS. The other species are not listed as endangered or threatened and are considered "fairly" threatened by the CNPS. The likelihood of most of these species occurring in Newark is low or not able to be determined.

Special status animal species that are known to exist or that may exist in Newark include birds, reptiles, insects, and mammals. These include the Alameda song sparrow (*Melospiza melodia pusillula*), burrowing owl (*Athene cunicularia*), California clapper rail (*Rallus longirostris obsoletus*), western snowy plover (*Charadrius alexandrinus nivosus*), white-tailed kite (*Elanus leucurus*), Alameda whipsnake (*Masticophis lateralis euryxanthus*), monarch butterfly (*Danaus plexippus*), salt-marsh harvest mouse (*Reithrodontomys raviventris*), and salt-marsh wandering shrew (*Sorex vagrans halicoetes*). Some of these species are listed as endangered or threatened and some are not.

The Alameda song sparrow is known to exist at the northwestern edge of the city limit near Marshlands Road. The burrowing owl has been documented in the eastern area of Newark, near Cherry Street. California clapper rail, a state and federally endangered wetland bird, is found along Mowry Slough on the western edge of the City boundary. The endangered salt-marsh harvest mouse is also reported to be present in the city's wetland areas. Policies in the Conservation Element of the General Plan support the continued protection of these species from development, and the management of land to avoid adverse impacts to their habitat.

HYDROLOGY AND WATER QUALITY

Regulatory Framework

Like vegetation and wildlife resources, Newark's water resources are also governed by federal and state laws and local and regional programs. These laws and programs address water supply, water rights, water quality, and the management of surface water resources such as creeks, bays, and lakes. State and federal laws shape the City of Newark's water policies and ensure that water resources are carefully managed.

Among the most important federal water laws is the CWA of 1972. Under the CWA, the US Environmental Protection Agency (EPA) establishes water quality regulations to ensure the beneficial uses of water and protect these uses from pollution. The CWA also established a National Pollutant Discharge Elimination System (NPDES) to regulate municipal and industrial discharges to surface waters, including discharges from City storm drains (generally referred to as *non-point* sources) as well as direct outfalls from activities such as factories and wastewater treatment plants (generally referred to as *point* sources). NPDES permits identify limits on the allowable concentrations of different chemicals that may enter surface waters. They also prohibit certain discharges and establish requirements for pollution pre-treatment, prevention, and monitoring.

At the state level, the Porter-Cologne Water Quality Control Act was passed in 1969 to protect California's streams, groundwater, and other bodies of water that are not under federal jurisdiction. The Act established the State Water Resource Control Board (SWRCB) and created nine RWQCBs to adopt plans that set water quality objectives, along with programs to achieve those objectives. The RWQCBs also issue and enforce a range of permits and standards. Newark is under the jurisdiction of the San Francisco Bay RWQCB.

Other state agencies regulate the safety and quality of California's drinking water, environmental health and hazards, and the alteration of water bodies, including any construction that would divert or obstruct the natural flow of water or substantially alter the banks of any stream or lake. In addition, the Department of Water Resources oversees water-related activities. Among the concerns expressed in its most recent Water Management Plan are drought, aging infrastructure, climate change, population growth, and sea level rise. State regulations also require completion of water supply assessments when large-scale new development is proposed, and the development of groundwater management plans. Newark's water supplier—the Alameda County Water District (ACWD)—has prepared such a plan for the groundwater basin that underlies Newark.

Recent state laws also require water conservation. The Water Conservation Act of 2009 requires a 20 percent reduction in per capita water use, both for domestic and









agricultural purposes, by 2020. This means that Newark will have to work with the ACWD to reduce water usage during the coming years. ACWD is already working to achieve these targets through incentive programs and public education.

Since 2010, the State of California has also required all cities and counties to adopt and enforce landscape water conservation ordinances. The State prepared a model ordinance that local governments could adopt, but gave communities the option of adopting their own requirements as long as the same objectives were achieved. The City of Newark has adopted a Bay Friendly Landscape Guide that is consistent with State requirements and encourages drought-tolerant plants and low-flow irrigation systems.

Also since 2010, construction activities that disturb more than an acre of land in a way that could affect water resources have been required to file a Notice of Intent with the SWRCB. Applicants must demonstrate that they are using best management practices (BMPs) to reduce the risk of pollution, and must also prepare a Storm Water Pollution Prevention Plan (SWPPP). Controls are required to prevent soil erosion and reduce the potential for contaminated runoff.

At the regional level, Newark has joined with Alameda County, its 13 other cities, the Alameda County Flood Control & Water Conservation District, and the Zone 7 Water Agency in the Clean Water Program initiative. An NPDES permit applicable to all of these jurisdictions, plus jurisdictions in several other Bay Area counties, covers storm drain systems and watercourses. The City of Newark has adopted Municipal Code provisions to implement the Clean Water Program, including regulations to control and eliminate non-stormwater discharges to City storm sewers and reduce pollutants in urban runoff.

LOCAL HYDROLOGY

Figure CS-1 shows local hydrologic conditions. Newark is located in the Alameda Creek Watershed and the Niles Cone Groundwater Basin. Alameda Creek is one of the main tributaries to San Francisco Bay. It drains a 633-square-mile area that stretches from Mount Diablo on the north to Mount Hamilton on the south and the Altamont Pass on the east. The creek itself enters the Bay in a flood control channel along the border between Fremont and Hayward, about two miles north of Newark.

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Source: City of Newark, 2012; Santa Clara County, 2012; The Planning Center | DC&E, 2012; ESRI, 2010; FTC, 2010; Fugro William Lettis & Associates, Inc., 2010.

LCity Boundary

- Creek
- Newark Plant Site*

*This is a closed, engineered system, for salt production and nothing is released or discharged to San Francisco Bay.

Watersheds

- Mowrey Slough Sub-Watershed
- Sanjon de los Alisos Sub-Watershed
- Plummer Creek Sub-Watershed
 Other Lower Alameda Creek Watersheds

The City's water supply is managed by the ACWD. This supply includes water that originates as precipitation within the Alameda Creek watershed and water that is transported from the Sacramento/San Joaquin River Delta through the South Bay Aqueduct. The South Bay Aqueduct delivers water to a treatment facility in Fremont, where it is disinfected and filtered. Water from both sources is stored in a series of large ponds in Fremont called the Quarry Lakes, where it percolates to the groundwater basin.

Sixteen wells—including six located in Newark—are used to pump water from the groundwater basin to a system of distribution mains serving residents and businesses. These 16 wells are capable of producing up to 47.5 million gallons of water per day (MGD). An additional 20 percent of ACWD's water supply comes from the Hetch Hetchy Reservoir in Yosemite National Park. That water is purchased from the San Francisco Public Utilities Commission. The quality of the Hetch Hetchy water is excellent and only requires simple disinfecting for domestic use.

ACWD also receives about 10 MGD of water from the Newark Desalinization Facility. This is the first brackish water desalinization (Desal) facility in Northern California. It produces drinkable water by removing salts and other minerals from brackish groundwater through reverse osmosis. The treated saltwater is then blended with other supplies for delivery.

The groundwater basin itself consists of gravel, sand, silt, and clay. The gravel and sand is highly permeable, allowing water to seep into the ground where it is stored in what is known as an aquifer. The Hayward Fault divides the Niles Cone into two basins; Newark is located in the portion of the basin below the Fault line. This aquifer is relatively shallow and lies between 40 and 140 feet below the ground in most inland locations. The depth to groundwater is much shallower near the edge of the Bay.

At one time, the Niles Cone was filled with fresh water and had a westerly gradient toward the Bay. However, the pumping of water for agriculture and development in the Niles Cone basin caused water levels to drop below sea level in the 1920s, which caused saltwater from the Bay to migrate into the aquifer. This compromised water quality and eventually required that ACWD purchase water from supplemental sources to restore groundwater quality. Since the 1960s, ACWD has been using water from the State Water Project to recharge the basin and correct water salinity



conditions. In the 1970s, ACWD took further steps to reduce saltwater intrusion, including a series of wells to intercept bay water before it reached the aquifer.

Although there has been substantial improvement, a considerable amount of salt water still remains. Potable water quality may also be threatened by urban activities, and from past industrial activities that may result in chemical plumes. The ACWD works continuously to address these issues through groundwater monitoring, pumping operations, and the procurement of supplemental water supplies as needed.

WATER QUALITY

Stormwater runoff is the principal source of water pollution in Newark, with the potential to affect both surface water and groundwater. During periods of heavy rain, stormwater can carry pollution and sediments into streams, channels, wetlands, and the Bay either directly or via storm sewers. Non-storm discharges, such as accidental spills and irrigation, can also carry contaminants from land surfaces into local waters. Typical pollutants include oil and grease from motor vehicles, paint, leaves and yard waste, pesticides and herbicides, fertilizer, solvents and household chemicals, animal waste, litter, and construction debris. Although Newark does not have natural creeks or rivers, its storm drainage system transports runoff from streets, parking lots, and yards into a system of flood control channels that eventually reaches San Francisco Bay.

The Engineering Division of the Newark Public Works Department is responsible for carrying out the City's stormwater quality initiatives. This includes stormwater control requirements for businesses and new development, enforcement of illicit discharge regulations, street sweeping, cleanouts of storm drain inlets, and a variety of public education and outreach events. Public Works staff attends community events to get the word out about water quality regulations, and to raise awareness of water quality issues. The City also works closely with the Alameda Countywide Clean Water Program on watershed planning and water quality monitoring.

SUSTAINABILITY

Sustainability refers to the use of resources in a way that ensures they are not permanently depleted or damaged. Living more sustainably can help support the quality of life for future generations by improving the balance between human

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activity and nature. From Newark's perspective, this requires planning not only for today's needs, but also for future needs, without harming the city's natural resources. Some of the most important ways a city can be more sustainable are by reducing pollution, consuming less water and energy, reducing waste, recycling more, and curbing the emission of GHGs, which contribute to global climate change.

The City of Newark was officially incorporated in 1955, a period synonymous with car culture. Many cities that developed around this time were almost entirely focused on cars. Cities emerged near newly constructed freeways, with wide streets and plenty of parking. People began to commute to work by car, and lower density, suburban-style development became common.

Today, the practicality of this style of development has diminished. Low density housing is unable to efficiently accommodate the rise in population and accompanying traffic congestion. Low densities also make it more difficult to sustain a viable bus system, leading to service cutbacks and further reliance on the automobile. Fuel prices have risen dramatically and the cost of owning and insuring a motor vehicle has continued to rise. Additionally, pollution and climate change have become growing concerns.

To adjust to these changes, the City of Newark is implementing goals, policies, and actions reflective of the community's vision for a sustainable future.

NEWARK'S URBAN FOREST

An "urban forest" is the collection of trees along streets, in private yards, and in public spaces that together provide a living canopy for the city. Providing and maintaining a healthy urban forest results in a variety of benefits to both the community and the environment. Urban trees cleanse the air, reduce heating costs, block gusting winds, reduce storm water runoff, buffer noise, and create pleasant, safer, and more walkable neighborhoods. Many of these benefits have positive secondary effects. For example, shade trees may also allow nearby buildings to consume less energy for cooling. Trees can also enhance property values and contribute to civic pride and identity.

The City of Newark understands the importance of the urban forest and has put in place a Street Tree Maintenance Program. This program ensures that the City's trees are properly cared for by scheduling regular pruning for existing trees, establishing guidelines for appropriate tree species for new or replacement trees, and providing



procedures for the removal of dead, dying, or undesirable trees. The City also has adopted regulations for the removal of mature trees. In recognition of the city's existing tree canopy and commitment to tree planting and maintenance, Newark has been named a "Tree City USA" for 26 consecutive years. To ensure that the City's urban forest thrives well into the future, the General Plan includes policies supporting the preservation and management of existing trees, as well as the planting of new trees.

CLIMATE AND GREENHOUSE GASES

The City of Newark recognizes that climate change poses a potential threat to the community and the environment. Climate change is directly related to GHGs. While GHGs occur naturally in the atmosphere and produce beneficial effects, they can also be adversely impacted by human activities. For example, burning fossil fuels results in the release of carbon dioxide into the earth's atmosphere. Without this activity, carbon dioxide would be naturally stored underground in sediments, such as petroleum, coal, and natural gas. Similarly, the removal of forests reduces the earth's capacity to absorb carbon dioxide, leading to greater concentrations in the atmosphere.



As these types of activities have increased over the two centuries since the industrial revolution, the amounts of GHGs have also increased, consequently enhancing the natural greenhouse effect and contributing to global warming. In addition, some GHGs, such as hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, are completely human-made, accelerating the extent to which heat may be trapped in the atmosphere. A warming planet can lead to large-scale changes to a variety of systems, resulting in such effects as sea level rise and increases in extreme weather events.

The State of California has responded to the threat of global climate change by adopting Executive Order S-3-05 in 2005 and Assembly Bill (AB) 32 in 2006. These directives set a cap on statewide GHG emissions and established a regulatory framework to reduce emissions to 1990 levels by 2020, and to 80 percent of 1990 levels by 2050. In 2008, the State passed SB 375, establishing a range of land use and transportation programs in pursuit of these targets. One of the outcomes of the State initiatives is that local governments across California have been strongly encouraged to adopt Climate Action Plans (CAPs) demonstrating the steps they will take to help the State meet its targets.

Newark adopted its CAP in 2010. Its overall goals are to:

- > Reduce municipal GHG gas emissions 5 percent between 2005 and 2012
- Reduce municipal <u>plus community</u> GHG emissions 5 percent by between 2005 and 2015
- Reduce communitywide GHG emissions by 15 percent between 2005 and 2020.

Data collected by the city through the GHG monitoring process shows the City has already achieved the first two of these goals.

The CAP was intended as a springboard for the GHG reduction actions to be taken over the next few years. One of its recommendations was to incorporate carbon reduction into the General Plan to ensure that it is expressed as a continuing city priority, with a commitment to long-term action. The CAP also seeks to maintain and report GHG inventories on a regular basis, and promote the involvement of Newark's businesses in inventory efforts.

This General Plan supports these goals and priorities. It contains policies to reduce Newark's contribution to climate change by encouraging transit-oriented development, increasing transportation options, and planning for rising sea levels.

TRANSIT-ORIENTED DEVELOPMENT

Transit-oriented development (TOD) is based on the idea that jobs, homes, and services should be located near public transit. In this way, people can live within a short walk, bicycle- or transit-ride of many of their daily needs, reducing reliance on auto-oriented travel. TOD is based on three key principles. The first is that densities should be higher than conventional suburban development, in order to leverage the public investment that has been in transit and maximize the number of potential transit riders. The second is that land uses should be mixed, with residential, retail, and office uses located within walking distance of each other. The third is that the design of the circulation system should balance the needs of cars with the needs of pedestrians and bicyclists, with an emphasis on easy access to the transit station.

At minimum, TOD shortens the distance a resident must travel in a vehicle to complete errands. Ideally, TOD can also enable a resident to live, work, and shop in the same area, reducing the need for auto ownership entirely, or enabling a two-car household to downsize to one car. Alternatives like shared cars and electric "plug in"



cars can become more viable in such a setting. Fewer and shorter vehicle trips translates into fewer GHG emissions and less fossil fuel use. Additionally, locating services, jobs, and residences near one another incentivizes "buying local" and can support the local economy.

Newark has designated a TOD area around the proposed site of the Dumbarton Rail Station on the west side of the city. A Specific Plan has been adopted to ensure that this area is developed in a way that enables future residents and workers to travel by transit. Other public transit options in Newark include local and regional AC Transit bus service, para-transit service for seniors and the handicapped, and BART shuttles.

INCREASING TRANSPORTATION OPTIONS

While encouraging development near transit stations is one way to reduce GHG emissions, there are other options. Some focus on reducing the number of "vehicle miles traveled" by individual cars by promoting carpooling, ridesharing, commuter shuttles, and telecommuting. Three people driving to work individually contribute GHG emissions from three separate vehicles, whereas those same three people only contribute GHG emissions from one vehicle if carpooling. Newark has had a trip reduction ordinance for more than two decades, which encourages carpools and vanpools.

Another option is the use of alternative fuel vehicles. These are vehicles that have lower—or zero—GHG emissions because they use fuel sources such as biodiesel, ethanol, electricity, natural gas, and hydrogen. Use of these vehicles is on the rise, especially as the necessary infrastructure (e.g. specialized fueling stations) is becoming increasingly available, making this a more feasible option. In 2013, plugshare.com reported that Newark had one electric vehicle plug-in location (at the Aloft Hotel near Thornton Avenue and Highway 84).

Another option for reducing auto-related GHG emissions is to make walking and bicycling a more viable means of travel. The Federal Highway Administration (FHA) reports that 1.0 percent of all trips in the US were made by bicycle in 2010, compared to 0.7 percent of all trips in 1995. The percent of total trips made on foot grew from 7.2 percent in 1995 to 10.9 percent in 2010. Echoing this national trend, the Metropolitan Transportation Commission (MTC) reports that the total number of bicycle and pedestrian trips in Alameda County increased 51 percent between 2002 and 2011.





Due to its mild climate and level terrain, Newark is an excellent place for both bicycling and walking. The City of Newark is preparing a Pedestrian and Bicycle Master Plan to create new opportunities for bicycle- and pedestrian- friendly development. Using data from the 2000 Census and regional travel forecasts, the City has estimated that there were approximately 1,032 to 1,720 bicycle trips per day in Newark in 2010.³ This number is likely to increase in the future because of General Plan policies that facilitate bicycle and pedestrian friendly design and continued investment in new sidewalks, crosswalks, and bike lanes.

ADAPTING TO RISING SEA LEVELS

Thermal expansion of ocean water due to warmer temperatures, coupled with the melting of land-based ice, is causing ocean levels to rise around the globe. This is of particular concern in coastal areas. The International Panel on Climate Change projects a potential sea level rise of 7 to 23 inches by the end of the century.⁴ Communities that may be impacted are exploring a variety of adaptive management strategies to protect developed areas along their shorelines. These strategies include protecting existing development, renovating existing structures and infrastructure, and undertaking risk assessments for vulnerable new developments.

The City of Newark has levees on its south and west, although the levees associated with salt harvesting and production were not constructed for flood protection. To ensure that new development is sensitive to sea level rise, the General Plan contains a policy requiring special consideration to this issue for projects locating in lower elevation areas. The City will also continue to work with Alameda County Flood Control, the Federal Emergency Management Agency (FEMA), the Army Corps of Engineers, BCDC, and other state and federal agencies to assess and mitigate flood danger. Newark does not allow development within the 100-year flood zone and requires non-residential development to be elevated at least 8 feet above mean high tide (11.25 feet for residential development).

GREEN BUILDING AND LOW IMPACT DEVELOPMENT

Buildings and development account for a surprising amount of total resource consumption in the United States. As of 2010, approximately 68 percent of electricity,

³ City of Newark, 2010. *Pedestrian and Bicycle Master Plan – Working Paper 2: Bikeway Element.*

⁴ International Panel on Climate Change (IPCC), 2007. *Climate Change 2007: the Physical Science Basis.*

39 percent of energy resources, 38 percent of carbon dioxide emissions, and 11 percent of water resources was associated with buildings. Designing buildings to reduce these percentages is an important part of reducing fossil fuel use, conserving water, and curbing GHG emissions. Structures which are designed to conserve natural resources and minimize impacts on the environment are sometimes referred to as "green" buildings.

Green buildings use a variety of eco-friendly features such as solar panels, rain water collection, grey water systems, recycled materials, and passive heating and cooling. There are accrediting bodies and programs that certify a building as "green," for example, the national US Green Building Council's Leadership in Energy and Environmental Design (LEED) program, the California Building Standards Commission's CALGreen program, and Alameda County's StopWaste.Org Bay-Friendly Landscaping and Green Building programs. As of 2011, the FullBloom Bakery building and Ohlone College's Newark Center for Health Sciences and Technology have both attained LEED certification.

In 2007, the City of Newark adopted the *Green Building and Construction and Demolition Recycling Ordinance* (Green Building Ordinance). The Ordinance requires all City projects and some private projects to recycle construction and demolition debris and complete a waste management plan. Additionally, the Green Building Ordinance requires larger City projects to meet the LEED Silver level of certification.⁵ The City of Newark's *2010 Climate Action Plan* discusses green building standards and contains measures for ensuring robust implementation of the City's Green Building Ordinance.

Low impact development (LID) is similar to green building but focuses on the areas around the building rather than the building itself. Typically, LID consists of strategies to retain stormwater on a development site, rather than letting it run off to storm drains and waterways. Such strategies include pervious pavers, bioswales, rain gardens, and other features that capture rainwater for reuse. As noted earlier in this chapter, Newark has developed a Bay Friendly Landscape Guide with policies to ensure that landscaping does not negatively impact the Bay.



⁵ LEED uses a point system for certification. The minimum number of points results in a "Certified" rating, "Silver" is the second level, "Gold" the third, and "Platinum" the highest level rating.

The CAP not only focuses on making new buildings greener, it also focuses on retrofits to existing buildings. For example, residents can participate in programs to retrofit their homes for energy efficiency, such as the State's Energy Upgrade Program. Businesses can take part in the Association of Bay Area Governments (ABAG) Bay Area "Green Business" Program, which lists a business as "green" if it can determine that the business complies with environmental regulations and takes additional action to further reduce its impact on the environment. Several businesses in Newark have been recognized by the Bay Area Green Business Program, including Amaral's Muffler and Automotive Center, Gateway Café, Quest Ink, and Tri-Cities One-Stop Career Center.

The General Plan supports the City of Newark's efforts to encourage green building and LID through policies and actions on these topics. These actions include programs that are already underway, and programs that are referenced in the City's CAP that may be implemented in the coming years.

ENERGY EFFICIENCY, CONSERVATION, AND RENEWABLE ENERGY

Energy efficiency, conservation, and the use of renewable energy are direct methods of reducing energy consumption. Energy consumption is often directly tied to the use of fossil fuels, which are not renewable and which negatively impact the environment during extraction and subsequent use. The combustion of fossil fuel at power plants is a major source of GHG emissions, and leads to associated hazardous waste and other air quality issues.

Pacific Gas and Electric Company (PG&E) is the principal source of natural gas and electricity to customers in Newark. It obtains its electricity from both renewable (e.g. wind, solar) and nonrenewable (e.g. coal, natural gas) sources. PG&E is steadily increasing the proportion of its energy generated from renewable sources. In 2012, PG&E reported its lowest GHG emissions since it began keeping data on the topic and projected that it will obtain 33 percent of its electricity from renewable sources by 2020.⁶ All energy providers in California, including PG&E, are regulated by the California Public Utilities Commission (CPUC). The CPUC's 2008 *Energy Action Plan* provides energy policies for the State, including measures necessary to reduce GHG emissions to 1990 levels by 2020.



⁶ PG&E, 2012. PG&E Reports Lowest Greenhouse Gas Emissions, http:// www.pgecurrents.com/ 2012/03/26/pge-reports-lowest-greenhouse-gas-emissions/, accessed on April 4, 2013.

According to the City of Newark's CAP, the City continues to meet and may even surpass its own energy reduction goals. To further strengthen this trend, the General Plan contains policies seeking to reduce energy use, expand the use of renewable energy, implement energy efficient design, increase the adoption of conservation practices citywide, and facilitate access to solar energy.

SOLID WASTE REDUCTION AND RECYCLING

Trash or garbage, otherwise known as solid waste, has a number of adverse effects on the environment. Materials deposited in landfills emit GHGs such as methane as they decompose. Additionally, landfills include numerous materials that take years to decompose or contain potentially hazardous substances. Without recycling, landfill capacity may be used more quickly, requiring additional land for waste disposal, and additional costs to carry garbage to and from landfills. For the past 25 years, California has worked aggressively to reduce the need to expand its landfills by promoting recycling, waste reduction, and composting programs. Reducing solid waste provides many environmental benefits; reducing GHG emissions is just one.

Solid waste services in Newark are handled by Allied Waste, a division of Republic Services. Historically, the County has met State and local waste reduction and diversion goals. Countywide waste was reduced by at least 50 percent between 1989 and 2000, in accordance with the target set by AB 939. The City of Newark has done its part by participating in a residential recycling program. Commercial recycling in Newark, while optional, is promoted by StopWaste.Org, a joint project of the Alameda County Waste Management Authority and the Alameda County Source Reduction and Recycling Board.

As of 2011, Newark's annual waste disposal rate was 4.0 pounds per day per resident, well below the target of 7.3.⁷ According to StopWaste.Org's 2013 report on diversion rates by jurisdiction, the percentage of Newark's waste diverted from landfills increased from 27 percent of the waste stream in 1995 to 69 percent of the waste stream in 2012. This was close to the countywide average of 70 percent.

Solid waste reduction will continue to be a priority in Newark. General Plan policies promote continued recycling and reuse, including green waste collection and



⁷ California Department of Resources, Recycling, and Recovery (CalRecycle), http://www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversionPost2006.aspx, accessed on April 4, 2013.

composting. The City will continue to work with StopWaste.Org and solid waste service providers to achieve higher diversion rates in the future. Expansion of recycling efforts to commercial, industrial, and multi-family residential customers will become increasingly important to achieving future targets.

GOALS, POLICIES, AND ACTIONS

areas.

ENVIRONMENTAL PROTECTION

GOAL CS-1	Protect Newark's natural environment, landscape, and physical features.
POLICIES	
Policy CS-1.1	Environmental Impacts of Development. Ensure that development minimizes its impacts on Newark's environment and natural resources through sound planning, design, and management.
Policy CS-1.2	Conservation of Sensitive Areas. Support the conservation of environmentally sensitive areas and unique natural resources in the city.
Роису CS-1.3	Interagency Cooperation. Participate in cooperative efforts with private landowners, the federal government, and surrounding cities to encourage the long-term preservation of the baylands and other sensitive natural areas.
Роцсу СS-1.4	Soil Erosion. Identify and eliminate erosion problems on public and private lands. The potential for erosion should be considered as a design and engineering factor in new development.
Роцсү CS-1.5	Environmental Education. Support greater environmental education, awareness, and stewardship among Newark residents.
	See also Policy LU-1.17 emphasizing sustainable development.
ACTIONS	
Action CS-1.A	Development Review. Use the development review and CEQA processes to address the long-term conservation of sensitive natural areas or that adequate mitigation is provided for any impacts to such

- ACTION CS-1.B Soil Erosion BMPs. Require new construction projects to incorporate best management practices (BMPs) which minimize soil erosion and runoff of nutrients, sediments, and pesticides.
- ACTION CS-1.C Environmental Curricula. Work with the Newark Unified School District and Ohlone College to promote environmental education and curricula for Newark youth. In addition, encourage Newark Recreation and Community Services Department and East Bay Regional Park District programs, which increase awareness of Newark's natural environment.

WETLAND CONSERVATION

GOAL CS-2 Conserve Newark's wetlands and baylands.

POLICIES

- POLICY CS-2.1 Wildlife and Habitat Protection. Preserve and protect Newark's plant and animal species and habitats, including wetlands, salt marshes, creeks, and lakes. Ensure that land use decisions avoid and mitigate potential impacts on wildlife habitat to the extent feasible.
- POLICY CS-2.2 Special Status Species. Ensure that adverse impacts on special status species, including those deemed rare, threatened, endangered, or candidate species for protection, are avoided and mitigated to the greatest extent feasible as development takes place.
- POLICY CS-2.3 National Wildlife Refuge. Encourage the preservation and maintenance of the Don Edwards San Francisco Bay National Wildlife Refuge by the US Fish and Wildlife Service, including the management of salt ponds to enhance their value for wildlife habitat.
- POLICY CS-2.4 Wetlands Delineation. Encourage the owners of large potentially developable properties to enter into early discussions with appropriate federal agencies to conduct wetlands delineation studies. Such studies should be used to identify areas to be conserved as permanent open space, as well as appropriate mitigation measures to offset any wetland impacts.
- POLICY CS-2.5 Development Near Wetlands. Manage land use and development on upland sites in a manner that minimizes off-site impacts to nearby wetlands.

- POLICY CS-2.6 Salt Pond Management. Encourage the management of salt ponds within the Don Edwards San Francisco Bay National Wildlife Refuge by the US Fish and Wildlife Service to enhance to enhance their value for wildlife habitat and recreation. Such activities should be consistent with Cargill's perpetual rights to utilize the salt ponds as part of its solar salt production system.
- POLICY CS-2.7 Coordination with State and Federal Agencies. Coordinate with the California Department of Fish and Game, the US Fish and Wildlife Service, surrounding cities, the Regional Water Quality Control Board, and other appropriate agencies to protect wildlife species and habitat.
- POLICY CS-2.8 Location of Mitigation. When off-site mitigation to address wetland impacts is necessary, encourage mitigation to be provided as close as possible to the affected site.

ACTIONS

- ACTION CS-2.A Habitat Restoration Plans. Support implementation of state and federal plans to restore natural habitat along San Francisco Bay, including Habitat Conservation Plans, which preserve, enhance, and restore local wetlands and bay waters.
- ACTION CS-2.B Wetland Delineation and Protection. Require wetland delineation studies, authorization from state and regulatory agencies, and the use of Best Management Practices to mitigate potential wetland impacts in any areas where wetlands may exist.

To reduce the potential for adverse impacts on wetlands, the City shall:

- (1) Require a wetland delineation conducted according to the 1987 USACE Wetland Delineation Manual (U.S. Army Corps of Engineers, 1987) and the Regional Supplement to the USACE Wetland Delineation Manual: Coast Region (Corps, 2008) prior to City approval of any specific development proposal. This delineation shall be submitted to the USACE for verification. Once that map is "verified," the full extent of waters of the U.S./State would be known and the extent of impacts on regulated areas ascertained.
- (2) Require authorization from USACE and the RWQCB as necessary and required by these agencies prior to filling any waters of the U.S. or State of California.

- (3) Require the use of Best Management Practices (BMPs) to protect waters of the U.S./State and to ensure that water quality standards are not compromised. These practices can include installing construction fencing buffers, straw waddles to keep fill from entering preserved/avoided wetlands and other waters, and other protective measures; and requiring a biological monitor be on-site during project construction to monitor the integrity of any preserved wetlands and other waters during mass grading or filling of the project site.
- (4) For those wetland areas that are not avoided, require wetlands mitigation approved by the USACE and the RWQCB either:

(a) through the purchase of mitigation credits from an approved mitigation bank or an approved in-lieu fee mitigation entity at a minimum 1:1 ratio or at a ratio determined by the RWQCB and USACE at the time permits are issued; or

(b) through the creation of wetlands of an equal or higher functional value than those wetlands affected by the project onsite. If wetlands are restored/ created, adequate compensation shall include creating wetlands at a suitable location that meet the following performance standards:

- 1. The wetlands shall remain inundated or saturated for sufficient duration to support a predominance of hydrophytic vegetation.
- 2. The wetlands shall exhibit plant species richness comparable to existing wetlands.
- 3. The wetlands shall replace the lost wetlands at a minimum ratio of one acre created for each acre, or fraction thereof, permanently impacted.
- 4. The developer shall provide for the protection of the mitigation areas in perpetuity, either through deed restrictions or conservation easements.
- 5. The developer shall establish a five-year program to monitor the progress of the wetland mitigation toward these standards. At the end of each monitoring year, an annual report shall be submitted to the City, the RWQCB, and the USACE. This report shall document the hydrological and vegetative condition of the mitigation wetlands, and shall recommend remedial measures as necessary to correct deficiencies.

ACTION CS-2.C Impacts on Special Status Species. Undertake a series of measures, as annotated in the text below, to address the potential impacts of proposed development in areas where special status plant and animal species may occur. Coordination with regulatory and resource agencies shall be required as appropriate to ensure any measures undertaken will be effective and sufficiently protective.

Mitigation measures for proposed development in areas where special status plant and animal species may be present shall include:

- (1) Preparation and submittal of focused habitat assessments conducted by a qualified biologist to the Newark Community Development Department to determine the potential for special status plant and/or animal species to occur within or adjacent to the proposed development project area.
- (2) Preconstruction surveys by a qualified biologist for each special status species that is known to occur or has a potential to occur within or adjacent to the proposed development project area, as required by the California Endangered Species Act and the Federal Endangered Species Act.
- (3) As appropriate based on the results of the preconstruction surveys, construction limits shall be clearly flagged as directed by the biologist to ensure that impacts to sensitive biological resources are avoided or minimized to the extent feasible.
- (4) As appropriate based on the results of the preconstruction surveys and biological resources assessment, the City shall require:

(a) Development and implementation of contractor training to educate project contractors on the sensitive biological resources within and adjacent to the project site and the measures being implemented to avoid and minimize impacts

(b) That a qualified biological monitor be present during a portion or all of the construction activities to ensure impacts to the sensitive biological resources are avoided or minimized to the extent feasible;

(c) That project applicants obtain written authorization from the U.S. Fish and Wildlife Service that the grading or construction activity complies with regulations on the "take" of the listed species, and that any mitigation requirements set forth by such agencies be incorporated into the project's final design plans.

- ACTION CS-2.D Interpretive Facilities. Encourage the development of interpretive facilities, which enable residents to learn about Newark's wetlands, salt harvesting, and the natural habitat of San Francisco Bay.
- ACTION CS-2.E Wetland Acquisition and Conservation. Support acquisition of wetlands and other environmentally sensitive areas from willing sellers by land trusts and other environmental organizations for the purpose of mitigation banking and wetlands restoration, provided there are no conflicts with other General Plan goals and objectives.

WATER RESOURCES

GOAL CS-3 Conserve and enhance Newark's water resources.

- POLICIES
- POLICY CS-3.1 Protection of Water Resources. Ensure that land use decisions consider the availability of water for domestic and non-domestic uses, potential impacts on groundwater quality and groundwater recharge capacity, and potential off-site impacts on water quality.
- POLICY CS-3.2 Water Conservation Standards. Promote water conservation through development standards, building requirements, irrigation requirements, landscape design guidelines, and other applicable City policies and programs.
- POLICY CS-3.3 ACWD Conservation Incentives. Support Alameda County Water District (ACWD) incentives, which encourage Newark residents and businesses to conserve water.
- POLICY CS-3.4 Reducing Water Pollution. Protect the quality of Newark's surface waters by supporting controls on point source and non-point sources of pollution.
- POLICY CS-3.5 Containment of Contaminated Runoff. Regulate land uses such as auto dismantling, waste disposal, gas stations, and industries in a manner that minimizes the potential for hazardous materials to enter groundwater, surface water, or storm drains.

- POLICY CS-3.6 Abating Illegal Dumping. Prohibit and abate the dumping of debris and refuse in and near wetlands and waterways, and the illicit discharge of pollutants into the storm drain system.
- POLICY CS-3.7 Wastewater Treatment. Work with the Union Sanitary District to ensure that sanitary sewer collection and treatment systems are maintained and upgraded to reduce water pollution in San Francisco Bay.
- POLICY CS-3.8 Integrated Pest Management. Minimize the use of pesticides, herbicides, and other toxic materials in the maintenance of City parks, medians, and public spaces, as a strategy to avoid runoff of materials, which could potentially harm local waterways, wetlands, and San Francisco Bay.
- POLICY CS-3.9 Reclaimed or Non-Potable Water. Plan for the expanded use of nonpotable groundwater and the eventual use of reclaimed water to supplement the local water supply and reduce the necessity of using potable water for landscaping, irrigation, and non-domestic purposes.

ACTIONS

- ACTION CS-3.A ACWD Conservation Education. Work with the Alameda County Water District (ACWD) to implement water conservation measures, which help the District achieve its 2015 and 2020 per capita water use goals. This should include collaborative community outreach, and education campaigns on the importance of water conservation, and the steps residents and businesses can take to conserve water.
- ACTION CS-3.B Development Review. Use the development review process to ensure that water conservation measures are incorporated in new projects.
- ACTION CS-3.C ACWD Coordination. Coordinate with ACWD on the review of proposed development, and the identification of necessary measures to mitigate potential impacts on groundwater and water supply.
- ACTION CS-3.D Low-Flow Plumbing and Irrigation. Strongly encourage--and where appropriate, require--the use of low flow plumbing fixtures, low volume irrigation systems, and drought-tolerant plant palettes as a way to conserve water.

- ACTION CS-3.E Water Efficient Landscaping. Continue to implement the City's Bay Friendly Landscaping Guidelines for water-efficient landscaping, including low water use plants and more efficient irrigation systems. Adopt more stringent outdoor water use policies for individual development proposals where feasible.
- ACTION CS-3.F Retrofitting Water Infrastructure. As funding allows, retrofit water infrastructure and landscaping on municipal property to reduce potable water use.
- ACTION CS-3.G Countywide Clean Water Program. Continue to participate in the Alameda Countywide Clean Water Program, in accordance with the federal National Pollution Discharge Elimination System (NPDES) permit. The City will work with Alameda County and other participating jurisdictions to carry out measures to monitor stormwater pollution, regulate construction runoff, sweep local streets, clean storm drain inlets, promote education and outreach, enforce regulations and penalties for illicit discharges, and participate in County meetings to discuss water quality issues.
- ACTION CS-3.H Stormwater Controls. Implement stormwater runoff and retention controls in new development and construction projects that reduce pollution discharges to surface waters, and reduce the rate of runoff to storm drain system. Such controls should encourage greater use of pervious pavement and surfaces.

URBAN FOREST

GOAL CS-4	Conserve and manage the City's tree resources and urban forest.
POLICIES	
Policy CS-4.1	Tree Preservation. Maintain and improve City programs for protecting and preserving trees.
Policy CS-4.2	Trees and Public Improvements. Manage the City's trees in a way that preserves the life of public improvements such as curbs, gutters, and sidewalks. Ensure that trees that are removed due to their age, health, or potential to damage property, are replaced in kind with new

trees that are appropriate for their locations.

POLICY CS-4.3 Neighborhood Tree Planting and Care. Encourage individual and neighborhood efforts that involve tree planting, tree care, and the stewardship of public space beyond what City resources can provide.

POLICY CS-4.4 Street Trees as a Community Amenity. Encourage the use of street trees and landscaping to distinguish major thoroughfares and neighborhoods, beautify the city, encourage walking, and create a stronger sense of identity.

ACTIONS

- ACTION CS-4.A Tree City USA. Continue to participate in the Tree City USA Program.
- ACTION CS-4.B Tree Planting and Maintenance Criteria. Periodically review the City's street tree planting criteria, maintenance practices, and street tree list to ensure that they are achieving the City's goal of sustaining a healthy urban forest. Modify tree trimming and management practices if it is found that they do not support this goal. Encourage tree trimming on private property to use practices which ensure long-term tree health.
- ACTION CS-4.C Trees and Greenhouse Gas Reduction. Consistent with the 2010 Climate Action Plan, update the City's Tree Management Policy to include a discussion of the greenhouse gas reduction benefits of a healthy urban forest.
- ACTION CS-4.D Tree Planting in New Development. Use the development review process to implement tree planting requirements for new development.

GREENHOUSE GAS REDUCTION

GOAL CS-5 Reduce greenhouse gas emissions in Newark and make reduction of the City's carbon output a high priority.

POLICIES

POLICY CS-5.1 Linking Land Use and Transportation. Encourage land use and transportation patterns that reduce dependence on automobiles. This includes siting well-designed higher-density, mixed use development near the proposed Dumbarton Rail station and in other areas with frequent transit service.

- POLICY CS-5.2 Pedestrian and Bicycle Friendly Design. Ensure that new development is planned and designed to facilitate walking and bicycling as well as driving. This can potentially reduce the number of vehicle trips and related greenhouse gas emissions.
- POLICY CS-5.3 Alternative Fuel Vehicles. Encourage the use of alternative fuel and electric vehicles and development of the necessary infrastructure for such vehicles to be viable in Newark.
- POLICY CS-5.4 Reducing Non-Residential Transportation Emissions. Encourage the participation of the business sector in efforts to reduce greenhouse gases. This could include commuter benefit and transit pass programs that encourage employees to use transit rather than driving to work. This also includes efforts by local employers to encourage ridesharing, carpooling, BART shuttles, telecommuting, and other programs that provide alternatives to driving alone.
- **POLICY CS-5.5 Consideration of Climate in Transportation Planning.** Consider potential greenhouse gas emissions impacts when making changes to the transportation system. Give preference to solutions that reduce auto dependency and minimize emissions.
- POLICY CS-5.6 Local Purchasing. Encourage residents to "buy locally." This includes shopping in Newark rather than driving long distances to other cities for major purchases, and buying food and other products made in Newark to reduce the emissions associated with transportation from source to market.
- POLICY CS-5.7 Public Awareness. Enhance and expand outreach, marketing, and education programs to raise awareness of Newark's greenhouse gas reduction programs.
- POLICY CS-5.8 Planning for Sea Level Rise. Require proposed development in lowlying areas to comply with applicable City of Newark standards for construction in flood hazard zones.

See the Transportation Element for additional policies on encouraging transit, ridesharing, and clean transportation.

See the Safety Element for additional policies on sea level rise.

ACTIONS

- ACTION CS-5.A Climate Action Plan. Maintain and periodically update a Newark Climate Action Plan that guides city policies on reducing emissions through land use, transportation, and building decisions.
- ACTION CS-5.B Greenhouse Gas Monitoring and CAP Updates. Conduct periodic monitoring and biannual estimation of greenhouse gas emission levels to determine the effectiveness of greenhouse gas reduction strategies. Revise the City's Climate Action Plan as needed based on the findings.
- ACTION CS-5.C Reducing Vehicle Miles Traveled. Implement the land and use and transportation strategies identified in the Climate Action Plan aimed at reducing greenhouse gas emissions related to motor vehicles.
- ACTION CS-5.D Cleaner Fuel Municipal Vehicles. As funds allow, convert the City's vehicle fleet to more energy efficient vehicles. This should begin with compressed natural gas (CNG) vehicles and eventually progress to electric vehicles.
- ACTION CS-5.E Living Near Work. Work with local employers to explore programs and incentives for employees to purchase homes in Newark, thereby reducing their commute lengths and related greenhouse gas emissions.

As noted in the Economic Development Element, the City will also work with the Newark Unified School District and private and public colleges to prepare Newark residents for local job opportunities. If residents are able to find jobs locally, they can reduce their commutes and possibly shift to other methods of travel such as bicycle or bus.

- ACTION CS-5.F Adaptation Planning. Collaborate with surrounding cities, the Federal Emergency Management Agency (FEMA), and other appropriate regional, state, and federal agencies to conduct a vulnerability assessment and strategic plan for long-term climate change adaptation.
- ACTION CS-5.G Electric Vehicle Infrastructure. Support the development of additional electric vehicle charging stations and other infrastructure which make electric vehicles more viable in Newark.

GREEN BUILDING

GOAL CS-6 Reduce the impacts of buildings and development on greenhouse gas levels and the environment in general.

POLICIES

- POLICY CS-6.1 Municipal Green Building. Lead by example by incorporating green design methods and materials in new City projects, including the design of new municipal buildings and the renovation of existing buildings. Long-term planning for a new Newark City Hall should take into consideration such factors as energy and water conservation, design for reclaimed water use, incorporation of recycled materials, and other green building components.
- POLICY CS-6.2 Encouraging Greener Construction. Encourage greener construction methods and greater use of recycled-content materials in new residential, commercial, and industrial construction projects.
- POLICY CS-6.3 Green Retrofits. Encourage and support Newark property owners seeking to retrofit their buildings to make them greener, more water-efficient, and more energy-efficient.
- POLICY CS-6.4 Green Roofs. Encourage the use of green roofs and cool roofs as a way of reducing heating and cooling costs, and reducing stormwater runoff.
- POLICY CS-6.5 Minimizing Impervious Surface Coverage. Minimize impervious surface coverage and related stormwater runoff in new development areas by allowing narrower roads and shared driveways, and by encouraging the use of pervious materials on driveways and parking areas. Other means of reducing urban runoff, such as rain barrels and bioswales, also should be encouraged.
- POLICY CS-6.6 Cool Pavements. Encourage the use of cool (light colored) pavements to mitigate the heat island effect of development.

ACTIONS

ACTION CS-6.A Code Updates. Periodically update the City's Building Codes to incorporate the latest State of California green building requirements.

- ACTION CS-6.B Green Building Incentives. Implement green building programs as called for by the Newark Climate Action Plan, including use of the Green Points certification program and the Multi-family Green Retrofit Fund.
- ACTION CS-6.C Green Building Information. Make information on green building practices and programs available to Newark homeowners, builders, contractors, business owners, and developers.
- ACTION CS-6.D Green Certifications. Provide resources and checklists to builders and contractors seeking to obtain green certifications through the City's Building Department.

ENERGY CONSERVATION

GOAL CS-7	Maximize opportunities for energy efficiency, conservation, and independence.
POLICIES	
Policy CS-7.1	Reducing Energy Use. Support measures to reduce energy consumption and increase energy efficiency in residential, commercial, industrial, and public buildings.
Роцсу СS-7.2	Renewable Energy Sources. Support the expanded use of renewable energy sources such as wind and solar by Newark residents and businesses, the City of Newark, and other government agencies.
Роцсу СS-7.3	Designing for Energy Efficiency. Support building design, site planning, and subdivision design methods that reduce heating and cooling costs and achieve greater energy efficiency.
Роцсү CS-7.4	Conservation Practices. Advocate for increased energy conservation by Newark residents and businesses, including basic conservation practices (such as shutting off lights and using lower wattage bulbs) and switching to more energy efficient appliances. The City itself should be a role model in this regard, through the retrofitting of its facilities and its operation and maintenance practices.

POLICY CS-7.5 Solar Access. Preserve solar access rights in a way that is consistent with state law, encourages the use of photovoltaic energy systems in new construction and rehabilitation projects, and balances parallel objectives to expand the urban forest and protect local trees.

ACTIONS

- ACTION CS-7.A Energy Efficiency Programs. Work with PG&E, StopWaste.org, and other organizations and agencies to provide energy assessments, audits, and educational programs, and to assist residents with undertaking energy efficiency and weatherization programs in their homes.
- ACTION CS-7.B Links to Energy-Related Information. Provide links from the City's website to information on alternative energy opportunities and energy efficient practices.
- ACTION CS-7.C Title 24. Enforce Title 24 and other energy efficiency and conservation standards when reviewing development and building permit applications.
- ACTION CS-7.D Energy Efficient Street Lighting. Continue to research energy reduction options for street lighting and parking lot lighting, including switching to light emitting diodes (LEDs). As funding allows, replace streetlights with more energy efficient alternatives.
- ACTION CS-7.E Climate Action Plan Programs. Implement Newark Climate Action Plan programs intended to reduce energy use, including conservation plans for City buildings, installation of more energy-efficient heating and cooling systems, insulation, solar lighting plans, and increased use of renewable energy.
- ACTION CS-7.F California First. Participate in the California First Program, a state-wide program to provide another financing option for homeowners to install energy efficiency measures on their homes.

SOLID WASTE MANAGEMENT

GOAL CS-8 Reduce landfilled waste through recycling, composting, and source reduction.

POLICIES

- POLICY CS-8.1 Recycling Program. Actively promote recycling, composting, and waste reduction in order to minimize the amount of waste requiring disposal in landfills. Provide for residential recycling and green waste containers and weekly curbside recycling pickup, to make it as easy and convenient as possible for residents to reduce the volume of trash requiring landfill disposal.
- POLICY CS-8.2 Interagency Coordination in Waste Reduction. Promote interjurisdictional cooperation, coordination, and planning in the development of recycling and waste management programs.
- POLICY CS-8.3 Maximizing Reuse. Manage solid waste in a way that maximizes the reclamation and reuse of resources. The City encourages the use of salvaged and recycled materials, rather than the disposal of such materials in landfills.
- POLICY CS-8.4 Increasing Commercial, Industrial, and Multi-Family Recycling. Increase recycling rates by the commercial, industrial, and multi-family residential sectors, including apartment buildings, offices, restaurants, hotels, retail stores, and other businesses. Retail centers and multifamily residential development should be required to provide onsite shared collection bins for recyclable waste.

ACTIONS

ACTION CS-8.A Reduction Targets. In collaboration with StopWaste.org, implement programs to achieve a 75 percent waste diversion rate by 2015, and to achieve an ultimate target of zero waste.

- ACTION CS-8.B Waste Reduction Program. Maintain a solid waste reduction and management program that is coordinated with and consistent with the Countywide StopWaste.org program. The program should include regularly scheduled trash collection, compost and recycling collection, bulk waste and e-waste collection events, household hazardous materials disposal provisions, education and outreach to promote waste diversion, and other components, which minimize landfilled waste.
- ACTION CS-8.C Source Reduction and Diversion for New Construction. As part of the development review process, require major new projects to prepare solid waste source reduction and diversion programs before building permits are issued.
- ACTION CS-8.D Construction and Demolition Debris. Reduce the amount of construction and demolition debris being disposed in landfills through mandatory construction and demolition recycling requirements.
- ACTION CS-8.E Recycling Receptacles in Public Spaces. As funding allows, provide recycling receptacles in parks and public spaces, in addition to trash receptacles.
- ACTION CS-8.F Environmentally Friendly Purchasing. As prescribed by the Newark Climate Action Plan, adopt an environmentally friendly purchasing policy. Monitor the policy's effectiveness and adjust it as appropriate.

NEWARK GENERAL PLAN CONSERVATION AND SUSTAINABILITY

PARKS, RECREATION, AND OPEN SPACE

INTRODUCTION

This chapter combines the State-mandated open space element with an optional element focused on parks and recreation. Parks are one component of an open space network that also includes wetlands and wildlife refuge areas, rights-of-way such as the Hetch Hetchy Aqueduct and PG&E transmission lines, school athletic fields, salt evaporation ponds, and public and private lands. Open space defines the edges of Newark on the south and west sides and is an important part of the city's history and character. This Element provides a framework to manage open space for recreation, conservation, resource production, and public safety in the future.

The Parks, Recreation, and Open Space Element emphasizes the important role that parks play in community life. Newark's parks contribute to health and fitness, mental well-being, aesthetics, and environmental quality. They are one of the most valued aspects of the community and enrich the lives of residents of all ages. Planning for the expansion and improvement of the city's parks will be essential as Newark adds residents and workers. It will also be important to adapt existing recreational facilities and programs to respond to the city's changing demographics and to trends in leisure and sports activities. Funding for park improvements, operations, and maintenance will continue to be critical issues.

Newark's parks are supplemented by other recreational facilities, including those operated by the Newark Unified School District, Ohlone College, and the private sector. Private recreational facilities include community rooms, swimming pools, tennis courts, tot lots, and similar amenities serving individual residential developments. Newark is also home to commercial businesses offering recreational activities such as martial arts training and dance instruction, and fraternal organization facilities such as the Newark Pavilion. The City's parks are further supplemented by regional facilities beyond the city limits, including Ardenwood Historic Farm and Coyote Hills Regional Park.



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The first part of this chapter provides background information on parks, recreation, and open space resources in Newark. The second part includes goals, policies, and actions guiding the use of these resources. Key topics include:

- > Conservation of open space.
- > Acquisition of new parkland to respond to increasing population and demand.
- Improvement of existing parkland to meet community needs and respond to recreational trends.
- > The use of non-City facilities to supplement City park and recreation facilities.
- > Trail improvements, including improvement of the Bay Trail and spur trails.

OPEN SPACE

State law requires that four types of open space be identified and analyzed in the General Plan. These are listed below:

- Open Space for Recreation. This category includes the City's park system, as well as school yards and athletic fields used for recreation. The management of these areas is the focus of this chapter and is addressed in Goals 2 and 3 at the end of the Element.
- Open Space for the Protection of Natural Resources. This primarily refers to public land within the Don Edwards San Francisco Bay National Wildlife Refuge, and wetlands on private property that will be conserved as open space. These resources are primarily addressed in the Conservation and Sustainability Element of the General Plan.
- Open Space for the Managed Production of Resources. This includes the Cargill salt harvesting, refining, and production lands and related salt harvesting facilities within Cargill's Newark Plant site. It also includes agricultural lands. These resources are primarily addressed in the Land Use Element and in the Economic Development Element of the General Plan.
- Open Space for Public Health and Safety. This includes areas where development would pose a threat to public safety due to earthquakes, landslides, flooding, aviation hazards, and similar risks. These areas are addressed in the Environmental Hazards Element. Flooding is the main safety hazard in Newark, and the open spaces set aside for this purpose are generally included in the three categories listed above. Most flood prone areas


in Newark are designated for recreation, resource production, or resource protection.

The geographic extent of land meeting the criteria above is shown on Figure LU-1 in the Land Use Element. These areas correspond to the following land use categories: Parks and Recreational Facilities, Conservation Open Space, and Salt Harvesting.

In 2013, 50 percent of Newark's land area, or about 4,500 acres, consisted of undeveloped or non-urbanized land. Over two-thirds of this area consists of salt harvesting, refining, and production along the edge of San Francisco Bay in the south and west parts of the city. This land is expected to remain in salt harvesting, refining, and production for the duration of the planning period. The remaining one-third includes Conservation Open Space (wetlands), City parks, agricultural areas, and privately owned vacant land zoned for development. Although private vacant land is not considered "open space" using the State definition, portions of these areas will be set aside as future parks, conservation areas, and landscaped rights-of-way as development takes place. The boundaries of future open spaces within development areas will depend on detailed mapping of wetlands, site planning for new development, and negotiations between the private sector and public resource agencies.

In addition to the open spaces described above, most residential properties in Newark include front yards, back yards, and side yards. These spaces are urbanized, but they still create a sense of spaciousness, provide access to sunlight, and support habitat for birds and other wildlife. Landscaped roadway medians, rights-of-way, and lawns around public buildings also supplement the traditional open space network.

General Plan policies under Goal 1 of this Element express Newark's commitment to conserving open space in the future. The policies recognize the different types of open space in the city, and the role these spaces play in protecting resources, supporting Newark's economy, and shaping the city's character.

NEWARK'S PARK SYSTEM

For the past five decades, Newark's parks have been planned and designed according to accepted national standards for park development. In many cases, these standards are still appropriate and have been carried forward in this Plan. However, recreational needs are not constant, and the City's ability to meet these needs has



changed over time. Newark is landlocked and has limited opportunities to develop new parks. Funding for land acquisition has become more limited, and operating budgets have become leaner. The emphasis in park planning is shifting to make better use of existing parks and providing new facilities that do not exist today. Partnerships with the private sector and other public agencies have become more important to meeting community needs.

Adopted Park Standards

The City of Newark uses two types of standards in park planning:

- Per capita standards, which establish the number of acres of parkland the city should have per 1,000 residents. These are generally applied on a citywide basis.
- Service area standards, which are used to ensure that all residents have easy, convenient access to a local park. These are generally applied on a neighborhood basis.

PER CAPITA STANDARDS

The per capita acreage standards are based in part on existing conditions, in part on national standards, and in part on State legislation which limits the amount of parkland the city can require developers to provide when new housing is approved. The Quimby Act was adopted by the California legislature in 1975 to allow cities to require developers to set aside land or pay impact fees of equivalent value for park improvements. Under state law, the dedication requirement ranges from up to 3.0 acres per 1,000 residents to up to 5.0 acres per 1,000 residents, depending on the amount of parkland the city currently has. The intent of the Quimby Act is to help a city retain its current ratio of park acres per 1,000 residents in the future; meaning that cities with larger existing park areas can require higher set-asides. Revenue generated through Quimby Act fees can only be used for land acquisition or capital improvements, and cannot be used for park operations or maintenance.

Newark has adopted a 3.0 acre per 1,000 resident standard for planning purposes and its Quimby Act fee is based on this ratio. Previous General Plans for the City stipulated that two-thirds of the total should be targeted for *community* parkland and one-third should be targeted for *neighborhood* parkland. The intent was to ensure that the City added both large <u>and</u> small parks in the future, recognizing the different function of each type of park. This division may no longer be appropriate in the



future, since the city is moving into a new era of park planning reflecting its mature, built out character and the adopted plans for its remaining large vacant tracts of land.

Chapter 16.30 of the Newark Municipal Code requires that new subdivisions include sufficient land to maintain the adopted per capita service standard, or pay a fee which will enable the city to acquire land to maintain the standard. Smaller developments typically pay the fee, since it is infeasible to provide a neighborhood park of sufficient size on-site. As of 2013, the dedication requirement or fee was based on .0102 acres (444 square feet) per single-family unit and .0072 acres (314 square feet) per multi-family unit. In 2013, these fees were \$2,998 per single-family unit and \$2,278 per multi-family unit.

SERVICE AREA STANDARDS

Like the acreage standards, the service area standards address two types of parks: neighborhood parks and community parks. The standards are defined below:

- Neighborhood parks are typically 5 to 10 acres in size and are designed to serve residents living within a 1/2-mile radius. Most Newark residents should be able to walk to a neighborhood park within 10 minutes of their homes. Ideally, neighborhood parks should be away from arterial streets and should be adjacent to elementary schools to enhance the joint use of the space for field sports and school activities. Significant features of a neighborhood park include fields, lawns, walkways, picnic areas, and tot lots. Other small-scale recreational facilities such as basketball courts may be acceptable. However, to minimize auto traffic and parking demand, neighborhood parks should generally not have facilities that draw residents from outside the service area.
- Community parks are typically 20 acres or larger and are designed to serve residents living within a 1- to 2-mile radius. They may also have facilities which draw residents from throughout the city. Community parks are typically located near major streets and are accessible by public transportation. Offstreet parking should be provided. These parks include a larger array of facilities than neighborhood parks, potentially including tennis courts, swimming pools, lighted fields, restrooms, recreation centers, and open space for unstructured play.





OTHER PARK CATEGORIES

In addition to the two park types listed above, this General Plan introduces two additional park categories which will become part of the city's park inventory in the future:

- Mini-parks are typically less than one acre in size. They include small parks within residential development areas, and civic plazas and open spaces within urbanized areas. Although Newark does not have public mini-parks at this time, the General Plan recognizes the opportunity for such parks in Old Town, in the NewPark Mall area, and in new large-scale development. The service area of a mini-park is typically ½-mile or less. Mini-parks do not include private open spaces within subdivisions or multi-family complexes which are reserved for the use of residents only.
- Special use parks are parks associated with a unique function or facility. They include the Shirley Sisk Eucalyptus Grove, the proposed golf course (or major recreational facility) to be developed in Southwest Newark, and possible future linear parks on utility, railroad, or former road rights-of-way (e.g., the Cedar Boulevard extension). Acreage and service area standards for special use parks do not apply since they vary with the park's function.

School recreational facilities are not typically included in the 3.0 acre per 1,000 standard, although there are exceptions for facilities such as MacGregor Fields, which is subject to a long-term lease between the City and the Newark Unified School District. Similarly, public land used for resource conversation such as the Don Edwards San Francisco Bay National Wildlife Refuge is not counted in the recreational standard. In the event a golf course is developed in Southwest Newark, the 3.0 acre per 1,000 resident standard may need to be recalibrated, as the golf course alone could double the acreage of parkland in the city.

PARK INVENTORY

The Newark Recreation and Community Services Department operates and maintains 131 acres of City parks and several recreational facilities, as listed in Table PR-1. Of this total, 121 acres are owned by the City and 10 acres are leased from the Newark Unified School District. There are 13 parks in the city, including eight neighborhood parks, three community parks, and two special use parks. Figure PR-1 shows the location of the parks. Parks are also called out as a land use category on the General Plan Land Use Map in the Land Use Element.

TABLE PR-1 Newark City Park Inventory					
Park Name	Acres	Location	Facilities	Adjacent Facilities	
Neighborho	od Park	S			
Ash Street*	6.1	Enterprise Dr. at Filbert St.	Play structures, softball fields, basketball court, picnic facilities, horse- shoe pit	Newark Senior Center	
Bridgepointe	3.5	Spruce St. at Bridgepointe Dr.	Play structures, picnic facilities	Lincoln Elementary School (8.7 acres of additional open space)	
Byington	3.0	Byington Dr. at Central Av.	Play structures, picnic facilities		
Civic Center	5.1	Newark Blvd. at Civic Terrace	Play structures, basketball court, par course, picnic facilities	Newark City Hall, Newark Public Library	
Lakeshore**	26.0	Lake Blvd. at Lakeshore Dr.	26-acre total includes 10 acres of lawn, paths, and par course area and a 16- acre water area with fishing and boating		
Mayhews Landing	8.3	Cherry St. at Mayhews Landing Rd.	Play structures, basketball court, picnic facilities	Graham Elementary School (5.6 acres of additional open space)	
Mirabeau	6.0	Haley St. at Mirabeau Dr.	Play structures, paths, picnic facilities	Snow Elementary School (6.0 acres of additional open space)	
Musick	0.8	Cedar Blvd. at Mayhews Landing Rd.	Play structures, picnic facilities	Musick Elementary School (4.4 acres of additional open space)	
Subtotal	58.8				
Community	Parks				
Birch Grove	12.2	Birch St. at Robertson Av.	Play structures, water feature, lighted softball field, basketball court, tennis courts, picnic facilities, restrooms	Across the street from Bunker Elementary School	
Community	16.3	Cedar Blvd at Newark Blvd.	Play structures, warm-up wall, basketball and handball court, lawn, paths, tennis courts, picnic facilities, Community Center	MacGregor Alternative Education Center, MacGregor Fields (10 acres)	

TABLE PR-1 Newark City Park Inventory

Park Name	Acres	Location	Facilities	Adjacent Facilities
Sportsfield/ Silliman Center	29.6	Mowry Av. at Cherry St.	Lighted and non-lighted softball field, soccer fields, Family Aquatic Center, Community Activity Center, including gym- nasium, showers and locker room, aerobic/ dance studio, fitness center, teen room, children's room, community meeting room, childcare	Adjoins Ohlone College Newark Campus, Fire Station
Subtotal	58.1			
Special Use	Parks			
Shirley Sisk Grove	3.2	Cedar Blvd. at NewPark Mall	Passive open space for summer concerts	
MacGregor Fields	10.5	Cedar Blvd. at Lake Blvd.	Soccer and baseball practice fields	MacGregor Alternative Education Center
Subtotal	13.7			
GRAND TOTAL	130.6			

* Excludes the acreage associated with the Newark Senior Center, which is located on an adjoining site and includes pool tables, card rooms, a computer lab, a lunchroom, meeting rooms, and social facilities. ** Although Lakeshore exceeds the acreage range for a typical neighborhood park, approximately 16 acres of the 26- acre total area is water, leaving 10 acres of land.

Source: Cal Poly San Luis Obispo, 2012; City of Newark, 2012.



Based on the decennial Census count of 42,471 residents, there were 3.11 acres of parkland per 1,000 residents in 2010. The figure rises substantially if school athletic fields and play areas are added in. School field and play areas total 133.2 acres,¹ bringing the grand total to 264 acres, or about 6.23 acres per 1,000. Although the City does not own or operate school playfields, these areas are available to residents on a limited basis during non-school hours. They provide an important supplemental resource.

¹ Excluding 10.5 acres at MacGregor Fields, which is counted in the figure for City parks due to a lease agreement.



Source Data: City of Newark, 2012; The Planning Center | DC&E, 2012; Tiger Roads 2010; ESRI, 2010; FTC, 2010.



As indicated in Table PR-2, Newark's community parks provide an array of facilities. Sportsfield Park includes the Silliman Activity and Family Aquatic Center, with an indoor water park and pool, gymnasium, teen area, fitness center, dance studio, childcare center, and meeting rooms. The park also includes lighted and non-lighted play fields, serving the entire community. Newark Community Park includes 16 acres of playfields and outdoor activity space, including picnic areas and tot lots. The park also includes a community center available for private rental. Adjacent to Ash Street Park, the Newark Senior Center offers programs and activities for Newark seniors. At Lakeshore Park, a 16-acre lagoon provides opportunities for fishing and boating. Other parks in the city contain a mix of passive and active facilities, meeting the recreational needs of persons of all ages.

While the City meets its overall acreage standard for parks, some neighborhoods are better served than others. In particular, the high-density residential area southeast of NewPark Mall is more than a 1/2-mile from the nearest city park. Other residential areas may be within a 1/2-mile of parks that do not provide a complete range of services and facilities. Other areas may be within the 1/2-mile radius, but face access barriers such as railroad tracks and wide arterial streets. Policies in the General Plan express the City's continued commitment to expanding and improving access to its parks to better serve all residents.

Several new parks are planned as part of future large-scale developments. The Southwest Newark Residential and Recreational Development includes plans for a golf course or major public recreational facility. A golf course would likely be 120 acres or larger and could potentially double the City's total park acreage. The Specific Plan for Southwest Newark (formerly Areas 3 and 4) also includes an approximately 5-acre neighborhood park, to be co-located with an elementary school on the south side of Cherry Street east of Ohlone College. The park will not only serve new residents, it will remedy a park access deficiency in the residential area on the north side of Cherry Street in this area.

Two neighborhood parks are planned for the Dumbarton Transit-Oriented Development (TOD) area, including one to the east and one to the west of the future transit station. The development will also feature a linear park network, including new sections of the Bay Trail. A total of 16.3 acres of new parks are proposed in this area.

TABLE PR-2	SUMM	IARY C	F NEV	VARK	Park	Facili	TIES					
Park	Basketball Court	Exercise Course	Handball Court	Open Turf Area	Picnic Facilities	Play Apparatus	Restrooms	Soccer Field	Softball Field	Tennis Court	Volleyball Court	Water Play Feature
Ash Street	✓			✓	✓	✓	✓	✓	✓		✓	
Birch Grove	✓			✓	✓	✓	✓		~	✓		✓
Bridgepointe				✓	✓	✓						
Byington	✓			1	✓	✓						
Civic Center	✓			✓	✓	✓						
Community	✓		✓	✓	✓	✓	✓			✓		
Lakeshore		✓		✓								
Mayhews Landing	✓			✓	✓	✓						
Mirabeau				✓	✓	✓						
Musick				✓		✓						
Shirley Sisk Grove				l	Jnimp	roved,	no fac	ilities				
Sportsfield/ Silliman							✓	~	~			
Source: City of Ne	wark 201	2.										

OTHER RECREATIONAL FACILITIES

SCHOOL PROPERTIES

As noted above, the Newark City park system is augmented by an approximately equivalent amount of recreational open space on school property. Among the most important facilities are the 35 acres of athletic fields at Newark Memorial High School





The general public does not have access to school athletic fields and playgrounds when school is in session. However, the School Board has adopted policies regarding access to school facilities and fields during non-school hours. Supervised recreational activities may be scheduled on school properties by making prior arrangements and receiving written authorization. Fees may apply to such activities to recover direct costs. Similar arrangements may be made to use recreational facilities within the schools themselves.

REGIONAL PARKS

Newark is served by the East Bay Regional Park District, a regional park agency serving over 2.5 million residents in Alameda and Contra Costa Counties. Newark residents have access to a network of 65 parks comprising 113,000 acres in the two county area, with settings ranging from shoreline wetlands to mountain wilderness. There are no regional parks within the City of Newark. The closest locations are Ardenwood Historic Farm, which is adjacent to the city limits on the north side of SR 84, and Coyote Hills Regional Park, which is less than 1 mile northwest of the city limits. Ardenwood Farm is a 205-acre working farm that has been in operation since the 1850s. It provides educational programs, horse-drawn train rides, a blacksmith shop, livestock areas, and public gardens. Coyote Hills is a 978-acre preserve comprised of marshland and grassy hills. Its facilities include bicycling and hiking trails, picnic areas, and bird watching areas. Newark is also about 2 miles away from Quarry Lakes Regional Recreation Area, a 539-acre park with swimming, fishing, biking, and picnicking areas.

DON EDWARDS SAN FRANCISCO BAY NATIONAL WILDLIFE REFUGE

The National Wildlife Refuge is a 30,000-acre area along the southern shoreline of San Francisco Bay owned and operated by the US Fish and Wildlife Service. A small portion of the Refuge is within the Newark city limits, and vehicle access to the interpretive facilities on Marshland Road is through Newark.



The Refuge is the first urban National Wildlife Refuge in the United States. Its mission is to preserve wildlife habitat from development, protect migratory birds and endangered and threatened species, and provide opportunities for outdoor recreation. Areas within the Refuge include salt ponds, salt marshes, mudflats, vernal pools, open water, and grassland. The Refuge hosts over 280 species of birds each year, including migratory birds on the Pacific Flyway. Its sloughs and marshes are home to a number of threatened and endangered plants and animals.

PRIVATE FACILITIES

The City's park dedication ordinance allows developers to reduce the amount of their park improvement fees by up to 50 percent when they agree to provide on-site recreation amenities. Most condominium and townhome developments in Newark provide such amenities, including swimming pools and tennis courts. In some locations, the localized shortage of park acreage is offset by access to these facilities. For example, private recreational facilities at the Murieta, Waterford, NewPark Village, and Nantucket Cove developments serve the area southeast of NewPark Mall. This is an area of the city that is more than a 1/2-mile from the nearest neighborhood park. The City will continue to allow and encourage private recreational facilities in the future, while still working to increase public park acreage.



PROJECTIONS OF FUTURE NEEDS

Newark's population is projected to be 60,510 by 2035. Maintaining the adopted service standard of 3.0 acres of parkland per 1,000 residents would require that the City have 181.5 acres of parkland at that time. The City presently has 131 acres and will not meet the 181.5-acre target unless it acquires more parkland in the next 20 years. As noted above, at least 21 acres will be added through new neighborhood parks in the Dumbarton TOD and Southwest Newark projects. This leaves a potential shortfall of 30 acres. The shortfall may be eliminated through development of a golf course in Southwest Newark. In the event the golf course is not developed, the City should maintain its service standard by designating sufficiently large park areas in Southwest Newark and elsewhere in the city to close the gap.

Policies in this General Plan direct the City to consider opportunities for neighborhood parks and mini-parks beyond the planned facilities at the Dumbarton TOD and in Southwest Newark. Such opportunities exist in Old Town Newark, on surplus school property, along the Hetch Hetchy Right of Way, along the vacant rightof-way reserved for the extension of Cedar Boulevard, and within new infill



development sites. For example, high-density development in the NewPark vicinity could include small pocket parks and plazas which would provide space for outdoor events, farmers markets, and community gatherings. Such spaces would introduce a new type of open space to Newark, augmenting the existing park inventory. There may also be opportunities to partner with Ohlone College, which currently has a large area of undeveloped land on its Newark campus.

Increasing park acreage is only one part of responding to future recreational needs. Newark must also respond to the need for new recreational facilities. The City has identified the need for a golf course, at least one additional lighted multi-purpose field, additional lighted tennis courts, a skate park, a BMX park, and a fenced dog play area. There is also interest in developing an ornamental garden similar to the San Jose Rose Garden, and in developing additional community gardens around the city. Gardens provide important opportunities for community building while also providing aesthetic and scientific interest. As more people use Newark's parks, the City will need to determine the need for ancillary improvements, especially restrooms and parking.

The siting of specific park improvements will require future study. Some parks, such as Birch Grove and Sportsfield Park, may have opportunities for additional features, while others are fully improved and already have an optimal balance between passive and active uses. An action program in this General Plan recommends preparation of a Parks Master Plan. Such a Plan would identify recreational needs at a citywide and neighborhood level, and develop siting and facility recommendations for individual parks.

RECREATIONAL SERVICES AND PROGRAMMING

Newark's Recreation and Community Services Department provides recreational, educational, and social programs that enrich the well-being of individuals and the community as a whole. The Department offers fitness classes for persons of all ages, youth and adult sports league activities, and community events such as a summer concert series, Family Day at the Park, and the Senior Health and Resource Fair. It also operates the Newark Senior Center, which offers programs ranging from daily lunches to field trips, recreation, transportation, and health screening.

The Recreation and Community Service s Department monitors participation in its programs and consults with the community to determine activities that are in

demand. The Department has responded to demographic shifts, including the aging of the population and increased cultural diversity. Programs such as Bollywood Dance, Muy Thai, and Tai Chi are now being offered alongside traditional programs such as softball and volleyball. The growing demand for cricket, lacrosse, and other field sports activities has created the need for multi-purpose fields rather than fields designed for a single activity such as softball.

Park maintenance is handled by the Newark Public Works Department. Park features must be regularly maintained and repaired to address wear and tear and ensure the continued safety of all users. This includes replacement of irrigation systems, graffiti removal, lawn and field care, landscaping, turf replacement, and modernization of older buildings and restrooms. Funding for such improvements is limited and is allocated through the capital improvements program and ongoing expenditures in the annual budget. These costs cannot be covered by facility rentals, concessions, and program fees alone. Voter-approved bond measures, special assessments, and other sources may be explored in the future to ensure sufficient investment in the City's parks.



BAY TRAIL

In 1987, the California Senate passed legislation authorizing the Association of Bay Area Governments (ABAG) to develop a plan for a trail that circumnavigated San Francisco Bay. ABAG adopted the Bay Trail Plan in 1999. The vision is to establish a 500-mile network of biking and hiking trails that circle San Francisco and San Pablo Bays and connect the bay to nearby neighborhoods and business districts. As of 2012, about 310 miles of the Trail had been completed. The Trail provides accessible hiking, bicycling, walking, bird watching, and educational opportunities.

In the Newark area, there are several off-road and on-road trails that are considered part of the Bay Trail network. The Newark Slough Trail is a 6.5-mile off-road shared use paved loop. Most of the trail is in Fremont but a short segment traverses the Newark section of the National Wildlife Refuge. The trail is accessed via the Wildlife Refuge Visitors Center just west of the city limits. Another paved all-purpose off-road trail extends from Marshlands Road west of Thornton to a pedestrian overpass across SR 84 to Coyote Hills; this trail is in Fremont, but provides the most direct access to the shoreline from Newark. There is also a network of interpretive nature trails around the Wildlife Center Headquarters on Marshlands Road in Fremont, west of the Newark city limits.

An on-street portion of the Bay Trail extends along a loop formed by Thornton Avenue, Paseo Padre Parkway, Ardenwood Boulevard, and Jarvis Avenue. The official alignment of the trail through Newark includes on-street sections along Thornton Avenue (between SR 84 and Cherry Street) and a parallel on-street route along Willow Street and Central Avenue. The trail follows Cherry Street from Thornton to the Fremont City limits, where it continues on Boyce Road.

Improvements to the Bay Trail are proposed in the future. The City is currently considering the recommendations of a Bay Trail Study that would move the trail offroad and closer to the shoreline in a number of locations. Specifically, development of a new trail is proposed as part of the Dumbarton TOD development. This trail would connect directly to the Newark Slough Trail and form a loop on the edges of the TOD area, with a spur to the transit station itself. A trail is also proposed to loop through the Southwest Newark Residential and Recreational Project. This segment would be linked to Cherry Street on its western end and to future trail extensions near the former Durham Road Landfill in Fremont on the eastern end. The possibility of a trail along the north side of Plummer Creek between the Dumbarton TOD and Filbert Street (to the rear of industrial properties along Central Avenue) has also been explored.

Policies and actions in this Element provide guidance on improvements to the Bay Trail. The policies aim to protect wildlife, avoid conflicts with industrial operations, and ensure that trail design is sensitive to issues such as rising sea level. The City will continue to work with property owners, ABAG, the City of Fremont, and other agencies to provide improvements which enhance shoreline access while achieving these objectives.



GOALS, POLICIES, AND ACTIONS

PROTECTION OF OPEN SPACE

GOAL PR-1	Protect Newark's open space for a variety of purposes, including public recreation, the managed production of natural resources, protection of environmentally sensitive areas, aesthetics, and public safety.
Policies	
Policy PR-1.1	Public Open Space. Protect and where possible enhance the public open space resources available within or near Newark.
Policy PR-1.2	Private Open Space. Encourage private property owners to preserve unique open space areas and natural features on their lands.
Policy PR-1.3	Open Space and Community Character. Recognize the value of open space for shaping community character and identity and defining Newark's image within the region.
Policy PR-1.4	Yards and Greenery. Provide adequate yards and landscaped areas around homes and businesses to create a sense of openness and greenery in Newark, and to enhance the beauty of the community.
Policy PR-1.5	Utility Easements. Encourage public utility agencies such as the San Francisco Water Department (Hetch Hetchy Aqueduct) and PG&E to retain their easements in open space or to improve them with linear parks or trails.
Policy PR-1.6	Hillside Vistas. Support efforts by Fremont and Union City to limit hillside development so that Newark's views of the East Bay Hills are preserved to the greatest extent possible.

Actions

- ACTION PR-1.A Don Edwards National Wildlife Refuge Expansion. Work with willing property owners, the California Department of Fish and Game, the U.S. Fish and Wildlife Service, and the California Coastal Conservancy in the expansion of Don Edwards San Francisco Bay National Wildlife Refuge and the conservation and restoration of salt marsh open spaces along San Francisco Bay. Future restoration activities should be consistent with the terms set forth in the Final Environmental Assessment – Potential Additions to San Francisco Bay National Wildlife Refuge prepared by the U.S. Fish and Wildlife Service.
- ACTION PR-1.B Environmental Review and Open Space. Use the environmental review process to encourage new development to designate areas with unique vegetation, wildlife habitat, or natural resources as open space or to provide adequate mitigation for impacts to such areas.

PARKLAND ACQUISITION AND EXPANSION

GOAL PR-2	Expand and improve Newark's parks and recreational facilities to meet existing and future needs.
Policies	
Policy PR-2.1	New Neighborhood Parks. Develop new neighborhood parks in locations where there is an existing or anticipated need.
Policy PR-2.2	Parks in New Development. Require new parks to be provided within large-scale new development. Where the provision of an on-site park is infeasible, require the payment of an in-lieu fee for parkland acquisition to serve that development.
Policy PR-2.3	Park Service Standards. Establish the following park standards to determine where and how much parkland should be provided in Newark, and to calculate the amount of in-lieu fees where appropriate:
	(a) within the city, provide at least 3.0 acres of parkland per 1,000 population. This total shall exclude wetlands and other areas that are not accessible for active or passive recreation,
	(b) provide one neighborhood park per 5,000 population, with a park located within 1/2-mile of each residence, and

(c) provide one community park per 15,000 population, with a park located within 2 miles of each residence.

These standards may be adjusted to facilitate high value and unique facilities such as linear trails, dog runs, formal gardens, and indoor facilities.

- POLICY PR-2.4 Pocket Parks. Allow a portion of the parkland dedication requirement to be met through the provision of on-site pocket parks and play lots in new development.
- **POLICY PR-2.5** New Facilities in Existing Parks. Where constraints to meeting the established park and recreation standards cannot be overcome, explore alternatives for providing additional recreational activities within existing park and recreation facilities.
- POLICY PR-2.6 Park Expansion. Explore opportunities to expand existing parks through the acquisition of vacant or underutilized land on the perimeter.
- POLICY PR-2.7 Distinctive Park Character. Ensure that every park and public space has its own unique character. Parks should vary in size and level of activity based on their location, natural setting, and use. Larger parks should include a mix of active and passive recreation areas to ensure that they serve a diverse range of users.
- POLICY PR-2.8 Natural Features in Parks. Design new parks to respect and conserve important natural features. Wetlands and other environmentally sensitive areas located within park boundaries should be designated for protection and restored to the greatest extent possible.
- POLICY PR-2.9 Parks in Nearby Cities. When evaluating the need for recreational facilities, consider the availability of public facilities in nearby cities as a factor.

Actions

- ACTION PR-2.A Park Impact Fees. Continue to implement provisions of the Quimby Act which enable the City to collect in-lieu fees for park acquisition.
- ACTION PR-2.B New Park Locations. Develop new public parks in the neighborhoods planned for the western and southwestern edges of Newark.

Action PR-2.C	New Park Facilities. Ensure that newly developing neighborhoods
	have access to a full array of recreational facilities. When determining
	what specific facilities should be provided in new parks, consider
	existing citywide deficiencies, so that all Newark residents may benefit.

- ACTION PR-2.D Old Town Park. Consider opportunities for a new neighborhood park in the Old Town Newark area.
- ACTION PR-2.E Donations of Money and Land. Create a mechanism through which individuals can donate money or land to the city for expansion of existing parks or the development of new parks or community facilities.
- ACTION PR-2.F Community Input. Seek public input on improvements to City parks and recreation programs through user surveys, community workshops, and communication with organized recreation and neighborhood groups.

See the Health Element for policies encouraging community gardens.

See also Action PR-4.A regarding joint use of school facilities for City recreation.

PARK MANAGEMENT

OAL PR-3	Manage Newark's parks in a way that enhances their
	natural qualities, conveys a positive image of the city and
	its neighborhoods, and fully meets the community's
	recreational needs.

POLICIES

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- POLICY PR-3.1 Facility Modernization. Periodically modernize or upgrade existing recreational facilities to ensure that they meet the needs of the community, respond to current trends, and make a positive contribution to Newark's quality of life.
- **POLICY PR-3.2 Quality Materials.** Utilize quality materials in the construction of parks, public spaces, and recreational facilities. Park equipment and facilities should promote durability and resilience, be responsive to the Bay Area's climate, and be resistant to vandalism to the greatest extent feasible.

POLICY PR-3.3 Extending Facility Usefulness. Enhance the usefulness of existing athletic fields and active play areas by providing facilities and equipment that support a wider variety of sports and activities.

As funds allow, this could include improvements such as night lighting and the use of artificial turf to extend the hours of operation for playfields.

- POLICY PR-3.4 Park Safety. Ensure that parks are designed and managed to maximize the personal safety of users, maintain the visibility of play areas, and minimize the risk of injury.
- POLICY PR-3.5 Mitigating Off-Site Impacts. Manage parks to reduce and mitigate the potential for adverse effects on surrounding neighborhoods, such as evening light, noise, and parking.
- POLICY PR-3.6 Park Landscaping. Maintain high standards for park landscaping. Include a mix of native vegetation and ornamental landscaping to enhance visual quality.
- POLICY PR-3.7 Park Cleanliness. Keep Newark's parks clean, well maintained, and free of litter, with an adequate number of trash receptacles and regular trash collection services.
- **POLICY PR-3.8 Park Maintenance.** Ensure the regular and systematic maintenance of park grounds and facilities. Maintenance methods should be sensitive to the environment, including pest management and weed control methods which minimize toxic chemical use.

This should also include facilities for composting and recycling, and sprinkler and irrigation equipment that is designed to reduce maintenance and repair requirements and minimize water waste.

- POLICY PR-3.9 Reducing Energy Consumption. Reduce energy consumption in parks and in recreational buildings through energy-efficient lighting, conservation and efficiency measures in park structures, and energy-conscious operating procedures in parks and recreational facilities. Wherever feasible, this should include the use of photovoltaic systems in new or rehabilitated recreation buildings.
- POLICY PR-3.10 Volunteerism. Encourage volunteer participation in the care and stewardship of parkland and the delivery of recreational services in Newark.

Policy PR-3.1	Responding to Changing Needs. Provide recreational facilities and programs which meet the diverse and changing needs of Newark residents, taking into consideration such factors as the aging of the population, the mobility needs of persons with disabilities, and the city's growing cultural diversity.
Policy PR-3.1	2 Special Recreational Needs. Maintain recreation programs for special user groups such as disabled persons, seniors, and teenagers.
	Recreation programs for youth are particularly important and should be a key consideration in the development of new facilities and programs.
Policy PR-3.1	Community Events. Hold communitywide events such as concerts and festivals in city parks. Such events should be carefully managed to ensure that parks are not over-programmed and that maintenance requirements are fully addressed.
Policy PR-3.1	Financing Park Improvements. Consider the use of bond measures and similar financing programs for acquisition and improvement of park land and recreational facilities.
Actions	
Action PR-3.	A Parks Master Plan. Develop a Newark Parks Master Plan, which evaluates local park facilities against National Recreation and Park Association standards and determines the types and locations of improvements needed. A Parks Master Plan would also include use guidelines for the city's parks, and a funding plan for future improvements.
Action PR-3.	B Reclaimed Water Use. Continue to work toward the use of reclaimed or non-potable water for park irrigation, rather than using domestic water. As reclaimed or non- potable water infrastructure is developed, parks and public landscaping should be a top priority for new service.
Action PR-3.	C Sustainability in Parks. Expand sustainability practices at Newark's parks. This could include the use of bay friendly landscaping in City parks, and the expanded use of compost and mulch materials for fertilizer and landscaping.

- ACTION PR-3.D Golf Course. Continue to pursue the development of a public golf course on the undeveloped residentially designated lands located in the southwestern part of the city. In the event a golf course is infeasible, consider development of another major public recreational feature or open space amenity in this area.
- ACTION PR-3.E Skateboard and BMX Park. Identify potential locations, costs, and funding sources for a skateboard park and a recreational bicycle/ BMX park.

These are envisioned as two separate facilities. Sportsfield Park provides the best opportunity for a skateboard park. A location for a bicycle/BMX park would need to be determined through future study. Development of both of these facilities is contingent on funding.

- ACTION PR-3.F Birch Grove Lighting. As funding allows, install night lighting at the Birch Grove Park tennis courts.
- ACTION PR-3.G Sportsfield Park Multi-Purpose Field. Pursue development of lighted multi-purpose all weather turf field at Sportsfield Park.
- ACTION PR-3.H Dog Park. Recognize the growing demand for dog play areas in the City, and pursue development of a designated dog park within the Dumbarton TOD area.
- ACTION PR-3.1 ADA Compliance. Make continued efforts to comply with all provisions of the Americans with Disabilities Act (ADA) in the design and renovation of recreational facilities.

See also Health Element policies about facilities supporting fitness and exercise in close proximity to all residents.

NON-CITY RECREATION FACILITIES

GOAL PR-4 Maximize the benefits of non-City operated recreational facilities for Newark residents.

POLICIES

POLICY PR-4.1 School Facility Access. Continue working with the Newark Unified School District to develop and maintain athletic fields and recreational facilities such as pools, playgrounds, and tennis courts. Support broader public access to these facilities when school is not in session.

Policy PR-4.2	Surplus School Sites. In the event a school site is declared surplus in
	an area deficient in park land, work with the School District to retain a
	portion of the school's existing open space, playground, or athletic
	field area as neighborhood parkland.

- POLICY PR-4.3 Ohlone College Partnerships. Explore potential partnerships with Ohlone College to develop recreational facilities or programs on the Newark campus which may be accessed by Newark residents.
- POLICY PR-4.4 Regional Parks. Support the continued acquisition and improvement of open space in southwest Alameda County by the East Bay Regional Park District to ensure that Newark residents have access to an array of natural open spaces, including hillside parks, wilderness areas, and shoreline trails.

The City supports continued enhancement of Coyote Hills Regional Park, Ardenwood Farm Agricultural Preserve, and Quarry Lakes, and access improvements which make it easier to reach these parks on foot or by bicycle.

POLICY PR-4.5 Residential Development Recreation Facilities. Encourage private residential developments to include private recreational facilities serving that development.

This could include community rooms, clubhouses, swimming pools, and other facilities intended for use by residents. Such facilities would supplement the contributions these developments are required to make to improve public parkland serving residents and the city at large.

- **POLICY PR-4.6 Employee Recreation.** Encourage commercial office and industrial projects to provide on-site recreational facilities to serve employees.
- POLICY PR-4.7 Plazas and Pocket Parks. In parts of Newark planned for more urban land uses and pedestrian-oriented development, provide for small pocket parks, plazas, and courtyards where residents, workers, shoppers, and visitors can congregate.

Such spaces could include amenities such as outdoor seating and dining areas, water features, and landscaping. Pocket parks and plazas should be designed to allow for interaction among community members and should be considered for programming with activities such as farmer's markets, lunchtime concerts, and mobile vending.

- POLICY PR-4.8 Temporary Uses. Allow for the temporary use of vacant developable land for recreational purposes such as community gardens, art installations, and other interim activities.
- **POLICY PR-4.9 Commercial Recreation.** Encourage the development of private commercial recreational facilities such as bowling alleys and health clubs which complement and enhance the facilities provided by the city.

Actions

ACTION PR-4.A Joint Use Agreements. Develop joint use agreements and other appropriate mechanisms to facilitate public access to school playgrounds and athletic fields, and reciprocal school access to City recreation areas.

The City will make a concerted effort to improve access to school recreational facilities in the coming years. Currently, use of school grounds for recreational uses requires a specific agreement is reached with the NUSD for access to that facility. Many facilities are off-limits or difficult to access, even during non-school hours. The City will work with NUSD in the coming years to enhance joint use, and provide greater recreational opportunities and open space access for all Newark residents.

- ACTION PR-4.B Modernization of School Facilities. Support implementation of School District capital projects which modernize or improve recreation and athletic facilities.
- ACTION PR-4.C Expanded Public Access. Work with the Newark Unified School District to determine the feasibility of expanded public access to recreational facilities on school property such as the High School swimming pool and the tennis courts at the High School and Junior High.

TRAILS

GOAL PR-5	Improve Newark's trail system, with a focus on access to the Newark shoreline, and access between the shoreline and Newark neighborhoods.
Policies	
Policy PR-5.1	Bay Trail. Encourage the realignment of the Bay Trail along the Newark shoreline where feasible, in support of the long-term vision of creating a continuous shoreline trail around San Francisco Bay. Pursue trails that are separated from motor vehicle traffic and pursue pedestrian crossings of railroad rights of way to allow for connections to regional open spaces without conflicts with motorized vehicles.(new)
Policy PR-5.2	Spur Trails. Provide spur trails which link the Newark section of the Bay Trail to the network of bicycle lanes and sidewalks serving the rest of the city.
Policy PR-5.3	Shoreline Access. Where feasible, align new sections of the Bay Trail as close as possible to the shoreline. Where shoreline locations are not feasible, encourage alignments that provide views to wetlands or other bay features.
Policy PR-5.4	Trail Safety. Strive for trail designs which minimize grade level street and rail crossings, and which ensure the safety and comfort of users.
Policy PR-5.5	Staging Areas. Develop strategically located parking and staging areas which provide trail access and encourage trail use.
Policy PR-5.6	Land Uses Along Trails. Consider adjacent land uses, existing operations, security, and potential operational conflicts in the alignment and design of the city's trails. Trail design should be coordinated with adjacent landowners.
Policy PR-5.7	Trail Sustainability. Consider long-term sustainability issues, such as projected sea level rise, surface durability, and the condition of levees, in the design of shoreline and wetland trail facilities.

POLICY PR-5.8 Trail Design and the Environment. Design trails and public access features to minimize impacts on wetlands and other sensitive habitats, including habitat fragmentation. If necessary, identify secondary alignments in the event a trail must be seasonally closed for habitat protection purposes.

Actions

- ACTION PR-5.A Trail Dedication. Encourage trail dedication and construction by developers for portions of the proposed Bay Trail and spur trails located within future development areas.
- ACTION PR-5.B Interpretive Features. Support development of interpretive features along the Bay Trail to educate visitors about natural resources and local history.
- ACTION PR-5.C Funding for Regional Connections. Seek regional and state funding for bridges and railroad overcrossings to facilitate regional open space integration and connection.
- ACTION PR-5.D Cedar Boulevard Extension Linear Park. As funds allow, construct a linear park and trail on the Cedar Boulevard Extension. Crossing of the Union Pacific Railroad should be grade separated to minimize risk and noise.
- ACTION PR-5.E Public Access Requirements. Ensure that future land use and capital improvement decisions for areas within the jurisdiction of the Bay Conservation and Development Commission (BCDC) are consistent with BCDC's public access requirements and do not preclude maximum feasible access to and along the waterfront.

NEWARK GENERAL PLAN PARKS, RECREATION, AND OPEN SPACE

ENVIRONMENTAL HAZARDS

INTRODUCTION

The Environmental Hazards Element combines two of the seven mandatory elements of the General Plan–Safety and Noise. It addresses potential risks to life and property resulting from naturally occurring hazards such as earthquakes and floods and man-made hazards such as noise and soil contamination. The Element also addresses emergency preparedness and response. As in other elements of the General Plan, background information on these topics is presented in the first part of the chapter and goals, policies, and actions are presented at the end.

An important function of this Element is to identify locations in Newark that may be inappropriate for certain land uses due to potential risks and hazards. The Element also identifies areas where hazards are present, but can be mitigated through special design and site planning measures. For example, Newark is located in a seismically active area. While this does not preclude construction, it does require that buildings are designed to withstand ground shaking and other hazards associated with earthquakes. The hazards discussed in this Element have helped shape Newark's Land Use Map, and have influenced its land use, housing, open space, and transportation policies.

The specific topics covered by this chapter are listed below:

- ► Geologic Hazards
- > Flood Hazards
- Fire Hazards
- Hazardous Materials
- > Emergency Preparedness
- Noise and Vibration

A number of topics related to environmental hazards are covered in other parts of the General Plan. Water quality is addressed in the Conservation and Sustainability Element, and air quality is addressed in the Health and Wellness Element. Police and



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fire services are covered in the Community Services and Facilities Element. Taken together, the policies in the General Plan minimize risks, protect the quality of life, and provide a foundation for response and recovery when disaster strikes.

GEOLOGIC HAZARDS

Local Geology

Newark's geological conditions have been mapped by the US Geological Survey. Most of the developed portion of the city is built on alluvial fan deposits, consisting of sandy clay. Areas closer to the bay consist of flood plain deposits with sandy or silty clay. The marshland areas are underlain by estuarine deposits such as Bay Mud, with a thickness that may exceed 60 feet. There are no bedrock outcrops (exposed rock) within Newark; the closest outcrops are in the Coyote Hills about a mile to the northwest.

LOCAL EARTHQUAKE HAZARDS

While no active earthquake faults pass through Newark, the Bay Area as a whole is seismically active and the threat of earthquakes is pervasive. The city is located 2 miles west of the Hayward Fault, 9 miles east of the San Andreas Fault, and 13 miles west of the Calaveras Fault. Of these, the Hayward Fault is most significant threat to the city; it lies closest to Newark and has not experienced a major earthquake since 1868.

Figure EH-1 illustrates the location of the known major faults in the Bay Area, and their associated earthquake probabilities. The Working Group on California Earthquake Probabilities, a collaborative effort involving the US Geological Survey (USGS), the California Geological Survey, and the Southern California Earthquake Center, estimates that the 30-year probability of a magnitude 6.7 or greater earthquake striking the San Francisco Bay area is 63 percent.¹ The USGS further estimated that there was a 31 percent probability of a magnitude 6.7 or greater earthquake on the Hayward Fault by 2036. Even though no known earthquake faults pass directly through Newark, an earthquake of moderate to high magnitude within the Bay Area could cause significant damage in the city.

¹ 2007 Working Group on California Earthquake Probabilities, 2008, *The Uniform California Earthquake Rupture Forecast, Version 2 (UCERF 2)*, page 6.

NEWARK GENERAL PLAN ENVIRONMENTAL HAZARDS



Source: 2007 Working Group on California Earthquake Probabilities, 2008, The Uniform California Earthquake Rupture Forecast, Version 2 (UCERF 2).

FIGURE EH-I EARTHQUAKE PROBABILITY MAP



When an earthquake occurs, energy travels in waves through the earth's crust and causes ground shaking. The degree of shaking is dependent on the magnitude of the event, the duration of the event, the distance to the zone of rupture, and local geologic and soil conditions. Thus, an earthquake in Newark might be felt as a sharp relatively rapid vibration, or a swaying rolling motion. It could have no permanent effect on the ground, or it could trigger slumping near water bodies or a loss of support capacity near structures. These important differences would be a function of local soil and groundwater conditions, rather than distance from the fault.

Ground shaking is measured on a scale ranging from I to X (the Modified Mercalli Scale) with shaking levels ranging from imperceptible to very violent. Most of the developed portions of Newark would experience "very strong" ground shaking (level VIII) in a 6.9 Hayward Fault earthquake, but some parts of the city would experience "violent" ground shaking (level IX). Ground shaking levels are higher on the southern and western fringes of the city.

In addition to ground shaking, earthquakes also create the risk of fault rupture and liquefaction. The risk from fault rupture is considered very low in Newark, since there are no active faults within the city. Liquefaction is a greater risk, given Newark's soil characteristics and underlying geology. Liquefaction results from a loss of soil strength during earthquake vibrations. Soils that are most prone to liquefaction are loose, saturated, fine-grained sands with shallow groundwater. During an earthquake, such soils may lose strength and fail, causing damage to buildings, bridges, and other structures.

Based on the California Geological Survey's 2003 seismic hazard report for the Newark quadrangle, the entire city is considered a liquefaction hazard zone. The level of risk varies from location-to-location, and can best be determined through site-specific geotechnical studies. Areas nearest to the bay, along sloughs, or on artificial fill, are generally considered more susceptible than other areas. Based on soil conditions and underlying geology, these areas may also be prone to more severe ground shaking in a major earthquake.

LANDSLIDES

Newark is comparatively flat, sloping gently from 37 feet above mean sea level (msl) in the northeastern part of the city to 5 feet below sea level in the marshes near the

Bay shoreline. There are no significant hills or steep slopes. The California Geological Survey's Seismic Hazard Mapping Program reports no landslide hazard areas within the city.

TSUNAMIS AND SEICHES

Tsunamis are sea waves generated by earthquakes. These waves have been known to cause serious damage at coastal locations around the Pacific Rim, including California. Tsunamis usually occur shortly after an earthquake and appear as a rapid rising and falling of sea level over a period of several minutes or hours. Although San Francisco Bay could be impacted by a Pacific Ocean tsunami, the effects would dissipate by the time they reached Newark. The temporary rise in sea level triggered by a tsunami would be comparable to an ordinary high tide.

A seiche is a local water wave generated by an earthquake. This would include abnormal waves on San Francisco Bay generated by seismic activity, as well as waves on lakes. The configuration of the shoreline and depth of water offshore is such that this hazard is not judged to be significant in Newark. Similarly, the small ornamental lakes and ponds in the city are not considered to constitute a seiche hazard.

SUBSIDENCE

Subsidence refers to the gradual settling or sudden sinking of the ground due to movements below. It can also occur due to prolonged pumping of groundwater. Groundwater elevations in Newark are generally 40 to 140 feet below the surface, beneath a thick silt and clay layer. The Alameda County Water District has been recharging the aquifer for the past 50 years to improve its stability and to reduce saltwater intrusion. This also reduces subsidence risks and related damage potential.

REDUCING RISK LEVELS

State and local laws have been adopted to reduce exposure to seismic hazards. The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to prevent the construction of buildings on top of active faults. Areas on either side of such faults are referred to as "Earthquake Fault Zones." Since there are no known active faults in Newark, there are no designated Fault Zones in the city. In 1990, California adopted the Seismic Hazards Mapping Act to assess the potential for other types of earthquake hazards, including liquefaction. One of the purposes of the Act was to assist local governments with land use planning by mapping high hazard areas.

The California Building Code (CBC) also incorporates standards that reduce exposure to seismic risks. The CBC, which has been adopted as part of the Newark Municipal Code, provides specific requirements for seismic safety, excavation, foundations, retaining walls, grading, and demolition. The Code is updated as new data is collected and new construction techniques are developed to improve structural performance in an earthquake.

Given the risk of liquefaction and potential for strong ground shaking, the City requires site-specific soils reports and geotechnical evaluations as part of the approval process for major developments. The City further requires that recommendations from such reports be incorporated into project design. Newark has adopted additional regulations for grading to reduce the potential for erosion and to ensure the stability of filled areas.

Newark has also taken steps to improve the safety of existing buildings. In 1986, the State required jurisdictions in earthquake hazard areas to inventory unreinforced masonry (URM) buildings and establish programs to reduce the risks associated with these buildings. URM buildings are brick, stone, or concrete structures without steel reinforcement. Newark surveyed its buildings after this law was passed and determined there were no URMs present. However, the city does have structures that fail to meet modern structural code standards and may be susceptible to earthquake damage. As appropriate, the City may require such buildings to be upgraded when applications for building permits or use permits are filed.

'Other hazards associated with earthquakes include shifting of homes off their foundations. This hazard can be minimized through structural connections between the house frame and foundation. Most homes in Newark are bolted to their foundations, but some are not. Older homes may also have unreinforced chimneys that may topple during strong ground shaking. Chimney ties can be used to make such structures more secure. Similarly, water heaters in older homes can be made more secure by bracing or tying them down.

Older tilt-up industrial buildings may also be vulnerable to earthquake damage, particularly on the west side of the city where liquefaction hazards are higher. Another vulnerable construction type is soft-story apartment buildings. These are 2-to 3-story apartment buildings with ground-level "tuck under" parking areas that lack



interior shear walls. Such structures can be retrofitted and reinforced to reduce earthquake-related hazards.

The safety of public buildings during an earthquake is particularly important. Buildings such as schools, libraries, community centers, and public offices are often occupied by large numbers of people, including vulnerable populations such as children and seniors. These same structures must also be used by first responders following a disaster, and often serve as emergency service centers and shelters during recovery operations. In 2011, Newark voters approved Measure G, a bond measure that allocated \$63 million for school renovation, including seismic upgrades to existing Newark Unified School District facilities. The City itself periodically evaluates the seismic safety of public buildings, including City Hall, to determine the need for structural improvements to improve earthquake safety. A priority is placed on locating new facilities in areas where safety, access, and operational capacity can be ensured during and after an earthquake.

Roads, railroads, bridges, and utilities also may be vulnerable during an earthquake. Subsidence and liquefaction can cause roads to settle and crack, making them impassable to traffic. This has secondary complications, if roads become impassable to emergency vehicles. Electric power lines and other overhead wires supported by poles are prone to damage and disruption of service if poles topple over. If not properly designed and maintained, water and sewer pipes also can be damaged by ground movement, and power outages can interfere with the operation of pumping stations and treatment facilities. The resulting loss of water pressure and supply can impede fire-fighting capacity.

The City of Newark works closely with Caltrans, PG&E, and other utilities to support seismic upgrades to infrastructure. Caltrans is in the process of completing a major seismic upgrade of the Dumbarton Bridge and regularly inspects overpasses and other facilities to ensure their safety. Alameda County Water District recently increased its rates to fund a major seismic upgrade of its water mains and to replace aging pipelines in the Tri-City area. The Hetch Hetchy Aqueduct is also being upgraded to improve earthquake reliability. While these projects will not entirely eliminate the potential for damage or service disruption, they will reduce the duration and extent of outages, enhance post-disaster fire-fighting capacity, and improve public safety.



Dam Failure

Earthquake-induced dam failure of the Calaveras, Del Valle, or San Antonio Dams could have serious effects on Newark. Calaveras Dam was built in 1925 and is 210 feet tall. The dam was deemed seismically unsafe in 2001 and the reservoir was subsequently drained to about one-third of its capacity. A major reconstruction of the dam is currently underway. Once the dam is completed in 2017, the original capacity of the reservoir will be restored and its seismic safety will be greatly improved. The James H. Turner Dam, which impounds San Antonio Reservoir, was built in 1964 and the Del Valle Dam was completed in 1968. Both of these dams are evaluated annually by the California Division of Safety Dams to ensure that they are safe and performing as intended.

Dam failure from any of the three reservoirs would cause flooding in Newark, with floodwaters reaching the city in as little as 90 minutes. Virtually all property in the city would be impacted. Failure of large water storage tanks in Fremont or Newark could also lead to localized flooding in Newark, although these hazards are less widespread.

FLOODING HAZARDS

Flooding may result when heavy rainfall exceeds the capacity of Newark's storm drains and flood control channels. Water may overtop channel banks or back up from storm drain inlets, inundating streets and surrounding properties. The risk of such flooding is highest adjacent to creeks, sloughs, and waterways. Flooding may also result from the failure of levees and dams, and is also one of the long-term effects of rising sea levels due to global climate change.

Flood hazards in Newark are carefully managed to minimize the potential for damage. Alameda County Flood Control and Water Conservation District (ACFC&WCD) maintains flood control systems, with channels following historic sloughs and former agricultural drainage channels. Major drainage courses in the city include Plummer Creek, Newark Slough, and Mowry Slough. Stormwater flows to these drainage courses through gutters, drains, channels, and culverts.

The Federal Emergency Management Agency (FEMA) has prepared Flood Insurance Rate Maps (FIRM) for Newark and other cities throughout the Bay Area. The maps indicate areas in the 100-year flood zone and the 500-year flood zone. The 100-year



flood zone areas are considered to have a 1 percent chance of flooding in any given year. The 500-year flood zones are considered to have a 0.2 percent, or a 1-in-500, chance of flooding in any given year.

Figure EH-2 indicates areas in Newark within the flood zones. These include narrow bands along the flood control channels, and an expansive area that includes the tidal marshes, and other areas on the western and southern edges of the city. Most of these areas have been designated as open space, but a few are planned for development. Flood control and stormwater management systems are planned in future development areas to reduce the extent of flood hazards.

The bayfront areas of Newark are susceptible to flooding caused by levee failure. FEMA has been working with flood control agencies across the country on a levee accreditation program. Levee systems must meet minimum freeboard standards and must be maintained according to an officially adopted maintenance plan to achieve certification. The ACFC&WCD has jurisdiction over levee maintenance in Newark and has been evaluating their condition since 2007 as it works toward FEMA accreditation. The evaluations include subsurface field exploration, soil and stability testing, and operation and maintenance plans. Until certification is received, areas identified as flood prone are required to carry insurance through the National Flood Insurance Program. Any levees associated with salt harvesting and production were not constructed for flood protection.

Newark is also subject to sea level rise. As a result, bayfront areas could become more prone to flooding during winter storms, and levees could face greater risks of being overtopped in the future. According to the International Panel on Climate Change, ocean levels may rise by 7 to 23 inches by the end of the century. Preventative measures may be needed to address increasing flood danger in coastal areas, including communities along San Francisco Bay. The City is working collaboratively with other city and regional agencies to develop long-term adaptation strategies to address this hazard.

REDUCING RISK LEVELS

The City of Newark requires drainage studies for major development projects to ensure that such projects will not cause or worsen downstream flooding. The City also requires that projects in the 100-year flood zone use fill to elevate structures at least 1 foot above the flood elevation, thereby removing these areas from the flood





NEWARK GENERAL PLAN ENVIRONMENTAL HAZARDS



Source: City of Newark, 2012; The Planning Center | DC&E, 2013; Tiger Roads 2010; ESRI, 2010; FTC, 2010; FEMA, 2010.

Salt Harvesting, Refining and Production

City Limit 100-Year

100-Year Flood Zone

500-Year Flood Zone

FIGURE EH-2 FLOOD HAZARD AREAS
plain. The City further requires that building foundations be at least 11.25 feet above msl unless special provisions are applied. Removal from the flood plain requires a formal Letter of Map Revision from FEMA, and relieves the owner(s) of the mandate to have flood insurance.

The City's Building Code and stormwater management regulations also reduce the impacts of flood hazards. Chapter 15.40 of the City's Municipal Code sets standards to minimize flood hazard risks, including anchoring and flood-proofing and a requirement that the lowest floor, including basements, is at or above the 100-year flood elevation. The City's codes also require the use of materials and utility equipment that are resistant to flood damage. Electrical, heating, ventilation, plumbing, air conditioning, and other building systems must be designed to avoid exposure to flooding. Water and sewer systems must also be designed to minimize or eliminate the potential for infiltration of floodwater. The City has adopted engineering standards and street design guidelines that further reduce the potential for flooding.

FIRE HAZARDS

Newark is considered to be at low risk for wildfire. The California Department of Forestry and Fire Protection (Cal Fire) has mapped areas at risk of fires around the state, and determined that Newark is neither in a State High Fire Severity Area (SRA), or a Local Very High Severity Area (LRA). The city does face the risk of urban structure fires, as do all urbanized areas. Preventative measures in the Fire Code and Building Code reduce the risk of fire and ensure the ability to detect and respond to fires when they occur. These measures address evacuation, alarm systems, emergency response, water availability and pressure, road design, and building access.



Fire prevention and protection services in Newark are addressed in the Community Services and Facilities Element of the General Plan.

HAZARDOUS MATERIALS

OVERVIEW

Hazardous materials include substances that may pose a threat to human health or the environment when they are improperly handled, stored, transported, or disposed. They include toxic metals, chemicals, gases, flammable and/or explosive



materials, corrosive materials, infectious substances, and radioactive materials. Newark has sizeable number of industries where hazardous materials are used, and a rail and freeway network on which hazardous materials are frequently transported. The threat of an accident or spill requires precautions and emergency response plans. In addition, the clean-up of previously contaminated sites is a priority, both to improve environmental quality and reduce the risk of future exposure.

Federal, State, and local laws guide the management of hazardous materials. The US Environmental Protection Agency (EPA) sets national standards for hazardous materials management. The EPA also controls the generation, handling, transportation, treatment, storage, and disposal of hazardous waste. The Clean Water Act governs hazardous material discharges into bodies of water. Other federal agencies with jurisdiction over hazardous materials include the Occupational Safety and Health Administration (OSHA), which ensures safe working conditions, and the US Department of Transportation (US DOT), which regulates the transportation of hazardous materials.

At the State level, the State Water Resources Control Board (SWRCB) and the California Department of Toxic Substances Control (DTSC) manage lists of hazardous wastes subject to regulation. Both agencies also track the location of sites requiring hazardous material clean-up to ensure safe future development. Cal/EPA also monitors activities involving hazardous material within the State. The Department of Industrial Relations' Division of Occupational Safety and Health, better known as Cal-OSHA, was established under the California Code of Regulations, Title 8, to serve as an organization that oversees policies for workplace safety, including exposure to hazardous materials. The California Emergency Management Agency (CEMA) prepares hazardous materials release response plans and assists local government in disaster preparedness, response, and recovery.

At the local level, the Alameda County Department of Environment Health (ACDEH) has developed a Hazardous Waste Management Plan. ACDEH has been designated as the Certified Unified Program Agency (CUPA) for Newark and as such, it coordinates and enforces environmental protection and hazardous material management, handling, and storage programs from the local to the federal level. These programs include the Hazardous Materials Business Plan (HMBP) Program; Hazardous Waste Generator Program; and California Accidental Release Program. Other County programs applicable to Newark include an underground storage tank

program, an aboveground storage tank program, a tiered permitting program, and a risk management program.

Fire codes, which are enforced by the Alameda County Fire Department (ACFD), also address the handling of hazardous materials, and the Newark Municipal Code requires Hazardous Materials Storage Permits. The Alameda County Water District addresses hazardous materials as they relate to the potential contamination of groundwater. The Regional Water Quality Control Board (RWQCB) monitors hazardous materials issues relating to urban runoff and stormwater. Construction plans that disturb 1 acre of soil or more require that a Stormwater Pollution Prevention Plan (SWPPP) be filed with the RWQCB. The SWPPP includes hazardous materials discharge regulations, sediment and erosion control measures, and detailed construction schedules.

HAZARDOUS MATERIALS HANDLING

Businesses that use hazardous materials are required to prepare HMBPs for their operations. The HMBP must include a complete inventory of all materials that are handled by type, quantity, storage conditions, and routes of transport. Each Plan assesses the potential hazards associated with the materials and the steps to be taken to minimize risks. The Plan identifies actions to taken in the event of a spill, identifies a responsible person for the facility, and includes any other data determined necessary to ensure public health and safety. The HMBP also addresses the methods for storing hazardous materials, including the design of storage tanks, containment facilities, and handling practices.

The General Plan encourages continued industrial growth in Newark, including growth in bio-medical, laboratory, research and development, and other sectors that will handle or generate hazardous materials. As development occurs, each proposal will continue to be carefully evaluated to limit the potential for negative effects on adjacent uses. Businesses will continue to prepare HMBPs that indicate the protocol for minimizing risks. In addition, the City will continue to maintain distance thresholds in its zoning regulations that ensure that businesses storing hazardous materials are separated from residential uses.

TRANSPORTATION OF HAZARDOUS MATERIALS

The transport of hazardous materials is closely regulated. The City has jurisdiction over transportation on local streets, while the freeways and railroad are largely under



the jurisdiction of state and federal agencies, including Caltrans. The City of Newark has identified a network of truck routes that direct vehicles carrying hazardous materials away from residential areas. The location of these routes will need to be periodically revisited, as a number of them pass through areas planned for future residential development. Backup routes also should be identified in the event a truck route is blocked or congested, impeding access by emergency vehicles.

With respect to the freeways and railroad, the City has less control over such activities due to the interstate nature of this traffic. Communication with State and federal regulatory agencies is critical to reduce the risk of accidents and ensure that response to transportation-related hazardous materials incidents is immediate and effective. In the event of a hazmat incident in Newark, the ACFD has a Hazardous Materials Unit that would provide the initial response.

The Transportation Element of the General Plan may be consulted for additional information on truck routes.

CLEAN-UP OF CONTAMINATED PROPERTIES

The storage of petroleum products and other chemicals on sites in Newark has created the risk of soil and groundwater contamination in parts of the city. The SWRCB monitors gas stations and industrial operations that operate subsurface gasoline or diesel storage units in Newark to ensure compliance with applicable hazardous material regulations. Groundwater monitoring and soil vapor testing is conducted regularly at potentially contaminated and contaminated locations to assess the degree of pollution.

Under California's Cortese Act, the location of underground storage tank facilities and clean-up sites must be made available for the public to review. As of February 2013, there were 108 listed facilities and sites in or near Newark. Of these, 16 are permitted underground storage tanks, 35 are leaking underground storage tank clean-up sites (17 of which are closed cases), 18 are DTSC clean-up sites, and 39 are other clean-up sites (16 of which are closed cases). In addition, the DTSC indicated that there were 62 local properties requiring action or evaluation as of February 2013. These included sites with varying levels of soil or groundwater contamination. The San Francisco Bay RWQCB is involved in clean-up oversight on some of these sites and serves as a lead agency on many cases involving chemical compounds. These compounds include tetracholoethylene (PCE), trichloroethylene (TCE),

trichloroethylene (TCA), volatile organic compounds (VOC), polynuclear aromatic hydrocarbons (PAHS), and polychlorinated biphenyls (PCBS). Clean-up oversight on other contaminated sites is often the responsibility of the Alameda County Water District.

Most chemical clean up locations are located in the industrial areas along Willow Street, Central Avenue, Sycamore Street, and Cherry Street. However, the list includes sites such as the Newark Police Pistol Range, which is affected by lead concentrations in shallow soils. In 2012, there were six locations with covenants that prohibited certain uses (day care, hospitals, homes, etc.) due to prior contamination. For example, a covenant on the southern part of the Ohlone College campus prohibits day care, elder care, hospitals, homes, or schools for persons under age 21.

The clean-up of contaminated sites will create new opportunities for development in the city. In some instances, continued monitoring will be required to ensure compliance with state and federal standards. In other cases, long-term development restrictions will remain in place to reduce the potential for future risks. Additionally, demolition of older buildings may require that special steps be taken to reduce the potential for impacts associated with hazardous building materials such as asbestos, PCBs, and lead paint.

The General Plan Environmental Impact Report (EIR) may be consulted for more detailed lists of hazardous material sites and a description of the clean-up status. The EIRs for various Specific Plans in the city include additional measures to reduce site-specific impacts.

HOUSEHOLD HAZARDOUS WASTE

Household hazardous waste includes products commonly used in the home such as paint, motor oil, household cleaners, batteries, lawn care supplies, antifreeze, and other consumer goods. Residents may be unaware of the potential damage these substances cause when they are disposed in the trash, poured on the ground, or dumped down an indoor or outdoor drain. Household hazardous wastes must be safely disposed in designated facilities. The facility closest to Newark is located just outside the city in Fremont. The City works with StopWaste.Org to educate residents about the safe use and storage of household hazardous waste and its rules and regulations for waste disposal.



PIPELINE SAFETY

There are two large (20- and 30-inch) PG&E owned and operated high pressure gas lines running through Newark. Because of a gas explosion in San Mateo County in 2010, PG&E is reviewing the safety of these lines and others. Moving forward, continued steps should be taken to ensure the long-term safety of the gas pipelines traversing the city.

EMERGENCY PREPAREDNESS

Newark's location in an area prone to earthquakes, floods, and hazardous material incidents makes it essential to be prepared in the event of an emergency. The City of Newark and the ACFD work collaboratively to reduce exposure to hazards, implement training programs for residents, and ensure effective response and quick recovery following an incident.

Newark has adopted two emergency response plans. The *Emergency Operations Plan* sets forth operational procedures for responding to a variety of emergency conditions. The procedures address the needs of the entire community and identify key responsible agencies and personnel. The City has designated an Emergency Operations Center so that citywide emergencies can be dealt with effectively from a central location. The *Chemical Emergency Preparedness Supporting Plan* establishes standard operating procedures for responding to a chemical spill or other hazardous materials incidents in the city.

Both of these plans are periodically updated in response to new requirements, technology and communication protocol, and real-world experiences. Newark has also designated a Disaster Council comprised of the Mayor, City Manager, department heads, and representatives of schools and utilities, to discuss disaster preparedness. Disaster planning efforts are coordinated with the cities of Fremont, Hayward, and Union City to maximize mutual aid response.

In addition, ABAG has prepared a Local Hazard Mitigation Plan (LHMP) to prepare for and mitigate the effects of potential hazards in the Bay Area. Although the LHMP covers multiple communities, it has been adopted by each city it covers to ensure a coordinated regional approach to disaster response. In 2011, the City of Newark drafted a supplement to the plan (called an "annex") which focuses on hazards that are specific to Newark. These include ground shaking, liquefaction, dam failure, and drought. Local priorities expressed in the Newark LHMP include inventorying



structures vulnerable to earthquake hazards, developing standards to lessen the potential for damage to these structures, developing a back-up plan in the event City Hall is damaged by an earthquake, and improving public information on earthquake safety.

The City also encourages its residents and businesses to be better prepared for disasters. The ACFD offers a local Community Emergency Response Training (CERT) program for community volunteers. The training provides basic skills in fighting, search and rescue, first aid, and emergency preparedness. Its main goal is to help residents become self-sufficient for the first 72 hours after a major disaster. Participants are provided with a training manual and take six classes free of charge.



NOISE AND VIBRATION

INTRODUCTION

Noise is one of the seven mandated elements of a general plan in California. Because noise is considered a public safety issue, the City of Newark has merged this element and the State-mandated safety element into a combined Environmental Hazards Element. The noise section of this chapter meets the requirements of Government Code Section 65302(f) and provides the framework for protecting Newark's residents from excessive noise.

The Noise section of the Environmental Hazards Element describes the major sources of noise in the city. It includes measurements of existing noise levels along with projections of future noise levels based on expected increases in traffic and other factors. This section also establishes standards for acceptable noise levels for different land uses. The final section of the Environmental Hazards Element includes the City's goals, policies, and actions related to noise. The Newark General Plan Environmental Impact Report (EIR) may be consulted for additional information on noise in the community.

Newark's location in a large metropolitan area makes it susceptible to high levels of noise. Each day, almost 200,000 cars pass along the city's eastern boundary on Interstate 880 while 60,000 cars pass along the northern boundary along State Route 84. Freight trains and large trucks pass through the city and aircraft fly overhead. Even in relatively quiet parts of the city, residents contend with domestic noise sources such as leaf blowers, barking dogs, and construction. Maintaining a relatively

quiet environment is considered an important quality of life goal in Newark's neighborhoods.

Noise is an important factor in determining the distribution of land uses shown on the General Plan Land Use Map. Policies in the Land Use Element and in this Environmental Hazards Element ensure that site planning for individual projects is responsive to local conditions, and protects public safety and well- being. For properties subject to high noise levels, this may mean that particular building orientations and buffering methods will be required, or that certain land uses may not be acceptable. Similarly, policies in the Transportation Element work in tandem with those in this Element to ensure that projected noise levels are considered in the design of transportation improvements.

NOISE DEFINITIONS AND STANDARDS

Noise can produce undesirable effects that range from irritability to hearing loss. The extent of adverse effects depends on the intensity, duration, time, and frequency of noise. Even noise of moderate volume and short duration, such as a heavy truck passing by, can have physiological effects.

The level of noise at a given location is usually expressed in decibels (dB). Decibels are measured on a logarithmic scale. This means that 10 dB is 10 times more intense than 1 dB, 20 dB is 100 times greater than 1 dB and 30 dB is 1,000 times greater than 1 dB. A particular type of decibel scale, called the "A" scale, is used to relate decibels to human perception. The A scale filters out very high and very low frequencies. Everyday sounds range from 30 dB, which is very quiet, to 100 dB, which is very noisy. Above 70 dB, noise can become irritating and disruptive.

When reporting noise levels, it is important to also report the distance between the source and receiver. Under typical atmospheric conditions, sound attenuates at a rate of 3 to 6 dB for each doubling of the distance. An untrained human ear typically cannot detect a difference in sound levels of less than 3 dB. It is difficult to tell the difference between 60 dB and 62 dB, but the difference between 60 dB and 65 dB is easily noticed.

Typical A-weighted sound levels for various sources of noise measured at specific distances are shown in Table EH-1. Different rating scales have been developed to

TABLE EH-1 TYPICAL NOISE LE	VELS	
Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock Band
Jet Flyover at 1,000 feet		
	100	
Gas Lawn Mower at 3 feet		
	90	
Diesel Truck at 50 feet, at 50 mph		Food Blender at 3 feet
	80	Garbage Disposal at 3 feet
Noisy Urban Area, Daytime		
	70	Vacuum Cleaner at 10 feet
Commercial Area		Normal speech at 3 feet
Heavy Traffic at 300 feet	60	
		Large Business Office
Quiet Urban Daytime	50	Dishwasher Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (background)
Quiet Suburban Nighttime		
	30	Library
Quiet Rural Nighttime		Bedroom at Night, Concert Hall (background)
	20	
		Broadcast/Recording Studio
	10	
Lowest Threshold of Human Hearing Source: Caltrans, 2009.	0	Lowest Threshold of Human Hearing

assess the severity of noise exposure, taking into consideration such factors as duration, repetition rate, background levels, and time of occurrence.

The term L_{dn} is used to express the average sound level over a 24-hour period, with a 10 dBA weighting factor applied for noise that occurs between 10 PM and 7 AM. The adjustment for night-time noise accounts for the greater human sensitivity to noise during these hours. The use of a 24-hour measurement period accounts for the variations in the intensity of sound levels that may occur throughout the day.

NOISE CRITERIA FOR LAND USE PLANNING

The potential for adverse psychological and physiological impacts related to noise requires that criteria be established for determining acceptable levels of noise for different land uses. Certain land uses are considered "sensitive receptors," meaning they are more prone to the adverse effects of high noise levels than others. These include residential areas, schools, childcare centers, hospitals, churches, libraries, and nursing homes, among others. Future land use decisions should protect these uses from high levels of noise. At the same time, when land uses such as housing and schools are developed in the future, it is important that they are located and designed in a way that protects occupants from potential impacts from existing noise sources.

Table EH-2 provides interior and exterior noise compatibility guidelines for different land uses. To avoid the potential for noise-related problems, future development proposals should comply with these guidelines to the greatest extent feasible.

Table EH-2 uses four terms to define the level of noise compatibility for each land use:

- "Normally Acceptable" means that the specified land use is satisfactory based on the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
- "Conditionally Acceptable" means that new construction or development should be undertaken only after a detailed analysis of noise reduction requirements is made and necessary noise mitigation measures are included in the design.

TABLE EH-2 NOISE COMPATIBILITY GUIDELINES FOR NEWARK

	Interior CNEL or		Exter Cl	ior Noi: NEL or	se Expe L _{dn} (dE	osure, BA)	
Land Uses	L _{dn} (dBA)	55	60	65	70	75	80
Residential-Low Density Single-Family, Duplex, Mobile Homes	45*		ĥп			<u></u>	
Residential-Multiple Family	45*	(((()))	<u>`````</u>	йн	Ч7,	//. <u></u>	
Transient Lodging, Motels, Hotels	45*		.)),	ŋл	Ч.,		
Schools, Libraries, Churches, Hospitals, Nursing Homes	45*		``II	ΝŊ	ή,/		<i>.</i>
Auditoriums, Concert Halls, Amphitheaters			111		11		
Sports Arena, Outdoor Spectator Sports							
Playgrounds, Neighborhood Parks			1111		<u>)) </u>		
Golf Courses, Riding Stables, Water Recreation, Cemeteries			////		$\left(\right) \right)$	<u>i)</u> ii	
Office Buildings, Businesses, Commercial and Professional	50		(111	////	ìπ	пШ	
Industrial, Manufacturing, Utilities, Agricultural		/////		1111	\mathbf{M}	ñμ	



Normally Acceptable:

Specified land use is satisfactory based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.



Conditionally Acceptable:

New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and the needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

Normally Unacceptable:

New construction or development should generally be discouraged. If new construction does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

Clearly Unacceptable:

New construction or development generally should not be undertaken.

* Noise level requirement with closed windows, mechanical ventilation, or other means of ventilation shall be provided per Chapter 12 Section 1205 of the Building Code.

Source: State of California General Plan Guidelines, 2003.

- "Normally Unacceptable" means that new construction or development of the particular land use should be discouraged. If new construction or development proceeds, a detailed noise analysis must be performed.
- "Clearly Unacceptable" means that new construction or development should generally not be undertaken.

The noise criteria for multi-family housing should also comply with the Noise Insulation Standards of the California Code of Regulations, Part 2, Title 24 (commonly referred to as "Title 24"). These standards establish minimum noise insulation levels for new hotels, motels, dormitories, long-term care facilities, apartments, and other attached or multi-family dwellings. Consistent with Title 24, when part of a development site is exposed to exterior noise levels greater than 60 dB L_{dn} , an acoustical analysis is required. The analysis should include measures that reduce the noise levels in interior living spaces to 45 dB L_{dn} or less.

NOISE EMISSION STANDARDS

In addition to the noise compatibility standards in the previous sections, State and federal agencies have established standards for motor vehicles. Section 38370 of the California Vehicle Code establishes noise emission standards that are enforced during licensing. The Newark Police Department may enforce noise violations caused by vehicles operating in excess of State standards.

Noise criteria which are designed to protect the health of employees in workplaces have been established at the federal level by the EPA and OSHA. The California Occupational Safety and Health Administration (Cal-OSHA) generally mirrors the federal standards.

GROUND VIBRATION

Ground-borne vibration can be detrimental to structures and can cause annoyance to persons within those structures. The level of vibration is influenced by a number of factors, including soil characteristics, groundwater depth, and geologic conditions. In the past, the greatest vibration-related concerns in Newark have been freight traffic along the Union Pacific Railroad, trucks along major thoroughfares, and heavy construction activity such as pile drivers, vibratory rollers, and jackhammers. Vibration levels usually dissipate rapidly with distance, so the area of concern is typically close to the source(s). Policies in this Element ensure that vibration impacts are considered when development is proposed. Appropriate setbacks for structures are determined on a site-by-site basis during the environmental review process for any planned development along a railroad corridor. Additionally, the City sets limits on construction hours and activities to reduce the potential for vibration-related impacts to become a source of annoyance and/or structural damage.

THE NEWARK NOISE ENVIRONMENT

The noise environment in Newark is influenced primarily by roadway traffic, railroad operations, industrial activities, and to lesser extent, commercial and residential activities. Major noise sources include Interstate 880 and State Route 84, the Union Pacific Railroad, and major thoroughfares such as Mowry Avenue, Thornton Avenue, Stevenson Boulevard, Cherry Street, Cedar Boulevard, Central Avenue, Jarvis Avenue, and Newark Boulevard. There are also a number of stationary noise sources in the city's industrial areas that create localized areas with high noise levels.

To identify existing noise conditions and develop a baseline for the projection of future noise conditions, noise level measurements were made at three long-term (LT) sites and ten short-term (ST) sites as part of the 2013 General Plan revision. Noise levels reported in various EIRs and prior planning documents also were considered. Using the noise measurement data, noise contour maps have been prepared to show the noise environment in the city under both existing and future traffic conditions. Figure EH-3 shows current (2013) noise contours while Figure EH-4 shows projected contours in 2035. The contour maps also consider existing and projected railroad noise.

The major types of noise sources within the city are profiled below.

VEHICLES

Cars, motorcycles, trucks, and buses are the principal sources of vehicle noise in Newark. Vehicle noise is generated by engines, tires, and exhaust systems. The highest noise levels are associated with Interstate 880, which borders the city on the east, and State Route 84, which borders the city on the north. Both freeways are at grade, with under-crossings or overpasses at major interchanges. In addition, arterial, collector, and local streets create a significant source of ambient noise around the city.

NEWARK GENERAL PLAN ENVIRONMENTAL HAZARDS



----- Railroads City Limit - 60 dBA CNEL contour - 65 dBA CNEL contour 70 dBA CNEL contour

NEWARK GENERAL PLAN ENVIRONMENTAL HAZARDS



----- Railroads City Limit - 60 dBA CNEL contour - 65 dBA CNEL contour 70 dBA CNEL contour



Figure EH-3 shows the noise contour lines along the Newark side of the two freeways and along major arterials as of 2013. Figure EH-4 shows projected noise levels in 2035 in the same locations. A slight increase in noise levels is anticipated as a result of increased traffic volumes.² The General Plan EIR may be consulted for a more detailed evaluation of the data. Policies and actions later in this Element indicate the steps that should be taken to mitigate the impacts of roadway noise on existing development and future development that takes place near the freeways and along major arterials.

Railroad

The Union Pacific Railroad includes two lines that bisect the city – one running northsouth and another running east-west. The two lines intersect near Thornton Avenue and Sycamore Street. Newark's railways serve freight trains and passenger trains. In 2013, there were eight Altamont Commuter Express trains and 14 Capitol Corridor trains each weekday. The number of freight trains varies from day-to-day, depending on the local and regional demand for the movement of goods.

Noise from passing trains is generated by locomotive engines, mechanical components, warning horns, crossing guard bells, and the interaction of steel wheels and rails. Federal regulations require that trains sound a warning horn ¹/₄-mile before they approach a grade-level crossing. Some cities have established "Quiet Zones" where these regulations are suspended, but Newark has not done so.

Aircraft

Aircraft contribute to the noise environment in Newark, but they are not considered a major problem at this time. The city is located roughly 10 to 15 miles from runways at the region's three international airports. At these distances, the city is not within the airport land use planning areas or runway protection zones associated with these airports. Smaller airports, including the Palo Alto and Hayward Airports, are located more than 5 miles away from the city. Low-altitude regular traffic patterns to and from the region's airports do not occur over the city. Further, there are no heliports in Newark or in immediate proximity to the city. While intermittent aircraft or helicopters over-flights may produce single-event noise levels of approximately 60 to 70 dBA, aviation noise, in general, is minimal throughout the city.

² The Transportation Element of the General Plan may be consulted for information on current and projected traffic volumes on the freeways and arterial streets.

STATIONARY NOISE SOURCES

Stationary noise is generated by day-to-day activities associated with industrial, commercial, residential, and public uses. These land uses may generate noise from heating, ventilation, and air conditioning (HVAC) systems, loading and delivery activities at local businesses, and the use of motorized equipment and heavy machinery. Even public uses such as schools and parks may generate noise associated with outdoor activities such as physical education programs and sporting events.

Industrial uses are generally located in the area west of Cherry Street and along both sides of Central Avenue between Cherry and Willow Streets. There are also areas of industrial activity along Cedar Boulevard near Central Avenue and along the southern perimeter of Old Town Newark along Wells Avenue and Enterprise Drive. Noise from these areas varies widely, with some businesses operating only during typical work-day hours and others operating on a 24-hour basis. The city's heavier industrial activities, such as Pabco Gypsum and Cargill Salt, tend to be more distant from residential uses. The potential for noise conflicts may be greater where industrial uses are adjacent to homes or generate noise that is perceptible at nearby neighborhoods.

Domestic noise also has the potential to create conflicts. This includes noise associated with yard maintenance activities such as leaf blowers and lawn mowers, and noise from loud music, barking dogs, parties, and other household sources. These types of noise issues are typically controlled through administrative processes such as police complaints, rather than through land use planning.

IMPACTS OF LAND USE CHANGES ON NOISE-RELATED ISSUES

The future noise environment in Newark will be impacted not only by changes in traffic volumes, but also by changes in land use. In particular, new transit-oriented development around the future Dumbarton Rail station and residential development in Southwest Newark will result in a larger population in areas that are presently vacant. New homes may be built in areas subject to railroad noise and in areas where there is audible noise from nearby industrial activities. The environmental impact reports (EIRs) prepared for approved development in these areas included measures to mitigate potential noise impacts. Likewise, future EIRs will include such measures, as appropriate.

Similarly, the development of new medium-density housing along Cedar Avenue between NewPark Mall and Mowry Avenue and potentially in the NewPark area could result in higher populations near Interstate 880. Infill development in Old Town Newark and on other housing sites will likely mean more residents living along major thoroughfares in the city. Development of the remaining vacant sites in Pacific Research Center, Stevenson Point Technology Park, and other industrial areas of the city could create new noise sources, which in turn could affect nearby residential areas.

Policies and actions in the General Plan have been developed to reduce the potential for impacts associated with these changes. As appropriate, through implementation of a new Noise Ordinance, the City will continue to require acoustical studies when development is proposed near noise sources, or when new development will generate noise that could impact nearby sensitive receptors.

When an acoustical analysis is required, it must be submitted at the same time as the application for a planning or building permit. The City requires that the analysis be prepared under the supervision of a person experienced in the field of acoustical engineering. The reports must include noise data obtained from on-site sound level measurements with appropriate variations based on the time of day and different locations on the site. Factors such as topography, the location, and characteristics of noise sources, and projected noise sources must be considered and discussed. As appropriate, acoustical reports also must include noise attenuation measures, and an analysis that demonstrates that interior noise level requirements will be achieved in a manner consistent with Title 24 and other applicable building code requirements.

CONTROLLING FUTURE NOISE EFFECTS

Noise problems are usually associated with one of three components: 1) noise sources, 2) the noise transmission pathway, and 3) noise receivers. Most measures to reduce the effects of noise focus on some combination of these three components. These measures include reducing noise at the source, providing greater distance separation (buffering) and/or barriers along the path between the noise source and the noise receiver, and modifying the receiver through sound insulation and/or other means.

NOISE SOURCE CONTROLS

One of the most effective ways to reduce noise is to control it at the *source*. This can be accomplished by placing enclosures around motors, requiring quieter machinery and equipment, regulating the hours during which noise is generated, and similar measures. For example, conditional use permits may specify that certain businesses activities are prohibited during night-time hours to reduce potential noise conflicts. Likewise, construction may be prohibited during certain times of the day and night. Other examples of noise source controls include federal regulations for quieter aircraft and motor vehicle mufflers, and the designation of certain streets as truck routes to direct truck traffic away from residential streets.

The Newark Municipal Code regulates industrial operations to reduce noise levels that could disturb nearby sensitive uses. The code sets strict limits on the emission of noise from industrial sites and also sets limits for the reception of noise at certain land uses adjacent to industrial districts. Noise from home occupations, animals, agriculture, alarms, and vehicles is also addressed by different sections of the Municipal Code. As noted earlier, an action in the General Plan calls for the reorganization of these various provisions into a City Noise Ordinance.

NOISE PATHWAY CONTROLS

Noise levels can be reduced by modifying the *pathway* that noise travels between its source and nearby receivers. Typical noise barriers include earthen berms and sound walls. Fences are sometimes used on private properties to absorb noise and increase privacy. Planting and shrubbery are less effective as roadway noise barriers, although they do provide privacy and visual screening. Another example of noise path control is to increase the separation distance between the source and receiving point.

Sound walls have been constructed along portions of Interstate 880 to reduce noise levels in adjoining residential areas in the northeastern part of Newark. Residents have expressed interest in using taller walls to further reduce noise levels in this area. The City has also constructed back-up masonry walls along arterials where noise levels exceed residential compatibility guidelines. These walls exist along portions of Thornton Avenue, Cherry Street, Cedar Boulevard, Newark Boulevard, Mowry Avenue, and Jarvis Avenue.

NOISE RECEIVER CONTROLS

Adjusting the noise *receiver* is typically done through site planning, building design, and construction. Lower noise levels can be achieved by designing a development to maximize separation distance between noise sources and receptors, and taking advantage of natural barriers and topography. For example, mechanical equipment should be placed away from sleeping areas. Likewise, decks and balconies should be avoided on facades that face noisy streets. Interior rooms should be arranged so that noise-sensitive spaces such as bedrooms are placed further away from the roadway or other nearby noise sources. Within the building itself, noise levels can be reduced by increasing wall mass and thickness, using double glazed windows and solid core doors, and through interior finishes such as carpeting, drapes, and acoustical ceiling tiles.

GOALS, POLICIES, AND PROGRAMS

REDUCING HAZARD EXPOSURE

GOAL EH-1	Reduce the potential for injury, harm, property damage, and loss of life resulting from environmental hazards.
Policies	
Policy EH-1.1	Development Regulations and Code Requirements. Establish and enforce development regulations and building code requirements to protect residents and workers from flooding, liquefaction, earthquakes, fires, and other hazards.
Policy EH-1.2	Considering Hazards in Project Location and Design. Prohibit development in any area where it is determined that the potential risk from natural hazards cannot be mitigated to acceptable levels.
Policy EH-1.3	Hazard Awareness. Promote public awareness of hazards, along with the resources available to help homeowners make their homes safer and be better prepared for an emergency.
Роцсу ЕН-1.4	Critical Facilities. Ensure that public facilities that are critical to health and safety (such as police and fire stations, and water and sewer facilities) are designed to maximize their resilience and ability to function during and after a natural disaster.

Policy EH-1.5	Adequacy of	of Ac	cess. Require	adequate a	ccess	and clearan	ce fo	r fire
	equipment,	fire	suppression	personnel,	and	evacuation	for	new
	developmer	nt.						

See also Community Services and Facilities Element policies on Fire and EMS.

Actions

- ACTION EH-1.A Development Review. Review all development applications to ensure their compliance with all relevant building and safety codes, including those related to fire, flooding, soil, and geologic hazards.
- ACTION EH-1.B Code Updates. Periodically revise construction codes and regulations to incorporate the latest information and technology related to natural hazards such as earthquakes and flooding.

GEOLOGIC HAZARDS

GOAL EH-2	Reduce risks to life and property associated with geologic hazards.
Policies	
Policy EH-2.1	Earthquake Safety in New Construction. Require new development to meet structural integrity standards which minimize the potential for damage during earthquakes.
Роцсу ЕН-2.2	Seismic Retrofits. Encourage the retrofitting of existing structures to reduce the potential for damage during earthquakes.
Роцсу ЕН-2.3	Earthquake Awareness. Inform Newark residents and businesses of steps they can take to reduce earthquake-related hazards.
Policy EH-2.4	Infrastructure Resilience. Maintain standards for roads and infrastructure which consider geologic hazards, including subsidence and liquefaction.

Actions

- ACTION EH-2.A Geotechnical Studies. At the discretion of the Director of Public Works, require detailed investigations of ground shaking, liquefaction, soil stability, and other geologic hazards as specific development projects are proposed. Such investigations shall be prepared by a qualified geologist or soils engineer, with appropriate mitigation measures identified and implemented.
- ACTION EH-2.B Geotechnical Staff Assistance. As needed, retain outside consulting assistance to assist City staff in conducting specialized evaluations of geotechnical and structural engineering issues.
- ACTION EH-2.C Mandatory Seismic Upgrades. If feasible and appropriate, require seismic upgrading of existing buildings when applications for renovation or use permits are filed.
- ACTION EH-2.D Homeowner Education on Earthquake Safety. Continue to educate homeowners on the importance of retrofitting their homes for earthquake safety, particularly bolting of foundations where there are currently no connections between the foundation and frame.
- ACTION EH-2.E Seismic Safety at Schools. Work with Newark Unified School District to enhance the seismic safety of all school facilities.
- ACTION EH-2.F Earthquake Hazard Maps. Periodically update maps indicating risks of liquefaction, subsidence, and other geologic hazards as information becomes available.

FLOODING HAZARDS

GOAL EH-3 Reduce risks to life and property associated with flooding

POLICIES

POLICY EH-3.1 Planning to Avoid Flood Hazards. Identify flood prone areas in Newark and utilize this data for land use and transportation planning purposes. Flood resistant construction techniques and minimum building elevations shall be required to reduce flood hazards.

- POLICY EH-3.2 Maintaining Drainage Patterns. Prohibit development, grading, and land modification activities that would adversely affect Newark's drainage system or create unacceptable erosion impacts.
- POLICY EH-3.3 Residential Development in the Flood Plain. Require that new *residential* development, including streets and other surface improvements, be constructed above the 100-year flood elevation.
- **POLICY EH-3.4** Non-Residential Development in the Flood Plain. Require that new *non-residential* development, including commercial and industrial uses, be flood-proofed or constructed on pads elevated above the 100-year flood elevation.
- POLICY EH-3.5 Storm Drain Maintenance. Manage and maintain the storm drainage system to avoid flooding and reduce the negative effects of stormwater runoff.
- POLICY EH-3.6 Dam Safety. Advocate for dam safety and maintenance at Calaveras and/or San Antonio Reservoirs, and take the precautions necessary to protect Newark properties from related flood hazards in the event of dam failure.
- **POLICY EH-3.7** Mitigating Downstream Flood Impacts. Design new development to reduce the potential for downstream flooding. Measures such as porous pavement and on-site drainage retention facilities should be considered to reduce downstream impacts.
- POLICY EH-3.8 Flood Control Improvements. Work with Alameda County Flood Control and Water Conservation District (ACFC&WCD) on improvements to the storm drain, flood control channel, and levee system which ensure that these systems continue to protect Newark neighborhoods and business districts from flooding.
- **POLICY EH-3.9** Sea Level Rise. Consider the effects of rising sea level on the potential for flooding in low-lying areas, and participate in regional adaptation efforts for these areas. Information on flood hazards related to sea level rise should be used to ensure that flood risk is reduced.

See also Community Services and Facilities Element policies on storm drainage.

See also Conservation and Sustainability Element policies on climate change.

Actions

- ACTION EH-3.A Hydrologic and Drainage Studies. Require hydrologic and drainage studies for new development, and use these studies to identify measures that will reduce the risk of flooding.
- ACTION EH-3.B Flood Insurance Rate Maps. Maintain up-to-date Flood Insurance Rate Maps for use in planning and public works decisions.
- ACTION EH-3.C Flood Prevention Code Provisions. Continue to enforce Municipal Code provisions for construction in flood hazard areas, and amend these provisions as needed to conform to National Flood Insurance Program criteria.
- ACTION EH-3.D Review of Potential Flood Impacts. Use the environmental review process to evaluate potential impacts of new development on the flood control system, and to ensure that post-development runoff rates do not exceed the capacity of the flood control system.
- ACTION EH-3.E Alameda County Flood Control and Water Conservation District (ACFC&WCD) Referrals. Continue to refer projects in flood prone areas to the ACFC&WCD for review and comment.

HAZARDOUS MATERIALS

GOAL EH-4	Protect Newark residents and workers from the potential adverse effects of hazardous materials.
Policies	
Policy EH-4.1	Hazardous Materials Risk Reduction. Seek to reduce the risk of hazardous materials accidents, spills and vapor releases, and minimize the effects of such incidents if they occur.

- POLICY EH-4.2 Hazardous Materials Source Reduction and Recycling. Undertake source reduction programs, recycling programs, and household hazardous waste reduction programs to reduce the quantity of hazardous waste generated in Newark and to ensure its safe disposal.
- **POLICY EH-4.3** Mutual Aid. Improve mutual aid cooperation and coordination with other jurisdictions to ensure swift, effective response to hazardous materials incidents. Ongoing training should be provided to first responders to ensure readiness in the event of a hazardous materials incident.
- POLICY EH-4.4 Design and Construction of Hazardous Materials Facilities. Require that all facilities in which hazardous materials are used, handled, or stored are designed and constructed to minimize the possibility of environmental contamination and off-site impacts. The City will work with county, State, and federal agencies to ensure that such facilities are regularly inspected and that applicable regulations are enforced.
- POLICY EH-4.5 Hazardous Materials Information. Provide the means for Newark residents and businesses to obtain information about hazardous materials handling, storage, and regulations in the community.
- **POLICY EH-4.6** Hazardous Materials Transport. Seek to reduce the risk of accidents in the transportation of hazardous materials. The City will require compliance with all hazardous waste transport standards established by state and federal agencies.
- POLICY EH-4.7 Railroad Cargo Safety. Work with the Union Pacific Railroad (UP) and the California Public Utilities Commission (CPUC) to ensure safe conditions for the loading, unloading, and transport of hazardous materials along rail lines through Newark. UP should be encouraged to maintain its tracks and facilities in excellent condition, and minimize occasions where trains block railroad grade crossings.

See also Health Element policies on land use decisions that reduce hazardous materials exposure and require clean-up of contaminated sites. Actions

- ACTION EH-4.A Hazardous Material Inventories and Inspections. In cooperation with the Certified Unified Program Agency (CUPA), inventory and regularly inspect those buildings and facilities in which hazardous materials accidents would pose a threat to the community. Work with the owners to develop and implement programs for reducing risks associated with these buildings and facilities.
- ACTION EH-4.B Certified Unified Program Agency (CUPA) Coordination. Continue to work with the Alameda County Department of Environmental Health (ACDOEH) to administer and enforce state and federal hazardous material regulations. The ACDOEH is the Certified Unified Program Agency (CUPA) for the City of Newark and enforces requirements for Hazardous Materials Business Plans (HMBPs), Hazardous Waste Generator reporting, and Underground Storage Tank removal and clean-up.
- ACTION EH-4.C Zoning for Hazardous Materials. Consider zoning standards and special environmental review processes that ensure that safe distances are maintained between businesses using hazardous materials and sensitive uses, such as residential areas.
- ACTION EH-4.D Underground Tanks. In cooperation with the Certified Unified Program Agency (CUPA), enforce State standards for the design, monitoring, and testing of underground storage tanks.
- ACTION EH-4.E Hazardous Materials Business Plans (HMBPs). Require the preparation of Hazardous Materials Business Plans for new uses that will handle hazardous materials. HMBPs should include a complete inventory of materials by type, quantities, and conditions of storage and transportation, an assessment of the potential hazards associated with the materials, and steps to be taken to minimize risks. The HMBP also should outline actions to be taken in the event of a spill.
- ACTION EH-4.F Website Links. Provide links from the City's website to the websites of the county, State, and federal agencies that regulate hazardous materials.
- ACTION EH-4.G Hazardous Materials Transport Routes. Work with appropriate State and federal agencies to designate and periodically update official routes for the transportation of hazardous materials.

- ACTION EH-4.H Household Hazardous Waste Collection Awareness. Work with Alameda County to publicize household hazardous waste collection events and provide Newark residents with information on safe disposal procedures for household waste such as paint, motor oil, and batteries.
- ACTION EH-4.I Community Disclosure Laws. Enforce community disclosure laws (e.g. Right to Know laws) that inform property owners of the presence of hazardous materials nearby.
- ACTION EH-4.J Phase I Assessments. Require a Phase I Environmental Site Assessment when a property is changed from an existing use to a more sensitive use (for example, industrial to residential). If potential hazardous materials issues are identified, ensure they are investigated and that sites are cleaned to regulatory agency standards prior to development.
- ACTION EH-4.K Hazardous Building Materials Abatement. As appropriate, incorporate hazardous building materials abatement provisions into building permit and development approvals. The City will work with property owners to ensure remediation of hazardous building materials such as asbestos, lead, and mercury.

See also Health Element policies on cleanup of hazardous sites prior to reuse.

EMERGENCY PREPAREDNESS

GOAL EH-5	Fast, efficient, and coordinated response to natural and man-made emergencies and disaster.
Policies	
Policy EH-5.1	Complete Circulation System. Provide for a traffic circulation system that assures the City's capacity to deliver emergency services. This should include measures to ensure that all areas of the city can be accessed by emergency vehicles in the event a grade-level railroad crossing is blocked or otherwise inaccessible.
Роцсу ЕН-5.2	Awareness of Preparedness Programs. Increase public awareness of

POLICY EH-5.2 Awareness of Preparedness Programs. Increase public awareness of City emergency preparedness programs and resources, including the Citizens Emergency Resources Team (CERT) program. POLICY EH-5.3 Adequacy of Emergency Response Access. Avoid placing new development in areas where emergency response and evacuation cannot be provided within acceptable levels.

POLICY EH-5.4 Standard Emergency Management System (SEMS) Plan. In cooperation with the fire service provider, maintain and regularly update emergency plans for floods, earthquakes, fires, hazardous materials, and other disasters. Plans should be consistent with SEMS protocol.

POLICY EH-5.5 Interagency Coordination. Cooperate with other public agencies, nearby cities, community groups, and private enterprise in developing comprehensive disaster preparedness, assistance, and post-disaster recovery plans.

POLICY EH-5.6 Utility Resilience. Work with local gas, electric, cable, water, sewer, and other utility providers to maintain their facilities and ensure their ability to function (or be quickly restored) following a disaster.

POLICY EH-5.7 Communication Improvements. Strive for improved communications and response capabilities following a disaster, including a resilient Emergency Operations Center.

POLICY EH-5.8 Expanding Outreach. Ensure that emergency preparedness information is available in multiple languages, consistent with Newark's demographics. Work with the cultural institutions serving Newark's non-English speaking communities to ensure that information is communicated to all residents. Outreach programs also should be designed to reach seniors and persons with disabilities, including those with hearing or sight impairments.,

Actions

ACTION EH-5.A Capital Improvements to Improve Emergency Response. Periodically update the City's capital improvements program to include railroad grade separations, traffic signal overrides, and other improvements that will expedite emergency response.

ACTION EH-5.B Emergency Response Training. Conduct regular emergency response training exercises.

- ACTION EH-5.C Emergency Supplies. Acquire and maintain emergency equipment, supplies, services and communications systems, consistent with emergency management systems plans.
- ACTION EH-5.D Emergency Facilities. Identify specific facilities and lifelines critical to effective disaster response, and evaluate their ability to operate efficiently after a major disaster. Designate alternative facilities for post-disaster assistance in the event that primary facilities become unusable. Take appropriate actions to ensure that critical services and facilities return to normal levels of operation as soon as possible after a disaster.
- ACTION EH-5.E Information on Hazards and Preparedness. Regularly disseminate information about Newark's emergency preparedness plans and resources via the City's website, press releases, local schools, employee information bulletins, and other means. The City should also explore the use of automated calling systems and other technologies which quickly and effectively provide notification of an emergency.
- ACTION EH-5.F Seismic Stability of City Hall. Regularly monitor the seismic stability of City Hall and undertake improvements as needed to reduce damage in the event of a major earthquake. The City should plan for a new City Hall building constructed to meet current seismic safety standards.
- ACTION EH-5.G Emergency Management Plan. Maintain an emergency management plan for the City. Among other things, the plan should identify alternate emergency routes in the event road service along any of the city's arterials is disrupted.
- ACTION EH-5.H CERT Teams. Continue Community Emergency Response Team (CERT) training programs and expand public awareness of these programs.
- ACTION EH-5.1 Grade-Separated Rail Crossings. Prioritize transportation investments to reduce the number of existing at-grade railroad crossings and ensure access by emergency vehicles in the event a grade-level crossing is blocked.

MAINTAINING PEACE AND QUIET

GOAL EH-6 Maintain the peace and quiet of Newark neighborhoods and promote an environment where noise does not adversely affect sensitive land uses. POLICIES POLICY EH-6.1 Vehicle Roadway Noise. Actively coordinate with Caltrans, neighboring jurisdictions, and other transportation providers during the planning and design phases of proposed roadway projects so that noise impacts are minimized and appropriate noise mitigation measures are provided. POLICY EH-6.2 Truck Noise. Establish, maintain, and enforce designated truck routes within the city to reduce noise from truck traffic near residential areas. POLICY EH-6.3 Public Transit Noise. Coordinate with transit service providers in the planning and design of proposed transportation projects to incorporate noise-reduction technologies and operations processes both on a system-wide and vehicle-specific basis. Technologies and processes should minimize noise impacts from public transportation systems, including existing and future bus service(s) and the proposed Dumbarton Rail system. POLICY EH-6.4 Railroad Noise. Actively coordinate with Union Pacific, Caltrans, neighboring jurisdictions, and other transportation service providers during the planning and design of proposed rail-related projects so that noise impacts to the community are minimized and appropriate mitigation measures are provided. POLICY EH-6.5 Aviation Noise. Actively coordinate with operators at Palo Alto Airport (PAO), Moffett Federal Airfield (NUQ), Hayward Executive Airport (HWD), and all local heliports so that take-off and landing procedures are prepared and implemented in a manner that minimizes noise impacts to the Newark community. Likewise, if changes to flight paths or transit routes from Oakland, San Francisco, or San Jose (Mineta) International Airports are proposed, the City should actively coordinate with airfield operators and the FAA so that future noise impacts from aircraft over-flights are minimized in the Newark community.

- **POLICY EH-6.6** Construction Noise Regulating Construction Hours. Reduce noise associated with construction activities by prohibiting construction in residential neighborhoods between the hours of 7 PM and 7 AM Monday through Friday and at all times on Saturdays, Sundays, and State/federal holidays.
- POLICY EH-6.7 Construction Noise Addressing Sources of Construction Noise. Reduce noise associated with construction activities by requiring properly maintained mufflers on construction vehicles, requiring the placement of stationary construction equipment as far as possible from developed areas, and requiring temporary acoustical barriers/ shielding to minimize construction noise impacts at adjacent receptors. Special attention should be paid to noise-sensitive receptors (including residential, hospital, school, and religious land uses).
- **POLICY EH-6.8 Domestic Noise.** Reduce the negative effects of domestic noise sources, such as residential maintenance activities (e.g. leaf blowers or automobile repair), car alarms, barking dogs, and loud music through the establishment and enforcement of municipal codes. The enforcement provisions should ensure that response(s) to resident noise complaints are prompt and effective so as to maintain a quiet and peaceful environment within the city.

Actions

- ACTION EH-6.A Noise Ordinance Limits on Noise Levels. Draft and adopt a Noise Ordinance that establishes acceptable noise levels and standards, as well as provisions for enforcement and penalties in the event these levels are exceeded. The Ordinance should include a requirement that no person shall be allowed to cause any noise beyond his/her property line that exceeds prescribed noise levels limits. These limits should be consistent with and promote the implementation of the land use compatibility standards, as shown in Table EH-2
- ACTION EH-6.B Noise Ordinance Limits on Hours of Operation. Draft the Noise Ordinance (described in Action EH-6.A above) to include limits on the intensity and hours of use for selected noise sources such as construction equipment, manufacturing equipment, motors, delivery trucks, and parking lot vacuum equipment. Limits on hours of operation should be consistent with and achieve the goals of the land use compatibility standards (as shown in Table EH-2).

- ACTION EH-6.C Railroad Quiet Zones. Explore the feasibility of creating railroad "Quiet Zones" in existing and planned residential areas along the UP right-of-way per Federal Rail Administration rules and procedures.
- ACTION EH-6.D Motor Vehicle Code Enforcement. Request that the California Highway Patrol actively enforce the California Vehicle Code sections relating to adequate vehicle mufflers and modified exhaust systems to limit vehicle noise emissions. Likewise, the City of Newark Police Department should be trained and equipped to properly enforce all local and state ordinances related to excessive vehicle noise emissions.
- ACTION EH-6.E Street Resurfacing to Reduce Noise. Conduct regular maintenance and resurfacing of city streets to reduce road noise due to potholes, grade irregularities, and uneven surfaces. Additionally, explore the feasibility of using 'quiet' paving materials or techniques to reduce road noise at the tire-surface interface.
- ACTION EH-6.F Reducing Noise from City Operations. Periodically review City operations procedures and timing to ensure that noise from refuse collection, street sweeping, outdoor recreational programs, and other activities has been reduced to the lowest practical level.
- ACTION EH-6.G Reducing Noise from City Equipment. If feasible, purchase new municipal equipment and vehicles which comply with noise level performance standards based upon the best available noise reduction technologies.
- ACTION EH-6.H Sound Wall Improvements. Work with Caltrans to enhance and supplement the benefits of sound walls in residential areas along I-880 and SR-84. The coordination should be aimed at determining where improvements to these walls may further reduce noise impacts to nearby neighborhoods. Appropriate cost vs. benefit assessments should be part of this coordination and alternative funding sources should be explored.

DESIGN OF NEW STRUCTURES

GOAL EH-7 Ensure that new structures/uses are designed and constructed to preclude excessive, inappropriate, and undesirable noise effects.

POLICIES

- POLICY EH-7.1 Land Use Planning and Noise Compatibility. Use the noise compatibility guidelines in Table EH-2 and the future-conditions noise contour map in Figure EH-4 to plan for appropriate land uses near existing uses that generate noise. Noise mitigation should be included to ensure that new residential areas and other noise-sensitive uses are appropriately buffered from significant noise sources.
- POLICY EH-7.2 Noise Compatibility Strategies. Where land use noise compatibility conflicts currently exist, explore the need for mitigation measures on noise sources that may be adjacent to sensitive receptors. In planning for future developments, promote the use of buffer zones, barrier/shielding measures, and/or sound insulation building techniques to preclude noise impacts to noise-sensitive land uses.
- POLICY EH-7.3 Reducing Exposure to Operational Noise. In new residential and mixed-use developments, require that stationary equipment (such as air conditioning units and condensers) be placed in separate spaces, rooftops, or other areas such that noise impacts to interior living areas will be reduced. Similarly, potentially noisy common spaces, such as trash collection areas and loading zones, should be located away from residential units or other noise-sensitive spaces.
- **POLICY EH-7.4 Residential Noise Standard Exterior.** Plan for and implement strategies to maintain exterior noise levels that are consistent with the noise compatibility guidelines in Table EH-2. For residential areas, this limit is 60 dBA L_{dn} for outdoor living areas. Where this level is exceeded due to freeways, arterials, and/or railroads, the construction of berms, walls, buffer zones, and other noise-reduction measures to reduce noise to the greatest extent feasible will be required.
- POLICY EH-7.5 Residential Noise Standard Interior. Use site planning and architectural design to protect occupants of new buildings from excessive noise, per California State Noise Insulation Standards (California Code of Regulations, Title 24) and Chapter 35 of the Uniform Building Code (UBC). For example, site planning should place bedrooms and other noise-sensitive rooms away from exterior noise sources and architectural design should use double-paned windows and other insulating measures to reduce interior noise.

POLICY EH-7.6 New Noise Sources. Require new developments that have the potential to create long-term noise increases to mitigate potential impact to off-site receptor properties.

Actions

POLICY EH-7.7 Acoustical Study Requirement. Require acoustical studies for new developments in areas where the noise levels exceed the 'normally acceptable' levels for the proposed land use; based on Table EH-2. For residential uses, the analysis should include mitigation measures to limit the noise exposure in interior living spaces to 45 dB Ldn, consistent with California Title 24.

Acoustical studies should have the following minimum attributes:

- > Be the responsibility of the development applicant
- Be prepared by qualified persons experienced in the fields of environmental noise assessment and architectural acoustics.
- Include representative noise level measurements with sufficient sampling periods and locations to adequately describe existing local conditions.
- Include estimates for existing and projected (20 years hence) noise levels in terms of (a) L_{dn} or CNEL and (b) any future noise regulations to be adopted by the City. Those existing and projected noise levels shall be compared to the adopted policies of the Noise Element.
- Include recommended mitigation measures to achieve compliance with the adopted policies and standards of the Noise Element. Where the noise source in question consists of intermittent single events, the report should address the effects of maximum noise levels in sleeping rooms and potential sleep disturbance issues.
- Include estimates for interior and exterior noise exposure after the prescribed mitigation measures have been implemented.
- Describe a post-project assessment program that could be used to evaluate the effectiveness of the proposed mitigation measures.

- ACTION EH-7.A Noise Mitigation. Use the development review process to ensure that noise impacts are mitigated through setbacks/buffer zones, earthen berms, sound walls, building siting/orientation, and other appropriate means.
- ACTION EH-7.B Conditional Use Permits. Use the development review process, including conditional use permits, to limit activities which would generate high levels of noise during nighttime hours (i.e., from 7 PM to 7 AM).
- ACTION EH-7.C Allowing Noise-Sensitive Uses Near Noise Sources. Use the development review process when evaluating zoning changes to consider potential noise impacts due to noise-sensitive uses being located near commercial uses, industrial uses, or other activities that typically generate excessive noise.
- ACTION EH-7.D Vibration-Intensive Construction. Implement a standard operating procedure that requires the evaluation of vibration impacts for individual projects which use vibration-intensive construction activities, such as pile drivers, jack hammers, and vibratory rollers, near sensitive receptors. If construction-related vibration is determined to be perceptible (i.e., in excess of Federal Transit Administrations vibration annoyance criterion) at vibration-sensitive uses, then additional requirements, such as the use of less-vibration-intensive equipment or construction techniques, shall be implemented during construction.
- ACTION EH-7.E New Development Near Railroads. Implement a standard operating procedure that requires the evaluation of potential vibration impacts for new development that occurs within 200 feet of a railroad track, in accordance with the FTA's vibration screening distances. In such instances, the project property owner/developers shall retain an acoustical engineer to conduct an acoustic analysis and identify, where appropriate, site design features and/or required building construction improvements to ensure that vibration impacts would remain below acceptable levels for residential uses.

Acceptable levels of vibration, as referenced in Actions, are documented in the General Plan EIR.

NEWARK GENERAL PLAN ENVIRONMENTAL HAZARDS
HEALTH AND WELLNESS

INTRODUCTION

The purpose of the Newark Health and Wellness Element is to promote and sustain the health of Newark residents. Although this is not a mandatory element of the General Plan, the City of Newark recognizes that land use, transportation, housing, and natural resource decisions directly influence public health. The Health and Wellness Element establishes goals, policies, and actions that strive to improve air quality, promote physical fitness, ensure access to healthy foods, expand local health care facilities, protect residents from exposure to hazards, reduce crime, and create a greater sense of civic engagement and mental well-being.

The profession of city planning itself has its roots in public health planning. A century ago, major cities prepared plans to protect residents from disease. As sanitation improved and overcrowding subsided, the focus of planning shifted to other quality of life issues. Today, new trends are compelling cities to take a second look at the relationship between public health and urban planning. An increasing number of Americans suffer from diabetes, obesity, asthma, and other conditions that are influenced by the way we live, the air we breathe, and the foods we eat. By rethinking the way communities are designed, cities can help their residents' lead healthier lives.

This Element begins with a profile of public health in Newark today, including statistics on the health of residents and a discussion of the conditions that can create a healthier city. The second part of the Element includes goals, policies, and actions that address the major health issues facing the city.

HEALTH IN NEWARK

In 2010, Alameda County released a report on the health of residents in the County and its 14 cities, including Newark.¹ Since the conclusions of this report mostly re-

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¹ Alameda County Public Health Department, 2010. *The Health of Alameda County Cities and Places: A Report for the Hospital Council of Northern and Central California.*



flect data from 2006-2008, the City has provided more current statistics where they are available. A summary of the statistics is provided in Table HW-1. Differences between the statistics for Newark and for the County as a whole are discussed below.

Overall, Newark residents enjoy a long life, give birth to healthy children, and are in better health than the average resident of Alameda County. Life expectancy in Newark is 81.9 years, slightly higher than the County average of 81.6 years. Newark residents have a roughly equal hospitalization rate for asthma compared to the County average. Newark residents had about the same odds of developing cancer compared as the average Alameda County resident. However, for certain types of cancer, the incidence is substantially higher in Newark than in the County as a whole and the survival rates are lower.

For example, Newark women are slightly more likely to develop breast cancer than Alameda County residents as a whole. However, the breast cancer mortality rate is more than 50 percent higher than the County average. The incidence of lung cancer was 40 percent higher in Newark than in the County as a whole. Similarly, Newark residents develop colon cancer at a 4 percent higher rate than the County average, and are 13 percent more likely to die of colon cancer.

Although obesity data is not available at the city level, it is estimated that roughly one-third of Alameda County's adult population was overweight and nearly a quarter of the population was obese in 2007.² Some weight-related ailments have a greater incidence in Newark than in the County as a whole while others have a lower incidence. For example, the County Public Health Department reports that hospitalization due to heart disease is 13 percent higher among Newark residents than in the County as a whole. On the other hand, Newark residents are 21 percent less likely to die from a stroke. Health statistics also show Newark school children are slightly less likely to be overweight than children in the County as a whole.

Certain segments of the population are more vulnerable to physical health problems than the population as a whole. Children, seniors, and lower income populations, in particular, have a higher exposure risk to a number of illnesses.

² Alameda County Public Health Department, 2010. *The Health of Alameda County Cities and Places: A Report for the Hospital Council of Northern and Central California.*

TABLE HW-1 Newark and Alameda County Health Statistics						
Health Statistic	City of Newark	Alameda County	Percent Difference			
Annual Mortality rate (deaths per 100,000 persons), 2008-2010	594.6	618.3	-3.8			
Life expectancy at birth (2008-2010)	81.9	8164	+0.3			
Asthma						
Asthma emergency department visits, 2009-2011*	501.4	542.5	-7.6			
Asthma emergency department visits by children under age 5, 2009-2011*	1,383.8	1,032.1	+34.1			
Asthma hospitalization rate, 2009-2011*	129.1	138.6	-6.9			
Asthma hospitalizations under age 5, 2009-2011*	422.5	428.7	-1.4			
Cancer						
Cancer incidence (all cancers combined), 2008-10*	481	470	+2.3			
Cancer mortality rate (all cancer), 2008-10*	165.7	152.2	+8.9			
Lung cancer incidence., 2008-10*	69.7	49.5	+40.8			
Lung cancer mortality, 2008-10*	50.3	35.4	+42.1			
Colorectal cancer incidence, 2008-10*	45.1	43.3	+4.1			
Colorectal cancer mortality, 2008-10*	14.5	12.8	+13.3			
Female breast cancer incidence, 2008-10*	150	154	+2.7			
Female breast cancer mortality, 2008-10*	32.0	20.5	+56.1			
Prostate cancer incidence, 2008-10*	140.3	131.4	-+6.7			
Contagious Disease						
Tuberculosis cases ^{*(1)}	8.3	9.8	-16.6			
Infant Health						
Infant mortality*(1)	5.7	4.5	+23.5			
Low birth weight (%) ⁽¹⁾	7.5	7.2	+4.1			
Teen births ⁽¹⁾	26.2	26.5	-1.1			
Injury						
Emergency department visits for mental disorders, 2009-2011*	1,230.9	1,064.1	+15.7			

TABLE HW-1 Newark and Alameda County Health Statistics

Health Statistic	City of Newark	Alameda County	Percent Difference
Unintentional injury emergency department visits, 2009-2011*	5,530.4	5,888.8	-6.1
Unintentional injury mortality rate, 2008-2010	20.6	22.0	-6.4
Obesity			
School district children overweight (%) ⁽¹⁾	26.5	29.1	-9.4
Diabetes mortality rate, 2008-2010*	22.9	20.7	+10.6
Coronary heart disease related hospitalizations rate, 2009-2011*	348.0	306.7	+13.5
CHD mortality rate, 2008-2010*	106.4	101.6	+4.7
Stroke hospitalization rate, 2009-2011*	211.5	229.1	-7.7
Stroke mortality rate, 2008-2010*	30.9	39.2	-21.2

* Rate per 100,000 persons

Source: Alameda County Public Health Department, 2013. Source for items with footnote (1) is: Alameda County Public Health Department, *The Health of Alameda County Cities and Places: A Report for the Hospital Council of Northern and Central California*.



Children are more susceptible to asthma than adults. This has implications for the design of housing, schools, childcare facilities, and other uses near freeways and industrial uses where air pollutant concentrations may be higher.

Persons under the age of 20 represent roughly one-third of Newark's population. Walking and bicycling could be a more viable mode of travel for Newark's youth, but the risk of accidents associated with walking and bicycling on a street network designed for cars is currently a deterrent. As a result, youth do not get the exercise they would if walking and bicycling were safer. Improving pedestrian and bicycle safety provides the triple benefit of improving mobility, promoting physical fitness and exercise, and reducing air pollution.

About 4,500 Newark residents were older than 65 at the time of the 2010 Census. The number of seniors is expected to grow dramatically in the next two decades as baby boomers reach retirement age. This will trigger a shift in health care needs, as well as transportation, housing, and personal care needs for seniors. As residents

live longer, there will be a greater need for services for persons with limited mobility, cognitive disabilities, and chronic illnesses.

There is also a correlation between poverty and health. Communities with a high incidence of poverty have been found to experience higher rates of disease, injury, and child wellness issues. The cost of medical care, including insurance, can be burdensome for lower income households. The 2010 Census indicated that 8 percent of Newark residents had incomes below the poverty level (compared to 11.8 percent in the County as a whole). In addition, 17 percent of the City's residents had a disability, which in some cases prevented them from working. While there are state and federal programs to assist lower income households with health care, these programs often focus on treatment rather than the preventive care needed to live a healthier life and avoid future medical expenses.

AIR QUALITY

Air pollution can have significant health impacts, and can contribute to asthma, eye irritation, bronchitis, emphysema and other respiratory ailments. In addition, a number of air contaminants are known carcinogens. Air quality is closely regulated by federal and state agencies and laws, and is the focus of several local and regional initiatives relating to land use and transportation planning.

REGULATORY FRAMEWORK

The federal Clean Air Act amendments of 1970 enabled the US Environmental Protection Agency (EPA) to regulate levels of air pollutants around the United States. EPA has developed standards for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, particulate matter, and lead. Air basins that do not meet these standards are referred to as "nonattainment areas" and are required to develop plans and programs to demonstrate how they will attain the standards in the future.

California has adopted additional legislation to address air quality issues. The state standards tend to be more restrictive than the national standards and include similar requirements for attainment by the earliest practical date. The California Air Resources Board (CARB) is responsible for developing plans to meet the federal and state standards. CARB also regulates "tailpipe" emissions from motor vehicles in California.

Much of the authority for regulating air pollution and developing plans to bring California's air basins into compliance with air quality standards has been delegated to





regional air districts around the state. In the San Francisco Bay Area, the Bay Area Air Quality Management District (BAAQMD) regulates emissions from stationary sources such as power plants and refineries. BAAQMD also conducts air quality permitting, monitoring, and enforcement. The agency works collaboratively with agencies such as the Alameda County Transportation Commission and the Metropolitan Transportation Commission to develop air quality improvement strategies.

POLLUTANTS OF CONCERN

Both California and the federal government have established health-based air quality standards for seven air pollutants, which are shown in Table HW-2. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

An overview of the major air pollutants of concern is provided below:

- Ozone (O₃) is commonly referred to as "smog" and is a gas that is formed when reactive organic compounds and nitrogen oxides undergo photochemical reactions in the presence of sunlight. Ozone concentrations are typically highest in the summer months. The primary sources are motor vehicle emissions, power plants, refineries, and solvents.
- Carbon Monoxide (CO) is an odorless, colorless gas formed by the incomplete combustion of fuels and other organic substances. Motor vehicles are the main source. CO concentrations tend to be highest during winter mornings, when surface-based inversions trap pollution at ground levels.
- Nitrogen Oxides (NO_x) are a byproduct of fuel combustion and a contributor to ozone and particulate matter. The two major components, nitric oxide and nitrogen dioxide, are considered irritants and contribute to a number of respiratory ailments.
- Sulfur Dioxide is a colorless gas with a strong odor. It is generated through the combustion of fuels containing sulfur, such as oil and coal. At high concentrations, it can irritate the upper respiratory tract. At lower concentrations, it can harm lung tissue.
- Suspended Particulate Matter (PM_{2.5} and PM₁₀) includes a range of solid and liquid inhalable particles. Air quality standards differentiate between particles less than 10 microns and less than 2.5 microns in diameter. Major sources include road dust, agriculture, soot, fires, and construction and demolition.

Pollutant	Averaging Time	California Standard	Federal Standard	Major Pollutant Sources
Ω_{700} (Ω_{-})	1 hour	0.09 ppm	*	Motor vehicles paints coatings and solvents
02011C (03)	8 hours	0.070 ppm	0.075 ppm	
Carbon	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor
Monoxide (CO)	8 hours	9.0 ppm	9 ppm	vehicles.
Nitrogen	Annual Avg	0.030 ppm	0.053 ppm	Motor vehicles, petroleum-refining operations, industrial sources,
Dioxide (NO ₂)	1 hour	0.18 ppm	0.100 ppm	aircraft, ships, and railroads.
C 16	AAM	*	*g	
Sulfur Dioxide (SO ₂)	1 hour	0.25 ppm	0.075 ppm	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	24 hours	0.04 ppm	*9	
Respirable	AAM	20 µg/m ³	*	Dust and fume-producing construction, industrial, and agricultural
Particulate Matter (PM ₁₀)	24 hours	50 µg/m³	150 µg/m³	operations, combustion, atmospheric photochemical reactions, and natural activities (e.g. wind-raised dust and ocean sprays).
Respirable	AAM	12 µg/m ³	15 µg/m ^{3 b}	C
Particulate Matter (PM _{2.5})	24 hours	*	35 µg/m³	Same sources as PM ₁₀
	30-Day Avg	1.5 µg/m³	*	
Lead (Pb)	Calendar Qtr	*	1.5 µg/m³	Lead smelters, battery manufacturing & recycling facilities. Past
	Rolling 3-Mo. Avg	*	0.15 µg/m³	source: compustion of leaded gasoline.
Sulfates (SO ₄)	24 hours	25 µg/m³	*	Industrial processes.
Visibility Reducing Particles	8 hours	ExCo=0.23/km visibility of 10≥ miles	No Fed. Std	Metals, soot, soil, dust, and salt.
Hydrogen Sulfide	1 hour	0.03 ppm	No Fed. Std	Decomposition of sulfur-containing organic substances, sewer gas, natural gas, geothermal energy.
Vinyl Chloride	24 hours	0.01 ppm	No Fed. Std	Landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents.

TABLE HW-2 AMBIENT AIR QUALITY STANDARDS FOR CRITERIA POLLUTANTS

Notes: ppm: parts per million; µg/m³: micrograms per cubic meter; AAM: Annual Arithmetic Mean

* Standard has not been established for this pollutant/duration by this entity.

^a On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked.

^b On December 14, 2012, EPA lowered the federal primary $PM_{2.5}$ annual standard from 15.0 μ g/m³ to 12.0 μ g/m³. The new annual standard will become effective 60 days after publication in the Federal Register. EPA made no changes to the primary 24-hour $PM_{2.5}$ standard or to the secondary $PM_{2.5}$ standards.

Source: California Air Resources Board (CARB), 2012. Ambient Air Quality Standards, http://www.arb.ca.gov/research/aaqs/aaqs2.pdf.



Particulate matter can increase the risk of chronic respiratory disease and exacerbate breathing problems for those with respiratory conditions. It also contributes to asthma and cardiopulmonary disease.

Lead is a widely used metal that can contaminate air, food, water, or soil. It is found naturally in the environment as well as in manufactured products. High levels are typically associated with lead smelters, waste incinerators, and utilities. Leaded gasoline was formerly a primary source, but it has been banned since 1995.

In addition to the pollutants listed above, California also regulates more than 240 compounds that are classified as Toxic Air Contaminants (TACs). TACs include air pollutants which contribute to increase in mortality or serious illnesses, or which pose a present or potential human health hazard. Diesel particulate matter is a TAC of particular concern, as it accounts for much of the cancer risk from airborne toxics. Other sources of TACs include gasoline stations, dry cleaners, and auto body shops.

AIR QUALITY CONDITIONS IN NEWARK

The air quality monitoring station closest to Newark is in Hayward, about 10 miles to the north. Data from this station is summarized in Table HW-3. Because this station only monitors ozone, data was obtained from the San Jose monitoring station for the other criteria air pollutants. The data show occasional violations of the state and federal ozone standards, the state PM_{10} standard, and the federal $PM_{2.5}$ standard. The state and federal CO, SO₂, and NO₂ standards have not been exceeded in the last five years in the vicinity of Newark.

Table HW-3 also shows the attainment status for the listed pollutants as of 2011, the most recent year for which data is available. Although the Bay Area as a whole is considered a non-attainment area for the state and federal ozone standard, the standard was not exceeded in 2011 at the station closest to Newark. The federal fine particulate standard was exceeded on three days (in San Jose), while the coarse particulate standard was not exceeded. Because of Newark's bayside location, its air quality is somewhat better than air quality in the Bay Area's sheltered inland valleys.

According to a 2008 criteria and toxic pollutant emissions facilities data base, there are 74 stationary sources of pollution in Newark, including gas stations, print shops, auto body shops, and dry cleaners. The largest sources are industrial activities such as a waste oil refining facility, a gypsum manufacturing plant, a plastics packaging

TABLE HW-3	AMBIENT AIR C)uality M	ONITORING	SUMMARY

Number of Days Threshold and Maximum Levels During				d Were Ex ng Such V	ceeded iolations
Pollutant Standard	2007	2008	2009	2010	2011
Ozone (O ₃) ^a					
State 1-Hour ≥0.09 ppm	0	1	4	NA	0
State 8-hour ≥0.07 ppm	0	3	4	NA	0
Federal 8-Hour > 0.075 ppm	0	1	3	NA	0
Max. 1-Hour Concentration (ppm)	0.075	0.114	0.107	NA	0.088
Max. 8-Hour Concentration (ppm)	0.065	0.087	0.081	NA	0.070
Carbon Monoxide (CO) ^b					
State 8-Hour > 9.0 ppm	0	0	0	0	0
Federal 8-Hour \geq 9.0 ppm	0	0	0	0	0
Max. 8-Hour Concentration (ppm)	2.71	2.48	2.50	2.19	2.18
Nitrogen Dioxide (NO ₂) ^b					
State 1-Hour \geq 0.18 (ppm)	0	0	0	0	0
Max. 1-Hour Concentration (ppm)	0.065	0.090	0.069	0.064	0.061
Sulfur Dioxide (SO ₂) ^b					
State 24-Hour ≥ 0.04 ppm	NA	NA	0	0	0
Max. 24-Hour Concentration (ppm)	NA	NA	0.001	0.002	0.003
Coarse Particulates (PM ₁₀) ^b					
State 24-Hour > 50 μ g/m ³	3	1	0	0	0
Federal 24-Hour > 150 μ g/m ³	0	0	0	0	0
Max. 24-Hour Concentration ($\mu g/^{m3}$)	69.1	57.3	43.3	46.8	44.3
Fine Particulates (PM _{2.5}) ^b					
Federal 24-Hour > 35 μ g/m ³	9	5	0	3	3
Max. 24-Hour Conc. (ug/m ³)	57.5	41.9	35.0	41.5	50.5

Notes: *Italic indicates non-attainment status in 2011.* ppm = parts per million; $\mu g/m^3$ = or micrograms per cubic meter; * = insufficient data; NA = not available.

^a O₃ obtained from the Hayward Monitoring Station.

^b CO, NO₂, SO₂, PM₁₀, and PM_{2.5} data from the San Jose Jackson Street Monitoring Station.

Source: California Air Resources Board (CARB), 2013. *Air Pollution Data Monitoring Cards (2007, 2008, 2009, 2010, and 2011).*

plant, and salt harvesting operations. All stationary sources in the city are monitored by the California Air Resources Board.

AIR QUALITY PLANNING

The BAAQMD prepares air quality management plans that set forth strategies to attain air quality standards in the San Francisco Bay Area Air Basin. These plans include Ozone Attainment Plans for the national O_3 standard and Clean Air Plans for the California O_3 standard. The most recent adopted plan is the 2010 Bay Area Clean Air Plan. It included new emissions inventories, modeling tools, and emission control measures to reduce ozone concentrations.

Air quality planning is also a major focus of the Alameda County Transportation Commission's Countywide Transportation Plan (CTP). The 2012 CTP recognizes the connection between land use planning, transportation, and air quality conditions. In addition to promoting alternatives to single passenger driving, the CTP also supports a land use pattern that reflects the region's transportation network and constraints. This includes locating development near mass transit to reduce the necessity of driving.

Similar themes are expressed in the Sustainable Communities Strategy being prepared by the Association of Bay Area Governments (ABAG) and Metropolitan Transportation Commission (MTC). This Plan, which is intended to comply with California Senate Bill 375, emphasizes the importance of connected streets, diverse housing choices, and walkable neighborhoods as a way to reduce vehicle miles traveled (VMT), improve air quality, and achieve greenhouse gas (GHG) reduction targets.

At the local level, the City of Newark addresses air quality through its land use planning and environmental review processes. Land uses such as housing, schools, convalescent homes, and hospitals are referred to as "sensitive receptors." The Bay Area Air Quality Management District (BAAQMD) has adopted guidelines to reduce the exposure of such land uses to air pollution, particularly toxic air contaminants, and fine particulate matter. BAAQMD generally considers areas within 500 feet of freeways and high volume roadways (more than 10,000 vehicles per day) to have higher potential risks. Accordingly, future housing developments and other new sensitive receptors near State Routes 84 and Interstate 880 may need to incorporate special site planning and construction features to reduce risk exposure. Local development review procedures also address the potential for odors when development is proposed. BAAQMD has established specific distance thresholds for land uses with the potential to generate odor complaints, such as wastewater treatment plants, composting facilities, food manufacturing, and waste transfer stations. Strategies to reduce odors are required when these uses are developed near sensitive receptors. Such strategies may also be necessary in mixed-use projects, when uses such as restaurants and bakeries are located immediately adjacent to housing.

Since automobiles are the principal source of air pollution in the Bay Area, a major focus of air quality planning is focused on the transportation sector. This includes promoting cleaner burning fuels—and reducing the necessity of driving and the length of motor vehicle trips. An important goal is to achieve a better balance between jobs and housing in communities in the Bay Area, which in turn can help reduce commute lengths. As noted elsewhere in this chapter, improving the bicycle, pedestrian, and public transportation systems is also an important part of these initiatives. Many of the policies in the Land Use and Transportation Elements of the General Plan are focused on reducing auto dependency as a way to alleviate congestion, improve air quality, and curb GHG emissions.

Construction is another source of air pollution. Construction can produce exhaust emissions from equipment and vehicles, dust from demolition and grading, and reactive organic gases from asphalt, paints, and coatings. A number of basic control measures are prescribed when development is approved to reduce constructionrelated air quality impacts. Similarly, new homes are subject to regulations for woodburning fireplaces, asbestos disposal, and other activities with the potential to generate particulates and other airborne contaminants.

The City also implements BAAQMD and State air quality recommendations for specific uses, such as dry cleaners and gas stations. The California Air Resources Board has adopted distance thresholds which ensure that land uses such as housing and schools are located a safe distance away from uses such as distribution centers (with high volumes of diesel-powered trucks), chrome plating facilities, and refineries.

FITNESS AND WALKABILITY

Over the past 40 years, the number of Americans who are overweight or who are suffering from weight-related illnesses has increased significantly. Weight is a factor in the incidence of several serious medical conditions including Type 2 diabetes, heart disease, stroke, and certain types of cancer. In Newark, 26.5 percent of all chil-





dren are overweight and more than 500 people a year require hospitalization due to strokes or coronary heart disease.

Physical fitness can help reduce obesity rates and the incidence of weight-related health problems. Exercise can also provide mental health benefits, such as alleviating depression and promoting self-esteem. While not all residents may be inclined or able to engage in rigorous fitness activities, simple changes such as short daily walks can help curb obesity and lead to healthier living. Making Newark safer and more comfortable for pedestrians and bicyclists can increase the viability of walking not only for leisure, but also for day-to-day errands and short trips. The more opportunities the city provides for active transportation, the more opportunities there are to improve public health.

Land Use

The siting and orientation of different land uses within a city can affect public health. One of the fundamental purposes of zoning is to separate incompatible uses. Most zoning regulations and maps were initially developed in the 1920s and 30s to protect residents from the noise, odor, pollution, and potential adverse health effects associated with living close to industry.

Over time, the concept of separating different land uses expanded to uses which were not necessarily incompatible. Most neighborhoods developed after 1950 also separated residential uses from *commercial* uses, in some cases using street layouts, which made it difficult to walk from home to a nearby store, school, park, or shopping center.

For over half a century, the suburban development model was to design communities that kept housing and commerce apart. Such communities were often built with winding streets and cul-de-sacs, which lengthened the distance one had to travel to reach a destination. Wide streets, designed for fast-moving automobile traffic, made it even more difficult to walk from one point to another. One outcome of this approach to community design was that residents became dependent on cars to make almost all of their daily trips. *Walking* to work, to school, or to run an errand became the exception rather than the rule. While there are many factors that have contributed to increasing obesity rates in America, the inability to comfortably walk in our own communities is one of the most pervasive.



During more recent times, community design has shifted back to the more traditional idea of neighborhoods with multiple uses. While heavy industry and hazardous uses must still be separated from housing, it is becoming more common for new neighborhoods to integrate residential, commercial, and public uses in close proximity. One attribute of a traditional land use pattern is that it is denser than conventional suburban development. Housing is sometimes located above ground floor retail uses. Such neighborhoods also are characterized by a grid street pattern (rectangular blocks), rather than meandering lanes and cul-de-sacs. By shortening the distance between origin and designation in a neighborhood, it becomes much easier and more practical to walk.

STREET DESIGN

Land use is only one aspect of promoting healthy community design. The streets themselves must be designed to accommodate walking and bicycling. A "walkable" community includes continuous sidewalks, well-lit streets, shade trees for mid-day walking, and safety features such as marked crosswalks. A number of design features can be used to make it safer to cross wide or busy streets. For instance, streets that are more than four lanes can include medians or pedestrian "refuges" at intersections, curb extensions (also called "bulbouts") which reduce the pavement width at the crosswalk, and features such as digital countdowns, which indicate the time remaining before the signal changes.

Most of Newark was designed during the automobile era, and many of its streets were designed without these features. As of the 2010 Census, less than one percent of the city's residents walked to work. Walkscore, a company that measures the walkability of neighborhoods across the country based on their land uses and transportation systems, gave Newark a cumulative walkscore of 58 (on a scale of 100) in 2013. For comparison's sake, the walkscore in both Fremont and Union City was 52. Walkscores are higher in the Bay Area's more urban communities such as San Francisco (85) and Berkeley (82).

While there is no official definition of "walking distance," the benchmark is usually either 1 mile or 1/2-mile. Longer trips are usually made by other transportation modes such as bicycle, bus, or car. Of these modes, bicycling provides the greatest potential health benefits—provided that conditions for cyclists are safe. Newark's terrain is conducive to bicycling, but bicycles must share the same traffic lanes as cars on most of the city's streets.



It is estimated that 1,300 bicycle trips a day are made in Newark.³ The City is working to create more dedicated bike lanes and is taking other steps to improve bicycle safety. These steps include additional bicycle parking facilities, resurfacing existing bike lanes, using high visibility road markings, and installing additional signs to call attention to bikes. Secured bike parking at home, at work, and at key destinations (schools, stores, restaurants, etc.) is also an important factor to make cycling more viable.

FOOD ACCESS

Another factor affecting community health is diet and nutrition. Lower income communities may have poorer access to supermarkets and fresh produce than more affluent communities. In such locations, the only option for groceries may be to shop at corner markets and convenience stores, and the only restaurant options may be fast food outlets. Residents in such areas may have diets that are high in sugars, salts, and fat. This can lead to higher obesity rates, as well as other chronic conditions associated with poor nutrition.

Local policies can influence food access through zoning and economic development initiatives. Cities can also encourage farmers markets and community gardens, so that residents have additional opportunities to consume affordable, healthy food. Cities can also work collaboratively with school districts to promote nutrition education, healthier food choices in local schools, and a greater awareness of the relationship between diet and health.

At the present time, Newark is well served by grocery stores. There are several supermarkets in the Four Corners area, along Thornton Avenue, and in the NewPark vicinity. The City also has a number of ethnic markets, including those specializing in Asian and Hispanic foods. Most of Newark's neighborhoods are within 1 mile of a large supermarket. Growth in the Dumbarton transit-oriented development (TOD) area and the Southwest Newark area will generate additional demand for fresh produce; the City will encourage continued growth of supermarkets and green grocers to meet this demand.

Newark also is home to one of the largest farmers markets in the Bay Area. The Newark Farmers Market operates year round every Sunday in the parking lot of NewPark Mall. Produce from farmers markets may be fresher than retail produce,



³ City of Newark. (2010). City of Newark Draft Bikeway Element.

since it is shipped directly from farm to market without warehouse storage. Additionally, the Newark Farmers Market accepts food stamps, increasing its accessibility to lower income residents.

As of 2013, there are no community gardens in Newark. However, the City has established policies in this General Plan, which encourage community gardens in the future. The City already encourages backyard food gardening and maintains zoning regulations which enable small-scale urban agriculture.

The City of Newark also encourages the efforts of the Alameda County Food Bank, which provides nutrition education to youth and adults. Persons served by the Food Bank can learn how to eat healthy on a budget, and can take after-school healthy cooking classes in English, Spanish, and Chinese. Another important resource is the "garden-based education" program offered by the University of California Extension of Alameda County. This program provides technical assistance and training to teachers and community members interested in building gardens on school grounds.



ACCESS TO HEALTH CARE FACILITIES

There are 15 medical facilities within a 10-mile radius of Newark, serving health needs ranging from preventative to emergency care, with clients ranging from children to veterans. The hospitals and clinics in the Newark area are listed in Table HW-4.

Within the City of Newark there are three medical facilities: Newark Health Center, Washington Hospital Clinic, and Doctors Express Newark. Larger medical facilities are located about 4 miles away in Fremont. These facilities include Kaiser Permanente Medical Center-Fremont, and Washington Hospital, both of which are large, full-service hospitals with emergency and trauma care units. In Union City, roughly 10 miles away, there are additional medical facilities, including the Tiburcio Vasquez Health Center, which serves people at all income levels in Spanish and English.

PERSONAL SAFETY

Part of creating a healthy community is creating a *safe* community. This requires more than simply maintaining a police force and effective law enforcement services, it also requires designing the city to reduce the potential for crime. The term "Crime Prevention Through Environmental Design" (CPTED) has been coined to describe the ways cities can become safer through good urban design.



Name	Location	Type of Facility	
Newark			
Alameda Health System Newark Health Center	6066 Civic Terrace Avenue Newark, CA.	Community-based ambulatory clinic	
Doctors Express Newark	5763 Stevenson Blvd. Newark, CA	Clinic	
Washington Hospital Clinic	6236 Thornton Avenue Newark, CA	Clinic	
Fremont			
Fremont Center: Palo Alto Medical Foundation: Sutter Health Affiliate	3200 Kearney St. Fremont, CA	Hospital	
South East Bay Pediatrics Medical Group	2191 Mowry Avenue, Suite 600C Fremont, CA	Clinic	
Fremont Veteran's Affairs Clinic	39199 Liberty Street Fremont, CA	Clinic	
Kaiser Permanente Medical Center-Fremont	39400 Paseo Padre Pkwy Fremont, CA	Hospital	
Fremont Urgent Care	3161 Walnut Ave Fremont, CA	Clinic	
Fremont Surgery Center	39350 Civic Center Dr Fremont, CA	Clinic	
Tri-City Health Center	39500 Liberty St Fremont, CA	Clinic	
Washington Outpatient Sur- gery Center	2299 Mowry Ave Fremont, CA	Clinic	
Union City			
Nakamura Clinic	33077 Alvarado-Niles Rd. Union City, CA	Clinic	
Kaiser Permanente Medical Center - Union City	3553 Whipple Rd Union City, CA	Clinic	
Tiburcio Vasquez Health Center	33255 9th St Union City, CA 94587	Clinic	
Alvarado Medical Clinic	32270 Alvarado Blvd. Union City, CA 94587	Clinic	

TABLE HW-4 MEDICAL FACILITIES IN THE TRI-CITY AREA

Source: The Planning Center | DC&E, 2013.

CPTED is based on four key strategies:

- Natural surveillance, or making places highly visible and reducing hiding places es or sheltered areas for illicit activities.
- Territorial reinforcement, or creating clear boundaries and a sense of ownership and stewardship of common space.
- > Access control, which is directing movement (along lighted pathways, etc.).
- Maintenance, which conveys the message that residents care about a space and are committed to its upkeep.

These strategies can be used in tandem to create public spaces that deter criminal activity and anti-social behavior such as graffiti and vandalism. The City of Newark uses the development review process to ensure that new development is designed to reflect security considerations, along with provisions for emergency vehicle access. Involvement of local police and fire personnel in development review is critical to ensure that new neighborhoods and infill development are designed with safety in mind.

MENTAL HEALTH AND SOCIAL CAPITAL

In 2000, the Center for Disease Control reported that 5 percent of Americans suffered from occasional or chronic depression. The rate in Alameda County was higher, at approximately 9 percent. While depression is a physiological condition, it can be exacerbated by factors such as stress, lack of exercise, and poor environmental quality. Such factors can be addressed to some extent through community design. For instance, providing ample parks and open spaces, places to bike and run, and public amenities such as gardens and nature preserves can have a positive effect on mental health. Similarly, creating the opportunity for residents to live near their place of employment (or work near their homes) reduces the amount of time spent in traffic, and the associated stress, tension, and loss of family time.

Another measure of community mental well-being is called "social capital." This refers to the ability for residents to feel a sense of belonging in their community, and to have a meaningful connection to the place where they live. Programs like Music at the Grove, the annual Newark Days birthday celebration, and even community clean-up and volunteer programs can more fully engage residents in public life. A side benefit of these initiatives is that they leverage the capacity of Newark residents







to "give back" to the community, augmenting City services and providing resources the City itself could not otherwise provide.

An important partner in promoting Newark's social capital is the faith community. Another important partner is the non-profit sector, particularly organizations representing those with limited English who might otherwise feel isolated or unable to become engaged in community life. There are also organizations such as the League of Volunteers, Second Chance, and the Viola Blythe Community Services Center that provide opportunities for residents to help those in need, including the homeless. The City itself also works to promote physical and mental well-being, and provides safe houses for persons at risk of domestic violence or abuse.

GOALS, POLICIES, AND ACTIONS

AIR QUALITY

GOAL HW-1	Air quality that meets state and federal standards and provides improved respiratory health for Newark residents.				
Policies					
Policy HW-1.1	Air Quality Plans. Work with appropriate state, federal, and regional agencies to develop and implement programs that help the San Francisco Air Basin meet state and federal air quality standards.				
Policy HW-1.2	Land Use, Transportation, and Air Quality. Make land use and transportation decisions that reduce tailpipe emissions, including promotion of walking and bicycling, improvements to public transportation, and a jobs-housing balance that reduces vehicle commute miles. Higher density development and mixed commercial and residential uses should be permitted near the proposed Dumbarton Rail Station, and in other areas where high-frequency transit service is proposed.				
Policy HW-1.3	Reducing Exposure to Air Pollution in New Development. Use site planning and architectural design to reduce potential exposure of sensitive uses to major air pollution sources, including freeways and industrial activities.				

- **POLICY HW-1.4 Evaluation of Air Quality Impacts.** Evaluate air quality impacts during the local development review process. Development should be located and regulated to minimize significant air quality related health risks.
- POLICY HW-1.5 Cleaner Fuels. Encourage the use of cleaner burning fuels and lowemission vehicles.
- POLICY HW-1.6 Reducing Emissions from Single Passenger Vehicles. Support programs by local employers that encourage employees to carpool, use public transportation, bicycle, walk, telecommute, or pursue other alternatives to driving alone to work.
- **POLICY HW-1.7 Odors.** Reduce the emission of undesirable odors from manufacturing and commercial activities.

ACTIONS

- ACTION HW-1.A Air Quality Plan Implementation. Work with the Bay Area Air Quality Management District (BAAQMD) to develop and implement plans and programs to reduce diesel pollution, particulate matter, ozone, and toxic air contaminants.
- ACTION HW-1.B Air Quality Studies for New Development. Use the environmental review process to require mitigation of potential air quality impacts generated by new development. Site-specific air quality studies should be required for future development that includes sensitive receptors (such as schools, hospitals, daycare centers, or retirement homes) located within designated air quality buffer areas along Interstate 880 and State Route 84.
- ACTION HW-1.C Furnace Replacement and Clean Appliances. Support programs that help property owners replace residential, commercial, and industrial furnaces and gasoline powered appliances with cleaner fuel, low-emission furnaces, and clean energy appliances.
- ACTION HW-1.D Wood Burning Fireplaces. Ensure compliance with state and federal standards for wood-burning fireplaces and stoves in new or remodeled homes.

ACTION HW-1.E Restaurant Exhaust Systems. Require new restaurants located in mixed-use developments or adjacent to residential developments to install kitchen exhaust vents with filtration systems, re-route vents away from residential development, and use other accepted methods of odor control, in accordance with local building and fire codes.

Action HW-1.F Health Risk Assessments. Require submittal of a Health Risk Assessment (HRA) for applicants proposing major development or redevelopment within 1,000 feet of the I-880 or SR 84 freeways. For projects where the incremental cancer risk exceeds ten in one million, PM_{2.5} concentrations exceed 0.3 μg/m³, or the appropriate non-cancer hazard index exceeds 1.0, the HRA shall identify mitigation measures capable of reducing potential risks to acceptable levels.

HRAs shall be done in accordance with the latest State Office of Environmental Health Hazard Assessment and Bay Area Air Quality Management District guidelines, and shall mitigate impacts to levels deemed acceptable by these agencies. The City shall modify its standard conditions of approval to implement this action.

ACTION HW-1.G Construction-Related Pollutants. Require that construction contractors implement basic control measures consistent with BAAQMD recommendations to limit emissions of construction-related criteria pollutants, including fugitive dust.

ACTION HW-1.H Nuisance Odors. Evaluate the potential for proposed projects to emit nuisance odors beyond the property line and require that property owners submit odor management plans consistent with BAAQMD regulations.

ACTION HW-1.I Standard Conditions of Approval. Update the City's Standard Conditions of Approval to require measures which reduce particulate emissions (PM₁₀) from construction and reduce construction-related emissions if project-level environmental review determines that BAAQMD thresholds for criteria pollutants may be exceeded.

> Mitigation measures for construction impacts could include using construction equipment rated by the EPA as complying with current emission limits, ensuring construction equipment is serviced and maintained to the manufacturer's standards, and limiting nonessential construction equipment idling to no more than five minutes.

FITNESS THROUGH DESIGN

GOAL HW-2 A community in which physical fitness is supported and encouraged. POLICIES POLICY HW-2.1 Promoting Walking and Bicycling. Promote walking and bicycling as a healthier and more appealing alternative to driving for short-distance trips. This should include improved safety features such as marked crosswalks, high-visibility road markings, crossing islands, curb extensions, and other improvements that improve pedestrian safety. It should also include streetscape, landscaping, and bike lane improvements that make walking and bicycling more comfortable and pleasant. See the Transportation Element for additional policies on bicycle and pedestrian improvements. POLICY HW-2.2 Designing to Support Healthy Living. Support land use patterns and street designs that encourage physical activity and healthy living. The characteristics of the built environment should be improved over time so it becomes easier, safer, and more enjoyable to be physically active in Newark. POLICY HW-2.3 Connectivity. Improve connectivity in the street and sidewalk system, so that walking in Newark does not require circuitous routing. Where cul-de-sac or dead-end streets are used in new development, there should be provisions for pedestrian and bicycle easements that connect through to nearby streets in adjacent areas. POLICY HW-2.4 Access to Active Recreation. Maintain and develop facilities for active recreation and physical fitness in Newark, such as recreation centers, exercise circuits, and athletic fields. POLICY HW-2.5 Access to Parks. Ensure that parks and recreation centers can be easily reached on foot or by bicycle. POLICY HW-2.6 Fitness Education. Support public education for persons of all ages on the benefits of physical activity and fitness.

Policy HW-2.7	Walking and Bicycling to Work. Encourage employers to provide facilities such as showers, lockers, and secured bike parking which make it easier for employees to walk or cycle to work.
Policy HW-2.8	Health and New Development. Consider potential impacts on public health as new development is reviewed and approved. Seek input from the Alameda County Public Health Department to ensure that land use and transportation decisions promote community health.
Actions	
Action HW-2.A	Safe Routes to School. Support programs which improve conditions for youth walking or bicycling to school, including the federal Safe Routes to School Program.
Action HW-2.B	Pedestrian and Bicycle Improvements. Implement street design features, signage, safety improvements, enforcement efforts, and educational programs that facilitate safe walking and bicycling in Newark neighborhoods and shopping areas.
Action HW-2.C	Gaps in the Sidewalk System. Evaluate gaps or deficiencies in New- ark's sidewalk and crosswalk system, particularly between NewPark Mall and surrounding residential areas, in order to make it safer and more convenient to walk in the city.
	See the Transportation Element of the General Plan for additional ac- tions on pedestrian and bicycle improvements.

FOOD ACCESS

GOAL HW-3 Access to healthy, affordable food for all Newark residents.

Policies

- POLICY HW-3.1 Healthy Food Options. Encourage healthy food options in the city, including grocery stores selling fresh produce within 1 mile of all Newark residents.
- POLICY HW-3.2 Farmers Markets. Support the development of farmers markets in the city, and allow such markets to locate on public land where appropriate.
- POLICY HW-3.3 New Grocery Stores. Encourage new grocery stores to locate in those commercial areas nearest to where new housing is planned.

Policy HW-3.4	Community Gardens.	Encourage community gardens where appro	-
	priate.		

- POLICY HW-3.5 Home Gardening. Ensure that zoning or other ordinances regulations do not prevent or restrict the use of private yards for growing vegetables or fruit trees.
- POLICY HW-3.6 School Nutrition. Support efforts by the Newark Unified School District to provide healthier food choices in schools.
- **POLICY HW-3.7** Nutrition Awareness. Encourage community-wide knowledge and awareness of healthy food choices. The City will support efforts by the Alameda County Public Health Department, local non-profits, and other organizations to educate residents on the benefits of a healthy diet and active lifestyle.

ACTIONS

- ACTION HW-3.A Urban Agriculture. Review zoning provisions for urban agriculture and undertake revisions as necessary to remove any identified barriers.
- ACTION HW-3.B New Community Garden. Identify potential sites for new community gardens, including parks and schools.
- ACTION HW-3.C Farm to School. Consider a collaboration with the Newark Unified School District to undertake a "Farm to School" program that connects nearby farms and/or community gardens with local schools to provide fresh produce for school meals.

ACCESS TO HEALTH CARE

GOAL HW-4 Access to affordable health care services and quality medical facilities for all Newark residents.

POLICIES

POLICY HW-4.1 Interagency Collaboration on Health Care Issues. Continue to support health services and facilities provided through Alameda County and regional health care organizations. The City will collaborate with neighboring jurisdictions, Alameda County, private hospitals, and non-profit health care providers to address issues related to emergency and preventative medical services in the City and region.

Policy HW-4.2	New Medical Facilities. Support the development of new medical facilities in Newark, including senior care facilities, health care and dental facilities, and emergency medical and outpatient care facilities.
Policy HW-4.3	Transit Access to Health Care. Work with AC Transit, private transit and para-transit services, and local hospitals to improve access from Newark to nearby hospitals and health care facilities, especially for those who cannot drive or do not have access to a car.
Policy HW-4.4	Public Awareness of Preventive Services. Ensure that the public is aware of preventive health care services available in Newark and nearby cities.
Policy HW-4.5	Co-Location of Health Services. Support the co-location of health care and social services within City and School District facilities.
Policy HW-4.6	Role of Non-Profits and Private Sector. Encourage private, non-profit, and volunteer organizations to provide or subsidize community health services, such as medical care and crisis intervention and treatment.
ACTIONS	
ACTIONS	
Action HW-4.A	Health Care Outreach. Regularly disseminate information about services available at the Newark Health Center and at other Alameda County health facilities. The City's website should be reviewed to ensure that it adequately directs residents to health care services and facilities. Other outreach tools such as cable television, Radio Newark, newsletters, and mobile displays at City events should be used as feasible.
Action HW-4.A	Health Care Outreach. Regularly disseminate information about services available at the Newark Health Center and at other Alameda County health facilities. The City's website should be reviewed to en- sure that it adequately directs residents to health care services and fa- cilities. Other outreach tools such as cable television, Radio Newark, newsletters, and mobile displays at City events should be used as fea- sible. Monitoring Health Care Facility Demand. Work with the Alameda County Public Health Department and local health care providers to monitor demand for additional health care facilities in Newark, includ- ing a hospital or urgent care facility. Plan for expansion of facilities and services as needed.
Action HW-4.A Action HW-4.B	 Health Care Outreach. Regularly disseminate information about services available at the Newark Health Center and at other Alameda County health facilities. The City's website should be reviewed to ensure that it adequately directs residents to health care services and facilities. Other outreach tools such as cable television, Radio Newark, newsletters, and mobile displays at City events should be used as feasible. Monitoring Health Care Facility Demand. Work with the Alameda County Public Health Department and local health care providers to monitor demand for additional health care facilities in Newark, including a hospital or urgent care facility. Plan for expansion of facilities and services as needed. Mental Health and Crisis Counseling. Monitor changing mental health care and crisis-counseling facility needs to determine if additional services are needed and how they can best be provided.
Action HW-4.A Action HW-4.B Action HW-4.C Action HW-4.D	 Health Care Outreach. Regularly disseminate information about services available at the Newark Health Center and at other Alameda County health facilities. The City's website should be reviewed to ensure that it adequately directs residents to health care services and facilities. Other outreach tools such as cable television, Radio Newark, newsletters, and mobile displays at City events should be used as feasible. Monitoring Health Care Facility Demand. Work with the Alameda County Public Health Department and local health care providers to monitor demand for additional health care facilities in Newark, including a hospital or urgent care facility. Plan for expansion of facilities and services as needed. Mental Health and Crisis Counseling. Monitor changing mental health care and crisis-counseling facility needs to determine if additional services are needed and how they can best be provided. Mobile Health Facilities. Explore the development of mobile health care facilities and services for Newark residents.

REDUCING HAZARD EXPOSURE

GOAL HW-5 A land use pattern that minimizes exposure of residents and workers to hazards associated with commercial and industrial uses. POLICIES POLICY HW-5.1 Exposure to Hazardous Materials. Minimize the interface between existing hazardous materials users and adjoining sensitive land uses. This includes actions needed to protect the health of natural systems such as wetlands, as well as residential areas and other sensitive receptors. POLICY HW-5.2 Minimizing Land Use Compatibility Conflicts. Locate future land uses in a manner that limits the potential for residents to come into contact with hazardous materials. This includes locating new residential development away from areas where hazardous materials are present, unless they can be treated or removed to an acceptable level, and locating new industrial development away from established or planned residential uses. POLICY HW-5.3 Remediation. Require remediation of soil and groundwater contamination to a level that is consistent with proposed land uses. All site cleanup shall be coordinated with State and federal regulatory agencies. See the Noise Element for policies on reducing the health effects of noise. ACTIONS ACTION HW-5.A Hazardous Material Monitoring and Inspection. In cooperation with the Certified Unified Program Agency (CUPA), regularly inventory and inspect those buildings and facilities in which hazardous materials spills or accidents would pose a threat to the community, and work with the owners to develop and implement programs to reduce risks associated with these activities.

SOCIAL CAPITAL

GOAL HW-6	A civic culture that promotes meaningful engagement in public affairs and that creates a sense of pride in Newark among all city residents and businesses.		
Policies			
Policy HW-6.1	Participation in Civic Life. Promote the participation of Newark residents, businesses, and organizations in civic life.		
Policy HW-6.2	Volunteerism. Encourage volunteerism and stewardship events that help residents feel more connected to Newark and their neighborhoods.		
Policy HW-6.3	Public Space. Support the use of existing public spaces and create new public spaces where residents can gather for outdoor events (concerts, art fairs, etc.) or to meet and congregate.		
Actions			
Action HW-6.A	Volunteer Program. Maintain a roster of local volunteers and volunteer opportunities that are available for residents.		
Action HW-6.B	Temporary Uses of Unimproved Land. Allow the interim or temporary use of unimproved land such as parking lots or vacant sites for public events, such as community festivals and farmers markets, provided that potential effects on nearby properties and roadways can be mitigated.		

SAFETY THROUGH DESIGN

GOAL HW-7 Safe and secure neighborhoods and public spaces.

Policies

- POLICY HW-7.1
 Eyes on the Street. Design new development to encourage "eyes on the street" and discourage the potential for criminal activity.

 POLICY HW-7.2
 Development Lighting. Require lighting plans for new development that ensures that ensures and packing areas are illuminated in
 - **ICY HW-7.2 Development Lighting.** Require lighting plans for new development that ensures that common spaces and parking areas are illuminated in a way that improves public safety.

POLICY HW-7.3 Sidewalk and Pedestrian Lighting. Improve lighting of sidewalks, pedestrian areas, parks, and public gathering places where safety is a concern.

Actions

- ACTION HW-7.A Development Review for Safety. Incorporate *Crime Prevention Through Environmental Design* principles into project review procedures for new development and major renovation projects. These principles are aimed at improving the safety of building occupants by designing for natural surveillance (windows oriented to the street and entryways), access control (hedges and landscaping to direct movement), territorial reinforcement, graffiti resistance, vandal-proof exterior elements, and shared facilities that provide "eyes on the street" during extended hours of the day.
- ACTION HW-7.B Police and Fire Review of Proposed Development. Involve the Police and Fire Departments in the review of proposed development, and incorporate their recommendations to ensure safer designs.

NEWARK GENERAL PLAN HEALTH AND WELLNESS

COMMUNITY SERVICES AND FACILITIES

INTRODUCTION

Community services include education, law enforcement, fire protection, emergency medical response, senior assistance and childcare, and other administrative services provided by the City of Newark and other agencies. Community facilities include the buildings and infrastructure used to deliver these services, including schools, fire stations, libraries, and municipal buildings. Community facilities also include the utilities necessary to sustain development, including water, sewer, storm drainage, waste management, power, and telecommunications. Although State law does not mandate a specific chapter of the General Plan on these topics, planning for community services and facilities is integral to planning for the future of Newark.

The City of Newark maintains high standards for its community services. Public buildings create a sense of place in the city and contribute to Newark's sense of community. Maintaining quality public facilities as the city grows will require coordinated planning between different service providers, investment in new capital facilities, and an ongoing commitment to maintenance and modernization. The policies in this Element are intended to facilitate these objectives. The Element describes Newark's community services and facilities, reviews identified needs, and sets goals, policies, and actions for the coming years.

The Community Services and Facilities Element also addresses the need to adapt local services in response to changing demographics, technology, and resident preferences. Even in a mature city with slow growth, service needs are constantly evolving. Newark has become more diverse and its senior population is growing rapidly. New technologies are reshaping the way services are delivered. Financing options for capital facilities have become more complex, and fiscal resources continue to be constrained. The General Plan provides a tool to respond to these trends by presenting forecasts, identifying long-range development plans and related capital improvement needs, and establishing policies for managing growth.

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This chapter is organized into five major categories:

- > Administrative and public works facilities
- > Schools and libraries
- > Public safety (police and fire/EMS)
- > Human services (childcare, youth, and seniors)
- Infrastructure

The first part of the chapter profiles each topic area and provides data and forecasts. The second part includes goals, policies, and actions. The policies provide specific, enforceable directives for those services that are provided by the City of Newark, and general guidance for other service providers such as the School District and local utilities.

The location of major community facilities is shown in Figure CSF-1.

ADMINISTRATIVE AND PUBLIC WORKS FACILITIES

The principal administrative and public works facilities in Newark are Newark City Hall and the Newark Service Center. City Hall is located at 37101 Newark Boulevard. It includes the City Council chambers, the Police Department, and the offices of most City departments. At the time City Hall opened in 1966, it was the tallest building in the East Bay between Oakland and San Jose. The eight-story building features 80foot tall stained glass windows and was designed to serve not only as the center of government but as a civic gathering place for Newark.

Although the building was a state-of-the-art civic center when it opened, some of the building systems are now outdated and the space does not fully meet the needs of Newark today. Looking to the future, the City will consider options for modernizing or replacing City Hall with a facility designed to contemporary standards. As noted in the Land Use Element, plans for the Civic Center should consider not only the building itself, but the larger area around it, which includes the Library, Civic Center Park, and nearby properties along Thornton Avenue.

The Service Center is located at 37440 Filbert Street. It contains the City's Maintenance Division, which is responsible for the maintenance and repair of all City buildings, including recreation centers. The Division is also responsible for maintaining City parks, police and fire vehicles, and landscaped medians and rights-



NEWARK GENERAL PLAN COMMUNITY SERVICES AND FACILITIES



Library Fire Stations

Senior Center

FIGURE CSF-I COMMUNITY FACILITIES





of-way. The Service Center corporation yard includes equipment for storm drain maintenance, tree maintenance, weed abatement, and landscaping.

Schools and Libraries

PRIMARY AND SECONDARY SCHOOLS

The Newark Unified School District (NUSD) provides educational services to Newark students. The NUSD operates eight elementary schools (kindergarten through grade 5), two alternative high schools, one junior high, one comprehensive high school, one adult school and one preschool. The location of schools is shown in Figure CSF-1. School policy is set by a five-member elected Board of Education, within parameters established by the State of California.

In 2011-2012, there were 630 staff members, making NUSD one of the largest employers in the city. More than half of NUSD staff are full-time teachers. The student-teacher ratio is 17:1, which is lower than the state average of 21:1, but somewhat higher than the national average of 15.5 students per teacher.

Table CSF-1 shows enrollment levels in Newark's schools between 2006 and 2013. Total enrollment rose slightly between 2007 and 2009 but has been declining since then. In 2006-2007, there were 7,067 enrolled students. In 2012-2013, there were 6,538 enrolled students. Not all schools have experienced the same rate of change, however. The number of students has increased at a few of the elementary schools, and some schools have seen enrollment decline more rapidly than others.

Many of the City's schools were built during the 1960s and 70s when Newark was growing rapidly. School enrollment declined through the 1980s and 90s, although development continued in parts of the city. As a result, the northern part of Newark now has a greater concentration of elementary schools than the southern part and there are a few neighborhoods south of NewPark Mall that are more than one-half mile from the nearest elementary school. A new elementary school is planned as part of the Southwest Newark Residential and Recreational Project (in former "Area 3") to close this gap, while also meeting the demands of new residential growth planned for this area.

NEWARK GENERAL PLAN COMMUNITY SERVICES & FACILITIES

TABLE CSF-1 ENROLLMENT TRENDS	AT NEWARK'S PUE	BLIC SCHOOLS, 20	06-2013				
	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
James Bunker Elementary	562	542	564	572	560	573	536
James Graham Elementary	490	504	515	497	485	456	458
John F. Kennedy Elementary	458	469	478	428	383	396	309
Lincoln Elementary	347	348	382	401	380	387	289
Louis Milani Elementary	432	461	441	404	384	399	544
E.L. Musick Elementary	468	442	432	377	331	319	332
A.L. Schilling Elementary	536	540	550	541	541	583	492
H.A. Snow Elementary	411	427	426	435	400	404	420
Newark Junior High	1,065	1,036	1,044	998	1,047	968	862
Newark Memorial High	2,157	2,223	2,158	2,126	1,945	1,924	1,972
Bridgepoint High School	74	79	100	72	114	99	704
Crossroads Independent	67	31	52	46	62	43	324
Total	7,067	7,102	7,142	6,897	6,632	6,551	6,538

Source: Education Data Partnership, November 27, 2012



Future residential development in Newark will add students, particularly in the Dumbarton Transit-Oriented Development (TOD) and Southwest Newark areas. The NUSD has developed student generation rates to determine the effect of this growth on enrollment and facility needs. In 2012-2013, these rates were 0.416 students per single-family home and 0.133 per multi-family home, for a weighted average total of 0.274 students per unit. The District uses these generation rates to collect impact fees which are used for school construction and modernization. In the 2012-2013 school year, the fees were \$3.20 per square foot for residential construction. Lower fees are collected for commercial and industrial construction.

NUSD's forecasts indicate that with the construction of a new 600-student elementary school on Cherry Street just east of Ohlone College (former "Area 3"), there will be sufficient capacity to meet projected demand at the elementary school level. Elementary school boundary areas may need to be modified over time to more evenly distribute available capacity. The junior high school and high school already have sufficient capacity to meet the projected needs of new residential growth and their service area is citywide.

Continued investment will be required to modernize schools, improve seismic safety, and maintain operational efficiency. Policies later in this chapter provide guidance for the City and the School District to work collaboratively to ensure that quality educational facilities are provided for all Newark students. The policies also call for joint use agreements to improve the synergy between school open space and City parks and expand recreational opportunities for Newark residents. The City will also continue to work with the School District to address physical planning issues such as the safety of students walking to and from school, traffic and parking issues around campuses, and compatibility with nearby uses.

Newark's public schools also provide non-traditional learning environments, including the MacGregor Alternative Education Center. The Center provides an option for students who lack the credits to graduate or who seek an independent learning environment or life skills training. In addition, the Newark Adult School provides continuing education programs, including English as a Second Language, high school equivalency exam preparation, and arts-based classes.

POST-SECONDARY SCHOOLS

Newark is part of the Ohlone Community College District. The District serves 18,000 students at its campuses in Newark and Fremont, with the main campus located in the Mission San Jose district of Fremont. The 130,000-square-foot Newark Campus opened on Cherry Street in January 2008, with a focus on health sciences and technology programs. The Campus is a LEED-Platinum building and the building itself is used by the college as a teaching resource for the environmental sciences.

In 2003, the District adopted a Master Plan for the Newark campus. The Plan was affirmed in the 2012 District Facilities Master Plan which covers both the Fremont and Newark campuses. At this time only 27 acres of the 83-acre site have been developed. The Master Plan calls for eventual development of the southern half of the property, following soil remediation and future planning studies. More immediate recommendations for the Newark Campus include provision of additional parking, development of a photo-voltaic solar array, construction of a maintenance building, and better pedestrian linkages to adjoining properties.



LIBRARIES

The Newark Library is located at 6300 Civic Terrace Avenue in the Newark Civic Center. It is a branch of the Alameda County Library system, which serves over 523,000 persons in five cities and the County's unincorporated areas. The 15,000-square-foot Newark Library was designed to incorporate special areas for pre-schoolers, school age children, teens, adults, and older adults. It contains a community meeting room, a conference room, four small individual study rooms, and Wi-Fi access. The library contains over 81,000 items, including books, magazines, newspapers, DVDs, CDs, and books on CD.

Newark's public library is an important community institution and provides a place for study, self-improvement, leisure, and life-long learning. It offers educational and cultural programs for persons of all ages. However, the existing facility is over 30 years old and lacks some of the features found in a modern, state-of-the art library. The ratio of collection items per capita was 1.88 in FY 2011/12, which was below the Countywide average of 2.11. A larger building, designed to incorporate current information and reference technology, would be beneficial to serve Newark's growing population and workforce. The City will work with Alameda County and its non-profit fund-raising partners in the coming years to explore funding options for a new facility or modernization effort.







HUMAN SERVICES

Newark provides an array of human services to its residents, including childcare, youth and teen activities, and senior services. These services are supplemented by local non-profit and private enterprises. The City coordinates with these enterprises to close gaps, eliminate redundancy, and provide funding assistance to maximize benefits to Newark residents.

CHILDCARE

Childcare programs assist working parents and provide socialization and early childhood education for Newark's youngest residents. The 2010 Census indicated that there were 3,142 residents under age 5, and another 2,929 residents between ages 5 and 9. Together these groups represent over 14 percent of Newark's population. In many Newark households, both parents are employed, which leads to a need for childcare facilities. There are also over 1,000 single parent households with one or more children under 18. Affordable childcare provides an important benefit to these households and can provide the flexibility needed to find and maintain a decent job.

The City of Newark has operated a full time State-licensed childcare program for over 20 years. The program operates from the Newark Community Center and serves 3-to 5-year-olds. Its curriculum offers individual and group activities, including kindergarten preparedness, art, science, computers, music, and playtime. Pre-school activities are also provided at the Silliman Recreation Center. In addition, the Newark Unified School District operates the June Whiteford Pre-School on the MacGregor School campus. The Pre-School enrolls 67 students and has a speech therapist, a psychologist, and a district nurse on staff. Other childcare resources include a Head Start Center adjacent to Ash Street Park.

There are also private day care providers in the City. For example, Challenger School has a private pre-K program. Newark has a number of Montessori schools and several local churches include on-site childcare centers. There are also 17 home-based childcare centers, most subject to size limits that are established by State law. The City's zoning regulations allow small family day care centers (typically with fewer than 8 children) as a permitted use in residential areas. Large family day care centers (typically with 8 to 14 children) are conditionally permitted in most locations.
General Plan policies express Newark's commitment to maintaining quality, licensed childcare facilities in the city. This will include a combination of public facilities and private facilities, meeting the needs of persons of all incomes and backgrounds. The City also supports the inclusion of childcare centers in new workplaces, and will continue to provide zoning incentives for incorporating such centers in new development.

YOUTH AND TEEN SERVICES

Approximately 5,800 Newark residents are between the ages of 10 and 19. The City seeks to provide a safe, positive environment for youth which connects them with peers and adult leaders and promotes personal growth and responsibility. Youth activities are provided through the Recreation and Community Services Department, and through partner agencies such as the Newark Unified School District. The Silliman Center has a Teen Area which includes ping pong and pool tables, games, recreation equipment, and a social lounge. Programs include SAT Preparation classes, dances, drivers education, and field trips.



SENIOR SERVICES

Newark's Senior Center is located at 7401 Enterprise Drive. The Center offers programs and services for residents over 55, including transportation assistance, computer training, lunch, and health and fitness activities. The Recreation and Community Services Department provides classes and activities for seniors, and also offers programs such as tax preparation assistance and health insurance counseling. The City organizes senior trips and outings to destinations and performances around Northern California.

In 2013, there was one affordable senior housing development in Newark. The 200unit Newark Gardens development is located on Cedar Boulevard in the Four Corners area. The complex is operated by Satellite Housing, Inc. and its apartments are reserved for low- and very-low-income residents who are 62 or older. There are also private assisted living and congregate care facilities serving senior Newark residents. Additional services are provided through the Tri-City Elder Coalition, an advocacy group including service providers, faith groups, hospitals, long-term care facilities, and businesses in Newark, Fremont, and Union City.

There are more than 4,500 Newark residents over age 65 and this number is expected to increase dramatically in the next two decades. The City has a Senior





Commission to advise the City Council on matters pertaining to senior services, including the need to respond to a growing and increasingly diverse senior population. General Plan policies encourage the City to work proactively to respond to the growing demand for senior services, particularly in housing, transportation, and health care facilities.

PUBLIC SAFETY

NEWARK POLICE DEPARTMENT

The Newark Police Department (NPD) provides law enforcement services to the City of Newark from its headquarters in the Civic Center complex at 37101 Newark Boulevard. In 2013, the City had authorized 55 sworn staff, including one Police Chief, three Commanders, eight Sergeants, and 43 Police Officers. Additionally, the NPD staff includes 21 Non-sworn civilian positions.

The NPD runs three Divisions: Administrative Services, Field Operations and Support Services. The Administrative Services Division is responsible for Records, Communications, Detectives, Property and Evidence, Internal Affairs, and Personnel and Training. Field Operations is the largest of the three divisions. It includes Patrol, K9, Traffic, Animal Control, and Vehicle Abatement. The Support Services Division oversees the Special Enforcement Team, School Resource Officer, Southern Alameda County Major Crimes Task Force Detectives, Honor Guard, SWAT, Hostage Negotiation, and Emergency Preparedness.

City and FBI crime reports indicate that crime rates in Newark are comparable to those in most of Southwest Alameda County. In 2010, the FBI reported 4.4 incidents of violent crime per 1,000 residents, including murder, rape, robbery, and assault. This compared to rates of 4.4 per 1,000 in Union City and San Leandro, 4.5 in Hayward, and 2.4 in Fremont. FBI data further indicated 33.9 incidents of property crime per 1,000 residents in Newark in 2010, including burglary, larceny, arson, and auto theft. This compared to 24.7 per 1,000 in Union City, 21.5 in Fremont, 26.0 in Hayward, and 40.0 in San Leandro. In general, property crime trended downward between 2004 and 2011, with auto theft showing the greatest decline.

Crime prevention and response will continue to be an important issue in Newark in the future. During General Plan workshops in 2012, residents expressed specific concerns about gang activity and graffiti. The NPD has developed community policing programs to address these concerns, including Business and Neighborhood Watch Programs, and School Resource Officers at the High School and Junior High. The Department also offers a free Citizen Police Academy to teach residents about day-to-day law enforcement and crime prevention operations.

In 2010, the Police Department developed a Strategic Plan to express the NPD's core values and manage the workload over the next five years. The Strategic Plan addresses the integration of technology into Department activities, improved communication capacity, and the need for upgrades to Police buildings and the vehicle fleet. In the long run, the Department anticipates the need for new, modernized space, which would likely be included as a component of a new City Hall complex. Relocation of the Police shooting range also will be required, since the existing site is planned for new uses in the future.

Police Department personnel are involved in the development review process. This helps ensure that crime prevention and emergency access considerations are considered in site planning and building design. In addition, new construction is subject to development impact fees which partially defray the cost of expanding facilities and acquiring equipment to accommodate increases in population.



FIRE AND EMERGENCY MEDICAL SERVICES

The Alameda County Fire Department (ACFD) provides fire protection services to approximately 508 square miles in Alameda County, including Dublin, Newark, San Leandro, Union City, and the unincorporated areas. ACFD responds to structure fires, wildland fires, auto fires and extrications, medical emergencies, special rescues, and natural disasters. The Department also provides public education and disaster preparedness training. ACFD is organized into three major divisions: Operations, Administration, and Fire, Life, and Environmental Protection (FLEP).

There are three fire stations serving Newark:

- ACFD Station 27 is located at 39039 Cherry Street. Station 27 was built in 1981 and is home to a crew of three firefighters that staff one fire engine.
- ACFD Station 28 is located at 7550 Thornton Avenue. Station 28 is Newark's newest and largest fire station. It opened in 2005 and is approximately 13,500 square feet. This station is maintained by a crew of three firefighters that staff a Quint (a piece of fire apparatus that combines the features of a ladder truck and a fire engine) and one Battalion Chief.



NEWARK GENERAL PLAN COMMUNITY SERVICES AND FACILITIES



 ACFD Station 29 is located at 35775 Ruschin Drive. The Station was built in 1962 and is staffed by a crew of three firefighters and one fire engine.

The ACFD has allocated nine captains, nine engineers, nine firefighters, one deputy fire marshal, and one code compliance officer to the City of Newark. Newark is also responsible for a portion of positions that are shared by the Department at-large, including fire chief, deputy fire chiefs, division chiefs, battalion chiefs and administrative staff. The daily minimum staffing is 3 captains, 3 engineers, and 3 firefighters. There are also at least 9 paramedics and 18 emergency medical technicians assigned to the City of Newark at any given time. This capacity is provided by the captains, engineers, and firefighters listed above.

During the 2010-11 Fiscal Year, the Newark Fire Department responded to 2,952 calls, of which 2,000 were emergency medical service calls. The Department has adopted an average response time goal of five minutes or less for 90 percent of the calls for the first responding unit, and 10 minutes or less for 90 percent of the remaining units responding to a first alarm assignment.

ACFD includes a Fire Prevention Branch which reviews building and facility plans. Fire Prevention personnel also inspect completed work to ensure that new and remodeled buildings and facilities meet State and local fire codes and standards. New development is required to meet Fire Code requirements, including those related to interior sprinklers, water flow and hydrant requirements, and the design of driveways and access points to ensure adequate access for responding vehicles. The City collects a Capital Facilities Fee on new development to cover a portion of the cost associated with expanding facilities and acquiring new equipment.

Additional information on emergency preparedness and response may be found in the Environmental Hazards Element of the General Plan.

INFRASTRUCTURE

WATER

Water is supplied and distributed to Newark customers by the Alameda County Water District (ACWD). ACWD serves over 330,000 residents in a 104.8 square mile area that includes Fremont, Newark, and Union City. Average daily water delivery in 2011-12 was 43 million gallons per day, with a maximum day production of 64.1 million gallons.

The District's primary water sources include the State Water Project (SWP), the San Francisco Regional Water System (RWS), and local sources. The SWP provides approximately 40 percent of ACWD's supply through a statewide water storage and delivery system that includes 28 reservoirs and 660 miles of aqueducts across Northern and Central California. The RWS provides approximately 20 percent of the supply, primarily from the Sierra Nevada via the Hetch Hetchy Aqueduct. ACWD has a 25-year agreement with the San Francisco Public Utilities Commission to access this supply. The remaining 40 percent of the District's water comes from local sources, including groundwater from the Niles Cone Groundwater Basin, desalinated brackish groundwater, and surface water from Del Valle Reservoir.



Prior to delivery, water is treated at four District facilities. There are two water treatment plants that treat water from the SWP, both located in Fremont. There is also a desalination facility in Newark that treats brackish water from the aquifer with reverse osmosis to remove salts and other impurities. In addition, ACWD operates a blending facility which combines Hetch Hetchy water with local groundwater to provide a supply with lower hardness values. Treatment and distribution capacity of the water treatment plants is approximately 89.5 million gallons per day. The treated water meets or surpasses all state and federal drinking water standards.

Water is distributed to customers throughout the ACWD service area via 12 reservoirs and tanks and 825 miles of pipelines. Systemwide, approximately 70.4 percent of the water consumed was used by residential customers, about 14.1 percent was used by business customers, and about 8.8 percent was used by industry. Miscellaneous users accounted for the remaining 6.7 percent.

Since 1983, most urban water suppliers in California have been required to prepare and adopt Urban Water Management Plans (UWMPs). By law, the Plan must include measures to ensure a sufficient water supply to meet projected growth over a 20year period. The Plan must also establish water conservation and efficiency goals. UWMPs are required to consider potential water sources during dry weather years, and opportunities for reclaimed water use from wastewater plants to offset growth in potable water demand. More recently, UWMPs must also include strategies to reduce per capita water use by 20 percent by 2020, consistent with state legislation passed in 2009.

NEWARK GENERAL PLAN COMMUNITY SERVICES AND FACILITIES



The ACWD updated and adopted its UWMP in 2011 for the period from 2010 through 2015. At that time, the District's annual water delivery was approximately 50,000 acre feet per year (AFY). The UWMP projected that by 2035, demand would increase to 72,800 acre-feet-per year (AFY) under normal weather conditions. Total projected water capacity by 2035 was projected to be 78,300 acre-feet per year (AFY), indicating that there would be sufficient supply to meet demand in normal rainfall years.

The ACWD forecasts indicate that future shortages may be experienced during dry periods. Under single dry year conditions in 2035, demand could exceed supply by up to 10 percent. In such cases, the District would secure additional supplies through a California Department of Water Resources (DWR) drought water bank or a similar water purchase/transfer program. In a multi-year dry period, the District would implement drought contingency plans, which include measures to reduce demand by up to 50 percent. Despite these plans, a number of uncertainties affect future water supply, including the effects of climate change, limitations related to fishery restoration, competing demands for groundwater from other water districts, and ongoing concerns about the health of the Delta and reliability of the SWP supply.

ACWD adopted a 25-year Capital Improvement Program (CIP) in 2011, building on the recommendations of the UWMP and other water-related studies. The CIP includes a schedule and costs for 117 planned projects, including water main replacement and pipeline relocation. Older portions of the distribution system are more likely to require upgrades to meet new water service and fire flow requirements than newer sections.

Additional improvements and line extensions will be needed to serve new development. Impact fees provide an important funding source for such improvements. New ACWD customers are required to pay fees for water system extensions, capacity increases, new hydrants, and other system components required to serve new development.

ACWD's long term plans also include provisions for the development of a recycled water system. Although implementation of such a project may be at least 10 years away, the District currently requires that large new developments install separate distribution systems for potable water and reclaimed water, and agree to accept recycled water for landscape irrigation in the future. The use of low-flow plumbing

fixtures, high efficiency washers and dishwashers, drought tolerant, native plant materials, and automatic irrigation systems will also reduce potable water consumption in new development. The City of Newark also has adopted a Green Ordinance, with bay friendly landscaping requirements designed to reduce water use.

Sewer

The Union Sanitary District (USD) provides wastewater collection, treatment, and disposal services to residents and businesses in Newark, Fremont, and Union City. The USD serves an area of approximately 60.2 square miles, with a population of approximately 331,000. The District is a member of East Bay Dischargers Authority (EBDA), a Joint Powers Agency, which also includes the cities of Hayward and San Leandro, and the Oro Loma and Castro Valley Sanitary Districts. EBDA was formed to collectively manage wastewater treatment and disposal from these five agencies.

The USD owns and maintains over 783 miles of sanitary sewer pipelines, four lift stations, three major pump stations, and 13 miles of dual force mains that transport wastewater to the Alvarado Wastewater Treatment Plant (AWWTP) in Union City. Newark's wastewater is collected and conveyed by gravity sewers to the Newark Pump Station and is then pumped to the AWWTP. Once wastewater is treated at the plant, it is transported to EBDA's system for final dechlorination and is then discharged to San Francisco Bay via an outfall pipe in San Leandro.

The USD completed an \$11 million expansion project at the Newark Pump Station in 2010, which will accommodate increases in flow rates for the foreseeable future. Long-term plans call for a wastewater detention facility adjacent to the Pump Station. The USD is also planning to eventually add a third force main between the Pump Station and the treatment plant.

The treatment plant itself has the permitted capacity to treat an average dry weather flow of up to 33 MGD. It is currently treating 24 MGD. The discharge permit allows the limit to be increased to 38 MGD upon the development of planned new facilities, completion of an Effluent Characterization Study and Report, and approval by the Executive Officer.

Wastewater discharges are governed by a number of clean water regulations, including the federal Clean Water Act and the National Pollutant Discharge



Elimination System (NPDES) permit program. The State of California has also taken steps to ensure that wastewater systems minimize adverse impacts on water quality. Sewer system operators are required to prepare Sewer System Management Plans to reduce sewage overflows and prevent sanitary sewer waste from entering the storm drainage system. Various water quality responsibilities are also delegated to the San Francisco Bay Regional Water Quality Control Board, including monitoring and inspection of wastewater discharges. In addition, the USD has adopted ordinances which set discharge requirements for commercial and industrial customers.

The Sanitary District has prepared a Master Plan for the Newark Basin which includes 20-year demand projections and a capital improvement program for the central part of its service area, including Newark. Based on the growth projected by this General Plan and the General Plans of Fremont and Union City, there will be sufficient future capacity to treat wastewater from Newark customers. However, continued investment will be required to replace aging sewer collection lines. New sewer lines will also be required to serve new development areas such as the Dumbarton TOD and the Southwest Newark Residential and Recreational Project (former Areas 3 and 4). Both the USD and the City of Newark collect development fees to cover costs associated with such improvements.

STORM DRAINAGE

Storm drainage in Newark is jointly managed by the Newark Public Works Department and the Alameda County Flood Control and Water Conservation District (ACFC). ACFC is responsible for planning, constructing, and maintaining flood control channels and culverts, while the Public Works Department is responsible for monitoring and maintaining street gutters and storm drain inlets. ACFC was formed in 1949 to respond to the rapid development that was taking place in southwestern Alameda County at the time. The District has divided its service area into nine zones. Newark is located in Zone 5, which covers 71 square miles and includes 37 miles of natural waterways. Zone 5 includes several watersheds (see Figure EH-1 in the Environmental Hazards Element)

Stormwater is carried through City storm drain pipes to five ACFC flood control channels:

The C and D Lines pass under the Nimitz Freeway near NewPark Mall, into an underground culvert under Balentine Drive, and then become an open channel near Memorial High School.



- The B Line is an open channel that crosses beneath Cedar Boulevard just north of Moores Avenue and passes under Birch and Cherry Streets before running parallel to Smith Avenue.
- The F Line is an open channel that passes under Cedar Boulevard north of Central Avenue, turns north after crossing under Newark Boulevard, and then follows the railroad tracks, widening into Plummer Creek. This line was expanded in 2008 to increase its capacity.
- The I Line enters the city as an underground culvert near Thornton and I-880 and becomes an open channel west of Cherry Street near Mayhews Landing Road. It becomes the Newark Slough as it approaches the bay.
- The H Line drains the Lake and Rosemont areas and emerges as an open channel west of Haley Street. It passes beneath Spruce Street before entering marshland on the east side of Thornton Avenue near Jarvis.

ACFC manages two pumping stations which discharge stormwater into the Bay during high tides. The J-2 pumping station has a capacity of 107,712 gallons per minute (GPM) and the J-3 pumping station has a capacity of 45,920 GPM. A holding pond provides additional flood control by receiving overflow water from Alameda Creek. Natural creeks, including Crandall, Dry, and Plummer Creeks and Newark and Mowry Sloughs, are also an important part of the drainage system.

Improvements to Lines H and D have been included in ACFC's capital improvement program and are scheduled for construction in 2016 or 2017. In addition, ACFC is planning to complete a Drainage Master Plan Study in 2014, which may result in additional capital projects. The capital projects are intended to address existing deficiencies and accommodate the needs of future development. ACFC is currently developing a Hydrology and Hydraulics Manual to provide flood control guidance for new development.

New development is subject to regulations and standards which ensure that drainage needs are met. This includes requirements for stormwater management plans and stormwater pollution prevention plans. It also includes compliance with best management practices to reduce construction impacts and control soil erosion and sedimentation. Newark is covered by a Municipal Regional Stormwater NPDES permit issued in 2009 that requires stormwater controls, along with street sweeping programs, storm drain cleanouts, and other activities to reduce polluted runoff. Local

developers and builders have also been provided with guidelines for low impact development, consistent with the Alameda Countywide Clean Water Program. Stormwater controls are also codified as part of the Newark Municipal Code.

One of the basic principles of Alameda County's stormwater management program is to minimize increases in runoff as development takes place. This provides the dual benefit of reducing downstream flooding while minimizing water quality impacts associated with fertilizers, pesticides, trash, oil, grease, and other pollutants. Stormwater retention can be achieved through measures such as on-site detention ponds, rain gardens and cisterns, pervious pavement, green roofs, and other measures which reduce runoff rates and volumes. The Newark Public Works Department will continue to work closely with ACFC in the future to implement General Plan policies calling for such features on new development sites. The City also will ensure that storm drain systems are maintained to reduce ponding and flooding, and to ensure adequate capacity in the storm drain and flood control systems.

The Environmental Hazards Element of the General Plan may be consulted for additional information on flooding and water quality issues.



WASTE MANAGEMENT

The City of Newark oversees a franchise agreement that provides for solid waste and recycling services. In June 2013, the City shifted these services from Waste Management of Alameda County to Allied Waste, a division of Republic Services. Newark customers are provided with color-coded bins for garbage, yard waste, and recyclables. Under the agreement with Republic, waste from these bins is transported to the Fremont Recycling and Transfer station on Boyce Road.

At the Recycling and Transfer Station, recyclables are sorted into different groupings and then consolidated for efficient transport to processing facilities. Recyclables include mixed paper, cardboard, metal, glass, and plastic. Recovery operations at the Fremont facility also include household hazardous waste collection, construction and demolition separating and pre-processing, and wood and green waste consolidation. The Transfer Station opened in 2006 and is currently operating at about 50 percent of its capacity. As noted in the Conservation and Sustainability Element of the General Plan, Newark is diverting approximately 72 percent of its waste from landfills through recycling, composting, source reduction, and other measures. The diversion rate has increased significantly in the past 16 years—it was just 27 percent in 1995.

Non-recyclable waste is transported to the 2,300-acre Altamont Landfill east of Livermore for disposal. The landfill currently receives about 7,000 tons of waste per day and is permitted to receive up to 11,150 tons per day. About 2 percent of the waste stream entering the landfill originates in Newark. The Altamont Landfill had 54.7 million cubic yards of capacity remaining in 2008. Based on remaining capacity and projected volumes, the landfill operators estimate its closure date to be 2040.

Continued efforts will be made to divert solid waste from landfills in the future. Alameda County and its 14 cities have set a waste diversion target of 75 percent and will implement additional programs to reach this goal. Construction and demolition debris recycling is already required, and expansion of green waste programs and commercial recycling programs is underway.

The Conservation and Sustainability Element may be consulted for additional information on solid waste management and recycling.

ENERGY AND TELECOMMUNICATIONS

Newark receives natural gas and electricity from Pacific Gas and Electric Company (PG&E). PG&E has a service area of 70,000 square miles in Northern California and serves over 15 million people. Natural gas is provided through a network of underground pipelines and distribution mains originating from sources across North America. Electricity is generated by natural gas, nuclear energy, hydroelectricity, coal, and renewable sources such as wind, solar, and geothermal energy. Power is also purchased from independent producers and out of state suppliers. Because electric power generation is a major source of greenhouse gas emissions, a number of initiatives are underway to increase the share of energy generated from renewable sources.

A grid of high voltage transmission lines is used to transport power around the state. Power is stepped down to lower voltages at substations in Fremont and Union City and is fed into a distribution system serving neighborhoods and business districts across the area. The City of Newark works with PG&E to coordinate the provision of



gas and electric service to new development, ensure the safety of the gas and electric distribution system, and respond to interruptions in power during and after emergencies.

A number of private cable and telecommunication companies provide services to Newark residents and businesses. These services are subject to City franchise fees and utility user taxes, providing an important local revenue source. Cable and telecommunication services are vital to the quality of life in Newark, and are essential to maintaining a competitive business environment. In the future, Newark will strive to continue providing the infrastructure needed for the rapid processing of data and information, including fiber optic cabling, cell sites, and wireless facilities. The City will also maintain land use regulations for wireless equipment, cell towers, antennae, and other telecommunication apparatus that ensure that such facilities are compatible with surrounding uses and address local aesthetic concerns and other issues.

GOALS, POLICIES, AND ACTIONS

COMMUNITY SERVICES

GOAL CSF-1	Maintain community services and civic facilities that are readily accessible and respond to the needs of all Newark residents.
Policies	
Policy CSF-1.1	Planning for Public Facilities. Plan for adequate public facilities to meet Newark's current and future needs, based on demographic forecasts, fiscal and budgetary conditions, and adopted standards for municipal facilities and services.
Policy CSF-1.2	Contracting with Non-Municipal Agencies. Contract with other public agencies to provide community facilities and services when it is financially infeasible or inefficient for the City to provide these services. In addition, work with developers and community-based organizations to provide facilities and services that benefit Newark residents.
Policy CSF-1.3	Responding to Changing Needs. Ensure that community services respond to the changing demographics of Newark residents and businesses.

- POLICY CSF-1.4 Preventive Maintenance. Utilize and promote preventive maintenance practices which enhance the useful life of public facilities.
- **POLICY CSF-1.5 Civic Buildings.** Maintain safe, high-quality City administrative and public works facilities which meet existing and projected needs, utilize modern technology, and convey a positive image of the City.
- **POLICY CSF-1.6** Library. Ensure that the Newark Public Library continues to offer the services, facilities, and technology needed by Newark residents at the hours desired.

This should include computer facilities, internet access, and meeting space, as well as books and media.

POLICY CSF-1.7 Arts and Culture. Recognize the value of arts and culture to Newark's identity, economic development, and quality of life. The City supports the development of facilities for live performances, culture, and recreation.

Actions

- Action CSF-1.A New City Hall. Plan for the eventual construction of a new Civic Center, including new City offices, a new public library, and new public meeting facilities. Explore the possibility of co-locating School District offices in the same complex, enabling joint use of meeting facilities.
- Action CSF-1.B Performing Arts and Cultural Center. Explore the feasibility of developing a performing arts and cultural center. In the event it is infeasible for the City to develop such a facility, consider a joint effort with the private sector or a nearby city.
- Action CSF-1.C Cultural Programs. Support cultural programs such as the concerts in the Shirley Sisk Eucalyptus Grove and the Music Appreciation Program.
- Action CSF-1.D Access to School District Facilities. Work with the Newark Unified School District to use the theater at the high school and other multi-use facilities for music, dance, and other programs.
- Action CSF-1.E Demographic Forecasts. Use demographic data and forecasts published by regional, state, and federal agencies to evaluate community service needs and plan for future improvements.

Action CSF-1.F Community Input on Public Facilities. Conduct periodic community workshops or surveys to evaluate the demand for different services and facilities.

EDUCATIONAL FACILITIES

GOAL CSF-2	Provide excellent schools that deliver high-quality educational services to Newark students while serving as neighborhood centers and fostering civic pride.
Policies	
Policy CSF-2.1	Planning for School Facilities. Support the Newark Unified School District's efforts to modernize existing school facilities and develop new facilities to meet enrollment forecasts.
Policy CSF-2.2	Mitigation of School Impacts. When new residential development is approved, require mitigation of school impacts to the full extent permitted by law. Work collaboratively with the Newark Unified School Districts to ensure that appropriate fees are collected and other appropriate mitigation measures are taken.
Policy CSF-2.3	Promoting Neighborhood Schools. Encourage the School District to manage its assets and service area boundaries in a way that maximizes the concept of neighborhood schools, and ensures that schools as accessible as possible to local residents.
Policy CSF-2.4	Co-Location of Community Services and Schools. Encourage the co-location of community facilities with schools, so that multiple services may be delivered from a single location.
Policy CSF-2.5	Joint Use of Parks and Schools. Locate public schools and neighborhood parks adjacent to each other, so that recreational facilities may serve student and non-student residents to the greatest extent possible. Joint use agreements can allow City parks to be available to schools during school hours and school facilities to be available to the public in non-school hours.
Policy CSF-2.6	Ohlone College. Continue to encourage a collaborative relationship with Ohlone College which promotes lifelong learning and benefits for Newark residents.

The City will continue to work with the Ohlone College District on future updates of its Facilities Master Plan. Opportunities to provide additional educational and recreational facilities serving Newark are strongly encouraged.

POLICY CSF-2.7 Vocational and Technical Schools. Encourage vocational and technical schools and adult education facilities. which improve job opportunities and readiness for Newark residents.

See the Economic Development Element for additional policies on schools and workforce development.

Actions

- Action CSF-2.A School District Review of Development Projects. Engage the school district in the review of major development projects to ensure that school impacts are considered and adequate school facilities are available or will be provided concurrently with development.
- Action CSF-2.B Coordinating Long-Range Planning. Coordinate with the Newark Unified School District on enrollment projections and facility planning efforts.
- Action CSF-2.C New Elementary School. Work with the Newark Unified School District and the developers of the Southwest Newark Residential and Recreational Project (Area 3 and 4 Project) to facilitate development of a new elementary school in the vicinity of Cherry Street and Stevenson Avenue.
- Action CSF-2.D School Maintenance Facilities. Work collaboratively with the School District on the location and design of public works maintenance facilities, and consider alternative ways to use such space more efficiently.

Services for Residents with Special Needs

GOAL CSF-3 Expand services for Newark residents with special needs, especially children and seniors.

Policies

- POLICY CSF-3.1 Childcare Facility Development. Encourage the development of reasonably priced childcare facilities and services in a variety of settings to meet the needs of Newark residents and employees. Ensure compliance with all State regulations for permitting small and large family day care facilities.
- POLICY CSF-3.2 Childcare and the Faith Community. Encourage local churches and religious institutions to provide child and elder care services and facilities.
- POLICY CSF-3.3 After School Programs. Support the continued provision of after school programs and services at Newark public schools.
- POLICY CSF-3.4 Information on Childcare Resources. Work with childcare advocacy groups and service providers to provide additional information to the community about childcare facilities and resources in Newark.
- **POLICY CSF-3.5** Youth Services. Create a safe, positive environment for youth in Newark by providing recreation programs and facilities oriented to teens and pre-teens, encouraging internship and mentorship programs, and soliciting youth involvement and input in civic affairs.
- POLICY CSF-3.6 Senior Services. Extend facilities and services for Newark's senior population as the number of residents over age 65 increases.

The City will continue to provide a senior center with programs, services, and facilities serving the needs of residents over 65. Opportunities for a new, larger center will be considered.

POLICY CSF-3.7 Disabled Services. Provide services which meet the needs of Newark residents with disabilities. Ensure compliance with the Americans with Disabilities Act and ensure that reasonable accommodation is provided to recognize the special needs of disabled residents.

Actions

Action CSF-3.A Incentives for Childcare Facilities. Provide incentives to residential and non-residential developers to provide space for childcare facilities in new development. State law includes density bonus incentives for projects which include childcare facilities. These are codified in Newark's zoning regulations. In addition, the City will work with local employers to determine the possibility of providing on-site day care facilities, or contributing to the provision of day care services nearby.

- Action CSF-3.B Senior Volunteer Program. Continue the senior volunteer program which provides services to Newark's elderly residents.
- Action CSF-3.C Paratransit. Continue paratransit services for elderly and physically disabled Newark residents.

PUBLIC SAFETY

GOAL CSF-4	Provide responsive police, fire, and emergency medical services that ensure the safety of residents, employers, and visitors.
Policies	
Policy CSF-4.1	Police Services. Maintain professional, efficient, effective Police Department activities which promote a high level of public safety.
Policy CSF-4.2	Emergency Medical Services. Ensure the provision of high-quality emergency medical response services, including paramedics and emergency medical technicians.
Policy CSF-4.3	Animal Control Services. Maintain adequate animal control services for Newark.
Policy CSF-4.4	Fire Prevention and Response Services. Ensure the provision of fire prevention and response services which minimize fire risks and protect life and property.
Policy CSF-4.5	Mutual Aid Agreements. Support mutual aid agreements that allow for supplemental aid from other police and fire departments in the event of a major fire and which dispatch fire fighters from Newark to other communities in the event of major fires outside the city.
Policy CSF-4.6	Improving Fire Safety. Identify and take action to make buildings fire- safe including, where appropriate, requirements for sprinkler systems, non-combustible materials, and early warning systems.

POLICY CSF-4.7

commercial, public, and multi-family buildings to ensure that fire code violations are identified and corrected. Reducing Urban Fire Risks. Reduce the risk of urban and grassland POLICY CSF-4.8 fires by enforcing the fire code, abating weed problems along railroads and on vacant lots, and controlling access into open space areas with high fire risk. The City will continue to enforce weed abatement laws, litter and dumping laws, and other regulations aimed at eliminating blight and reducing fire and health hazards. **ACTIONS** Action CSF-4.A Police Department Strategic Plan. Prepare and periodically update a Police Department Strategic Plan which lays out the Department's priorities, and identifies strategies for technology, communication, training, and performance management, and plans for resources adequate to meet the need for police protection services in Newark. Action CSF-4.B **Community Engagement.** Maintain community engagement initiatives to combat crime through neighborhood watch and business watch efforts. Action CSF-4.C Using Crime Data. Use crime statistics and data on criminal activity to establish priorities and develop effective crime prevention and response programs. Action CSF-4.D Police Department Review of Development. Engage the Police Department in the review of major new development plans to ensure that projects are designed to minimize the potential for criminal activity and maximize the potential for responsive police services. Action CSF-4.E Crime Prevention Strategies. Actively participate in regional efforts to reduce gang activity, violence, graffiti, and other antisocial or criminal behavior. See the Health Element for policies on the design of new development to reduce crime and enhance personal safety.

Fire Inspections. Maintain an inspection program for industrial,

- Action CSF-4.F Improving Fire Response Capacity. Ensure the provision of sufficient facilities and additional fire personnel, to respond to the demand created by new development.
- Action CSF-4.G Collaboration with ACFD. Work collaboratively with the Alameda County Fire Department to track monthly call frequency, type, and response time. As needed, review and refine the agreement with ACFD to ensure that local needs are met.
- Action CSF-4.H Fire Department Review of Major Development. Engage fire personnel in the review of proposed development to identify necessary fire prevention and risk reduction measures. Fire Department input should also be solicited to ensure that water supplies will be sufficient to meet fire-fighting needs, appropriate building materials are used, and provisions for emergency access are included.

INFRASTRUCTURE

GOAL CSF-5 Provide safe, reliable, and efficiently operated infrastructure which meets Newark's long-term water, sewer, and stormwater management needs.

POLICIES

POLICY CSF-5.1 Water Supply. Work with the Alameda County Water District to ensure a stable supply of clean, safe drinking water for existing and future development in Newark.

The City of Newark will support the Alameda County Water District in its efforts to develop water management plans, acquire water for future development, ensure that the potable water supply meets all state and federal quality standards, and develop water infrastructure to serve new development areas.

POLICY CSF-5.2 Sanitary Sewer. Work with the Union Sanitary District to ensure that the sewer system is expanded to serve Newark's new development areas, existing facilities are regularly maintained, sufficient wastewater capacity is provided to meet projected growth, and wastewater effluent is treated to meet all state and federal standards.

- POLICY CSF-5.3 Reclaimed and/or Non-Potable Water. Continue to work with the Alameda County Water District (ACWD) and the Union Sanitary District (USD) in the development of a reclaimed water program. The use of reclaimed or non-potable water sources should be encouraged in order to reduce the use of domestic water for landscaping and other non-potable uses.
- POLICY CSF-5.4 Flood Control. Coordinate with Alameda County Flood Control and Water Conservation District (ACFCWCD) and Alameda County Public Works to ensure that stormwater runoff is managed in a way that reduces flood hazards.
- POLICY CSF-5.5 Drainage within New Development. Ensure that new development provides drainage and flood protection improvements which reduce on-site and downstream hazards such as ponding, flooding, and erosion. New development areas should be designed to minimize impervious surfaces in order to reduce associated site runoff and maximize groundwater recharge.

Green Infrastructure. Encourage sustainable, environmentally friendly practices by water, sewer, drainage, and energy utility service providers. The City supports "greener" approaches to infrastructure design.

Storm drain catch basins should be designed to capture sediment and debris and should reduce the transport of pollutants to the Bay. Stormwater management strategies should direct water away from buildings and foundations and maintain natural hydrological functions to the greatest extent possible.

- POLICY CSF-5.6 Involving Utility Agencies in Development Review. Engage local water, sewer, and stormwater service providers in the review of new development projects to ensure that infrastructure, including water supply and wastewater treatment capacity, is available or will be made available to meet development-related needs.
- **POLICY CSF-5.7** Infrastructure Cost. Ensure that the cost of infrastructure improvements required for new development is the financial responsibility of that development and is allocated based on each project's expected impacts.

- **POLICY CSF-5.8** Visual Impact of Utilities. Minimize the visual impact of public utilities such as transmission lines and wireless communication facilities. Utility lines along new and redeveloped rights-of-way should be placed underground wherever feasible.
- POLICY CSF-5.9 Design of Utility Facilities. Coordinate with utilities in the design of utility facilities such as traffic control cabinets, utility boxes, substations, pump facilities, and switching buildings.
- POLICY CSF-5.10 Maintenance. Work with the agencies responsible for managing Newark's infrastructure to ensure regular maintenance for all utility systems.

See the Transportation Element for policies and actions on transportation infrastructure, including landscaping and back-up walls along arterial roadways.

See the Environmental Hazards Element for additional policies and actions on storm drainage and flood prevention.

Actions

- Action CSF-5.A UWMP Updates. Encourage the Alameda County Water District to complete regular updates of the state-mandated Urban Water Management Plan to reflect current forecasts, water supply conditions, and best practices in water management.
- Action CSF-5.B Ensuring Water Availability. Coordinate with the Alameda County Water District to conduct water supply assessments or take other steps to ensure that water is available or can be made available to meet current and anticipated needs. Special precautions should be taken to ensure that adequate water supplies are available during drought periods.
- Action CSF-5.C USD Master Facilities Plan Updates. Coordinate with the Union Sanitary District to complete regular updates of the District's Master Plan to ensure that it reflects development plans and forecasts for Newark and responds to changing needs and requirements.

Action CSF-5.D Stormwater Management Plans. Require the preparation of stormwater pollution prevention plans and stormwater management master plans for large scale developments. Such plans should determine runoff control and treatment measures, identify drainage improvements to be constructed, and address funding and maintenance responsibilities for the storm drainage system.

See also the Conservation and Sustainability Element for additional policies and actions on water quality, including the Countywide Clean Water Program.

- Action CSF-5.E ACFCWD Fee Program. Continue the Alameda County Flood Control and Water Conservation District Drainage Area Fee Program to fund flood control and drainage improvements in newly developing areas.
- Action CSF-5.F Utility Undergrounding. Develop a priority-based program for undergrounding utilities along existing public rights of way.
- Action CSF-5.G Wireless Communication. Explore alternatives for expanding wireless ("wi-fi") coverage within Newark, both within new development areas and within already developed parts of the city.