APPENDIX D
CULTURAL RESOURCES STUDIES
RESEARCH DESIGN AND SENSITIVITY ASSESSMENT
FOR THE CITY OF ORANGE,
ORANGE COUNTY,
CALIFORNIA.

Prepared for:

Chattel Architecture,
Planning and Preservation
13417 Venture Boulevard
Sherman Oaks, CA 94123

Prepared by:

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Sacramento, CA 95816
(916) 739-8356

April 2006
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April 18, 2006
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INTRODUCTION

The City of Orange (City) is in the process of updating their General Plan, including its Historic Preservation Element. To this end, in 2004 the City hired Cotton Bridges (now EDAW) and their consultant, Chattel Architecture, Planning and Preservation, to conduct Historic Property Surveys of selected areas within the City and to prepare a General Plan Historic Preservation Element. Chattel hired PAR Environmental Services, Inc. (PAR) in January 2005 to address the archaeological portion of the plan. As a local agency, the City is charged with ensuring that City or local projects under City review meet requirements of the California Environmental Quality Act (CEQA). CEQA’s requirements for cultural resources, including built environment and archaeological sites, are clearly stated in Section 5024 and in the CEQA Guidelines Section 15024. This document is intended as a planning document to assist the City in meeting planning needs and comply with CEQA. Its intent is summary in nature.

Project Area

For the purposes of this document the project area under consideration consists of the City of Orange proper, including the historic communities of Olive, El Modena, McPhearson and Orange. The area currently under consideration for annexation as East Orange, and additional areas with the Orange Sphere of Influence are not included in the study. It should be noted, however, that contextual information from these areas and known land use patterns as presented in the Santiago Hills EIR and East Orange EIR were considered and included in this study.

Project Goals

This report is intended as a working document that includes a compilation and analysis of reasonably available regional cultural resources data and literature and a management-focused interpretive narrative and synthesis of the data. The report is meant to provide an informed basis for understanding the variety, extent and importance of the various kinds of archaeological resources that may occur within the City and their potential significance under CEQA. To this end, PAR conducted archival and archaeological research to prepare an overview of development that may have left significant archaeological deposits, provided a discussion of research potential and prepared a cultural context. The purpose of this document is to identify previous studies and their results, summarize prehistoric, ethnographic and historical development of the area, determine potential archaeological property types that could be discovered below grade within the City, provide a generic research design, and present a discussion of site sensitivity within the City boundaries, based on previously recorded site locations, historical documents, and environmental factors. It is not the intent of this document to provide a detailed history or definitive research design of the City of Orange.
METHODS

PAR used a combination of archival research and record search information to prepare the historical summary of the City of Orange and the research design. Secondary sources included published general and specific histories, unpublished reports, and articles in specialized journals, especially regarding prehistoric resources. An archival research form was used to standardize the types of information gathered. Materials are maintained in files within PAR’s library. No archaeological testing was conducted as part of the current study.

A multitude of sources were consulted by Chattel Architecture and PAR in preparation of this document (Table 1). Materials were drawn from repositories in California, including those listed below. Additional material was reviewed from Chattel Architecture and PAR’s in-house library. These extensive collections contain materials related to previous cultural resource reports prepared for sites and projects throughout the City of Orange for various local, state and federal agencies and private companies. Additionally, online sources are increasingly available through the internet and offer invaluable site-specific and general historical material. County-specific information is often available through the internet at chamber of commerce or local historical society and museum websites. These sites are easily found through the use of common search engines. PAR also contacted various archaeologists and historians requesting information regarding pertinent research themes and property types.

Table 1. List of Sources Consulted

<table>
<thead>
<tr>
<th>Repository/Website/Contact</th>
<th>Material Available</th>
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<tbody>
<tr>
<td>City of San Jose Public Library</td>
<td>Sanborn Fire Insurance Maps</td>
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<tr>
<td>City of Orange Planning/Public Works Departments</td>
<td>Previous cultural resources investigations, plat books, subdivision records, sanitation records, sewer line construction data, street improvement records</td>
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<tr>
<td>City of Orange Public Library</td>
<td>Historic land use maps, manuscripts</td>
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<td>Orange County Archives, Orange County Courthouse, Santa Anita, CA</td>
<td>Historic maps, land use records, city development data</td>
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<tr>
<td>Bureau of Land Management, Sacramento, CA</td>
<td>General land office survey plats, records related to land grants and homesteading</td>
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<tr>
<td>California Office of Historic Preservation, Sacramento, California</td>
<td>NRHP and state historic resource listings</td>
</tr>
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<td>California historical materials, photographs, maps</td>
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<td>Orange County Historical Society</td>
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<td>California Historical Society, San Francisco</td>
<td>Historic maps, specific and general histories</td>
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<tr>
<td>California History Section, California State Library, Sacramento</td>
<td>Census data, historic maps, historic newspaper articles, county histories, historical society publications</td>
</tr>
<tr>
<td>Government Publications Section, California State Library, Sacramento</td>
<td>Historic USGS maps, geological information</td>
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<tr>
<td>South Central Coastal Information Center, California State University, Fullerton</td>
<td>Recorded archaeological site information, previous surveys and archaeological excavation reports, historic maps, ethnographic and prehistoric studies</td>
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Table 1. List of Sources Consulted (concluded)

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<td><a href="http://ohp.ca.parks.gov.htm">http://ohp.ca.parks.gov.htm</a></td>
<td>California Office of Historic Places official website, provides links to county listing, and related sites</td>
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<td><a href="http://www.cr.nps.gov/habs/haer/coll/">http://www.cr.nps.gov/habs/haer/coll/</a> HA</td>
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<tr>
<td>Julia Costello, Historical Archaeologist</td>
<td>Rancho and adobe archaeology</td>
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<td>Rebecca Allen, Historical Archaeologist</td>
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<td>Roberta Greenwood, local archaeologist</td>
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<td>Robert Hoover, Historical Archaeologist</td>
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<tr>
<td>Steven Mikesell, Deputy State Historic Preservation Officer</td>
<td>Historic Preservation Issues</td>
</tr>
<tr>
<td>Anna Pehoushek, City of Orange Community Development Department</td>
<td>Previous studies, historic property lists, secondary sources, pertinent EIR documents</td>
</tr>
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Once PAR acquired the historical maps and other records the material was synthesized onto maps depicting historical growth of the City and its outlying areas, locations of former town sites, such as McPherson and Olive, and potential and known adobe sites. A windshield survey was then conducted and site-specific map locations were field checked.

Native American Consultation

Senate Bill (SB)18, Chapter 905, Statutes of 2004, was signed into law in September 2004. The bill requires local and regional agencies who are developing or modifying General or Specific Plans to consult with California Native Americans with an interest in the effects of the Plan. A supplement to the state planning guidelines was published in November 2005 (California, State of 2005). The purpose is to aid in the protection of traditional cultural places. SB 18 takes its definition of traditional cultural places from Public Resources Code (PRC) 5097.996 (the Native American Resources Protection Act) rather than the definitions employed in CEQA, which are based upon a narrow reading of the National Register of Historic Places criteria for identifying cultural, historical and archaeological properties. The principle effect of SB-18 is to ensure that California Native Americans with knowledge of traditional properties that may be affected by the implementation of General and Specific Plans are allowed an opportunity to consult with the planners regarding their concerns. As part of the process of updating the General Plan for the City of Orange, Chaffet sent notices of an invitation to consult to the California Native American organizations listed below:

- Gabrieleno/Tongva Tribal Council, San Gabriel, California
- Juaneno Band of Mission Indians, Santa Ana, California
- Gabriélno Band of Mission Indians, Beaumont, California
- Gabrieleno/Tongva Council / Gabrieleno/Tongva Nation, Santa Monica
- Juaneno Band of Mission Indians, Acjachemen Nation, San Juan Capistrano

Notices were mailed on February 17, 2006. No responses were received as of April 15, 2006.

CULTURAL CONTEXT
This section provides a summary of the City of Orange’s cultural development from the earliest known occupation to modern day. The cultural context statement for the City of Orange represents a synthesis of over 50 years of surveys, excavations, and analysis of material culture, written documents and records, and oral histories undertaken by archaeologists at federal, state, and local agencies and in the private sector. To date over 50 surveys have been conducted within the City or its surrounding unincorporated areas. Most of these have been small in size (less than 10 acres), although a few have investigated hundreds or thousands of acres. These larger projects have been confined to relatively undeveloped areas, such as Burruel Point, Santiago Creek or the hills east of the City. These surveys have resulted in the recordation of only 25 or so sites within the City, although others have been documented along the coast or in other regions of the county.

Prehistoric Setting

Orange County falls within the San Diego sub-region of the southern coast archaeological region of California (Moratto 1984: Figure 1). The archaeological study of Southern California’s prehistory has been in some ways one of the more active aspects of archaeology in California. Collectors are known to have been active as early as the 1870s (Moratto 1984:121). The history of the archaeology of this period in Southern California is almost novel-like in its accounts of nationalism and competition between ambitious institutional collectors (Moratto 1984:120-123). Intense and competitive, but unsystematic institutional collecting persisted in the region into the twentieth century.

An initial framework of regional prehistory was in place by the 1950s. This framework is not specific to Orange County; however, elements of it are derived from work at Newport and Laguna beaches. The generally accepted framework recognizes four broad temporal periods or cultural horizons. These are the Paleo-coastal or Early Man period dated to more than 10,000 years ago; the Millstone Period, falling between 10,000 years ago and 3,000 years ago; the Intermediate Period from 3,000 years ago to 1,350 years ago, and the Late Prehistoric from 1,350 to 650 years ago. The Millstone period and the Late Prehistoric are both further divided into shorter-term cultural periods.

Initial Occupation

This time period is variously known as the San Dieguito after Rogers (1939) or Early Man (Chatters 2001; Wallace 1955). Initial occupation is thought to have occurred between 8,500 and 11,000 years ago in Southern California (Jones 1992). One recent radiocarbon date from Santa Rosa Island suggests human occupation as early as 11,500 years ago (Moratto 1984) and future research may prove even earlier occupation. Wallace (1955) and Warren (1964) viewed the early occupants as mobile foragers primarily dependent on hunting terrestrial game. Recent archaeological evidence from some coastal sites indicates the systematic and intensive use of marine resources, including shellfish, during this period (Erlandson 1994).
One immensely important find was the partial remains of a woman on Santa Rosa Island in 1959. Now known as the Arlington Springs Woman, the find consisted of two femurs recovered at a depth of approximately 30 feet. The discovery was excavated in a block and transported to the Santa Barbara Museum of Natural History. In 1989 samples of the bone were submitted for chemical and radiocarbon analysis. The resulting estimate of the age of the remains suggests the individual was buried approximately 13,000 years ago, making the Arlington Springs Woman one of the oldest finds of human remains in the Americas (Johnson 2005).

**Millingstone Period**

Sites dating from around 8,000 years before present (B. P.) are far more common than those from the Initial Occupation period. They typically include groundstone assemblages, indicating a probable dependence on hard seeds. At coastal sites, there is continued evidence of a wide variety of marine resource exploitation, most commonly shellfish. Drover et al. (1983) believed that terrestrial game still provided a foundation of the diet. Some archaeologists note that the abundance of Millingstone Horizon sites suggests a sedentary settlement system, rather than a mobile foraging pattern, with central settlements and a logistically based economy supplied from special purpose camps and task sites (e.g., Drover et al. 1983; Glassow et al. 1988). Sites of this time period typically yield large numbers of metates and manos, as well as unique artifacts of unknown use, called cobbled stones or discoids.

**The Intermediate Period**

At about 3,000 B. P. important changes began to occur in settlement, technology and subsistence intensification caused by a growing population (Erlandson 1994). Changes included the increased use of acorns, elaborate fishing technology, such as the introduction of the shell fishhook (Raab et al. 1995), and a diverse arsenal of hunting tools (Erlandson 1994). The apparent disuse of the Newport Coast area during this period is thought to have indicated the arrival of Shoshonean-speaking groups from the deserts to the east. Archaeologists believe these people were proto-Gabrieleno and Luiseño who were not yet familiar with marine resources.

**Late Prehistoric Period**

The Late Historic Period, beginning approximately 1,350 years B. P., reflects high population densities and complex political, social, technological, and religious systems throughout the Los Angeles Basin. Economic systems, primarily based around the growing marine fisheries, became more diverse and intensive. The growing geographic complexity of trade networks, is reflected in shell-bead currency and a variety of materials traded to or acquired from remote locations. Technological improvements are seen in the appearance of the bow and arrow, the plank canoe in coastal sites, and a broad variety of marine resources including mammals and fish taken in deep sea environments. Settlements became permanent towns supported by temporary camps set up at resource procurement sites (Mason and Peterson 1994). Archaeological evidence of this time period includes the presence of arrowhead s, soapstone bowls, callused shell bead s, steatite effigies and cremations. This period ended abruptly when Spanish colonists began establishing missions along the California coast.
Ethnographic Setting

The City of Orange is situated within the ethnographic territory of the Gabrielino Indians of California. Gabrielino lands included most of present-day Los Angeles and Orange counties, and several offshore islands. The Gabrielino spoke a Cupan language in the Takic family, which in turn is a member of the Uto-Aztecan linguistic stock. The Gabrielino people lived in either permanent or semi-permanent villages. Known settlement locations seem to have favored two different locales: coastal estuaries and major inland watercourses (Bean and Smith 1978; Kroeber 1976). Villages are thought to have been the focus of family life, with each individual group linked to others by paternal kinship relations. Coastal Gabrielino exploited bay and kelp-bed fish, shellfish, and occasionally sea mammals. Inland groups collected and processed plants and hunted deer, bear, quail and other terrestrial game (Padon 1998:18).

Gabrielino culture was heavily affected by colonial Spanish missionary efforts long before systematic ethnographic studies could be conducted, indeed before there was such a discipline as ethnography. Disease and forced participation in the mission system disrupted most traditional cultural lifeways and resulted in a catastrophic reduction of the native population. Information about their material culture and lifeways is very limited and derived largely from historical sources, such as the diaries and records of early missionaries, soldiers and explorers (Bean and Smith 1978:538-549; Kroeber 1976:620-647). While traveling through the area in 1769, Father Crespi noted the presence of a large village, Hotuuknga, upstream from present day Olive on the north side of the Santa Ana River. Crespi wrote that 52 Indians came to greet them and accepted blankets, beads and other goods. When he returned two years later the group was hostile and the Spaniards quickly continued on their way (Brigandi 1997:8). A small “Indian camp” was visible on the north side of Santiago Creek just west of the Glassell Street crossing as late as the 1870s (Brigandi 1997:9).

What little ethnographic information is available suggests that the Late Prehistoric Gabrielino settlement pattern may have been characterized by a complex of central villages occupied by patrilineally constructed family lineages and smaller special purpose sites where specific resources were extracted or where food or other resources were collected for transportation back to central villages. Such a pattern is consistent with the "collector" economic model for complex hunter-gatherer societies such as the Gabrielino.

Historical Setting

The following major themes in Orange history have been identified for the purposes of this report: Colonization, Early Settlement, Agriculture and Industry, Immigration and Ethnic Diversity, Interwar Development, and Postwar Development. Within these themes, places of particular interest include rancho sites, Old Towne, El Modena, McPherson, and Olive. Physical developments of particular interest include the railroad, packinghouses, private homes, and civic buildings; and social developments of particular interest include ethnic settlement, labor issues and segregation.
Colonization (Spanish/Mexican Period, Circa 1800-1870)

The first recorded non-Native American visit to Orange occurred in 1769 when a band of Spanish soldiers on their way to Monterey stopped for the night along the Santa Ana River near modern day Olive. Other soldiers passed through the area over the years but permanent residency did not occur until around 1800 (Brigandi 1997:8).

The first land user in the Orange area was Juan Pablo Grijalva, a retired Spanish soldier who had accompanied Father Crespi on his travels through the region in the late 1700s and recognized the potential for grazing. Grijalva never received a formal grant to the rancho but was given permission by the Spanish government in 1801 to graze herds on land extending from the Santa Ana River and the foothills above Villa Park to the ocean at Newport Beach. Grijalva and his son-in-law, Jose Antonio Yorba, began a cattle ranch and dug irrigation ditches that carried water from the Santa Ana River. These early pioneer family ditches created the basis for future irrigation canal systems. Grijalva maintained a permanent house in San Diego County but built an adobe ranch house on what is now Hoyt Hill to use as his headquarters. The adobe was abandoned after his death in 1806 and was reportedly in ruins by 1830 (Brigandi 1997:11).

After Grijalva’s death, Yorba and his nephew, Juan Pablo Peralta (Grijalva’s grandson) filed a petition with the Spanish government for a land grant totaling 78,941 acres and encompassing Grijalva’s grazing lands. The petition was granted in 1810 and the land became known as Rancho Santiago de Santa Ana. Yorba and Peralta each had nine children. As these descendants married, the family expanded and settled on different parts of the rancho.

Yorba chose the flatlands near the Santa Ana River at what became known as Olive. His son’s, Tomas and Teodocio, built adobes on the hills by Olive, out of the flood plain. Their cluster of adobes (near today’s Burruel Point) became known as Santa Ana Ranch and served as the rancho headquarters (Brigandi 1997:13).
Jose Antonio Yorba II moved down river from the home ranch, settling closer to the mouth of Santiago Creek on the east side of the river north of Chapman Avenue. This location proved very successful. The settlement became known as Santa Ana Abajo and was surrounded by irrigated fields, corrals and vineyards. In 1836, 19 Californios occupied Santa Ana Abajo, as well as many Indian vaqueros, servants and ranch heads needed to keep the operation going (Brigandi 1997:12).

When the grant was awarded in 1810 Yorba’s partner, Peralta, moved upstream into the Santa Ana River canyon and established Santa Ana Arriba. He and his sons built adobe homes on the south side of the river, near where Fairmont Boulevard meets Santa Ana Canyon Road, and worked their portion of the ranch from what became known as Peralta Hills (Brigandi 1997:13).

Tomas was the first of the Yorba brothers to die, passing away in 1845. At the time of his death he left behind 2,000 head of cattle, 90 ewes, 300 mares, two vineyards and an 18-room adobe house on the hill at Olive. His brother, Jose Antonio Yorba II, died in 1849, followed in death by Teodosio in 1863 (Brigandi 1997:14).

Soon after Jose’s death the family made the first attempt to divide the huge rancho among the Yorba and Peralta heirs. While the family followed their internal division of property for many years, legally the rancho remained one 79,000-acre parcel. Individual family members, however, began selling off their parcels. For example, in 1860 Jose Antonio’s son, Miguel, sold 500 acres on the west side of the river north of current Walnut Avenue to Francisco Rodriguez. There were numerous adobes on the property in 1863 and the family resided on the land until 1873 (Brigandi 1997:13).

After California became a state in 1848 as part of the Treaty of Guadalupe Hidalgo, one member of the extended Rancho family – Leonardo Cota – borrowed money from Abel Stearns, the largest landowner in Southern California, putting up his share of the rancho as collateral. When Cota defaulted in 1866, Stearns filed a lawsuit in Los Angeles Superior Court to demand a partition of the land, so that Stearns could claim Cota’s section. Consequently, the rancho was divided into 1,000 units and parcelled out to the heirs and to the claimants in the lawsuit.

**Early Settlement (circa 1870–1920)**

**Old Towne Orange**

In the 1860s, the Yorba rancho was subdivided by heirs of the original grantees and Andrew Glassell and Alfred Chapman (lawyers for several parties in the partition suit) took 4,000 acres in lieu of attorneys’ fees. Other portions of the rancho were also divided into smaller ranches. From this acreage, farm lots, ranging in size from ten to forty acres, were first surveyed in the fall of 1870 and divided in 1871, under the supervision of William T. Glassell. Eight lots in the center of the newly-subdivided blocks of land were set aside for use as a public square, now known as Plaza Square, or simply “the Plaza.” This square was bounded by Walnut Street (now named Maple Avenue) to the north, Grape Street (now called Grand Street) to the east,
Almond Street to the south, and Lemon Street to the west. The two main streets, which intersected at the public square, were named Chapman Avenue (running east-west) and Glassell Street (north-south).

In 1870, the “Richland Farm Lots” development, consisting of 10 to 40 acre parcels, was placed on the market. In 1870, Glassell hired a surveyor to divide a total of 5,400 acres into 40-, 60-, 80-, and 160-acre parcels. Glassell’s brother, Captain William Glassell, surveyed and platted a new town named Richland in 1871; the name was changed to Orange two years later to satisfy postal requirements (White et al. 2002:12-13).

The original townsite consisted of the current historic district plaza area and was surrounded by outlying farms and ranch land under cultivation. The first subdivision, Fletcher Tract, was platted in 1875. Dry farming consisted of grain crops, including wheat, rye, barley and oats. In 1871, the A. B. Chapman Canal began bringing water from the Santa Ana River to the townsite, with ranchers digging lateral ditches to their farms. In 1873, development of wells began, tapping into a water table only 18 feet below ground (Dolan et al. 2003:9). Irrigation added raisin grapes and corn to the area’s agricultural production. Water became a critical element to the on-going prosperity of the region. In 1873, Chapman and Glassell reorganized the Chapman Canal with the Semi-Tropic Water Company managed by a local rancher. Under the new management, the canal was extended to Santa Ana. When 1877 proved to be a drought year, local ranchers bought out the company and created the Santa Ana Valley Irrigation Company (S. A. V. I.).

Like most Southern California communities, Orange was strongly affected by the Great Boom of the 1880s when new settlers flocked to the state. The cross-country expansion of the railroad system and its inexpensive fares made the balmy climate in southern California even more attractive and accessible to Americans nationwide. New settlers arrived in Orange via the Santa Fe Railroad (later called the Atchison, Topeka & Santa Fe), which entered the city about four blocks west of the Plaza (currently the site of Atchison Park) in August 1887. In 1911, Armor wrote (1911:32 [cited in White et al. 2005:15]):

Touched off by the railroad rate war, the boom of the 80s was built largely on speculation. Landowners subdivided their ranches to sell individual lots, which were often bought by speculators. Although a few subdivisions were recorded in the early 1880s, the big boom occurred about five years later. In and around Orange, dozens of new subdivisions and four new townsites were laid out in 1886-1887. Promotional literature was sent out across the country extolling the virtues of Orange and its environs. Orange did its best to appear attractive, progressive, and promising to prospective buyers.

Also in the late 1880s, transportation between neighboring communities was provided by two horse-drawn streetcar systems: the Orange, McPherson & Modena and the Santa Ana, Orange & Tustin lines.

By the late 1870s and early 1880s, the population of Orange was large enough to support the construction of civic buildings and gathering places such as churches, schools, and public
As the population grew, new parcels were added by subdividing tracts surrounding the original town site. These additions and town streets were commonly named after the owner or resident hometowns, such as Palmyra and Batavia, New York. The town was incorporated on April 6, 1888, as a sixth class city within Los Angeles County. At the time of incorporation, Orange town limits included an area about three square miles, with 600 people (many German immigrants) who predominantly lived on small family ranches surrounding the town. Although most residents lived on working farms, some homes, generally for the town doctors, lawyers, and merchants, were built on the small lots surrounding the Plaza.

Major construction in Orange lay dormant in the aftermath of the great boom for over ten years. With the new century came growth in the town’s citrus industry and an increase in economic prosperity. The Plaza soon became the commercial and social hub of Orange and the principal banks, newspapers, stores and public institutions of Orange were built on Chapman and Glassell Avenues. Radiating out from the Plaza and commercial center, residential development increased to house the growing population.

**El Modena (ca. 1880-1920)**

Paralleling the early settlement of Old Towne Orange was the establishment of another town located approximately three miles to the east. The area would eventually become known as El Modena, an early Quaker establishment that evolved into a Mexican-American barrio. In 1875 the Colony of Fairhaven (near the northwest corner of Fairhaven and Esplanade) was settled as a non-drinking, fruit growing Episcopal town. In the 1880s, after extending Chapman Avenue east, developers created streets in the area, including Center Street, just north of and parallel to Chapman Avenue, and the north-south streets of Esplanade and Alameda (later Hewes Street). San Francisco millionaire and philanthropist David Hewes became one of the primary developers in the area when he bought hundreds of acres of property in the area around 1885, settled into a new home he named Anapauma ("place of rest"), and began a large citrus ranch.

Much of the early population of El Modena arrived en masse when a group of Quakers who were members of a congregation called the Society of Friends migrated to the El Modena area in the early 1880s (Brigandi 1997:36, 37; Patterson 1949). By 1886, there were 400 people, along with 18 homes. The new town enjoyed a brief building boom in 1887 and 1888. In December 1887, the Friends completed construction of a meeting house, commonly called the Friends Church, at Chapman Avenue and Earlham Street. In January 1888, the Orange, McPherson and Modena railroad (actually a horse-powered streetcar) opened. A number of hotels, schools, stores, and residences were constructed during this period, until the boom collapsed in 1889, and the population dropped (Brigandi 1997:37, 38).

El Modena survived through the boom and established itself as a fruit growing area. Ranchers planted apricots, walnuts, lemons and several varieties of orange trees. In 1898, David Hewes’ ranch and fruit packing company set agricultural records in the area by harvesting 100 acres of prunes and processing 1,000 barrels of olives. By the early 1900s, real estate developers in the area promoted El Modena as the "Pasadena of Orange County," focusing on its mild climate and rich capacity for farming. Hewes continued to invest his capital in El Modena,
creating a public park near the town center. In 1905, Hewes Park, designed by Robert G. Fraser, designer of the famous Busch Gardens in Pasadena, opened to residents of El Modena at the corner of Esplanade Avenue and La Veta Street (the park served the community until the 1940s, when it was sold to private interests) (Orange, City of 2005).

**Olive (1887)**

The agricultural development boom of the 1880s spread throughout the region. Outside of the City of Orange, the little town of Olive grew, based on an olive industry. Olive Heights was platted on a hillside in 1887 by Louis Schorn and other owners of the Olive Milling Company. The town was sited around the old Yerba adobes. Schorn built a tourist hotel on the hill and sold lots in the area. Olive Heights became the town of Olive and managed to survive the building boom, largely because of the existence of the mill. The town was largely a company town owned by the Olive Milling, Land and Improvement Company who held the deeds on the unsold lots and water system.

Olive had at least three olive packing houses. These included the Olive Hillside Groves packing house (1914) and the Olive Heights Citrus Association (Sunkist) house. These two houses sat next to each other on the east side of Orange-Olive Road along the railroad tracks. One major fire in 1927 spread through Olive Heights and burned two packing houses. As a result, the Olive Heights mill moved across the street to a safer location. They built a concrete packing house in the new location to avoid further fire damage. It thrived in the new location. In 1929, Olive Heights filled 918 railcars full of citrus. In the 1960s, the Orange Cooperative Citrus Association dissolved and most of the local growers moved to the packing house at Olive Heights (Brigandi 1997: 13, 78-79, 81,108). It remained operational until 1984, one of the last packing houses in Orange County. Today Olive is annexed in the City of Orange (Brigandi 1997:39, 79).

**St. James (1887)**

While Old Towne, El Modena and Olive became successful towns, other planned developments failed to sell. In 1887 the townsite of St. James was platted just south of Olive. This proposed town site included 64 blocks bound by the Olive Railroad, 7th Street, Alviso Avenue and Grassell. St. James was a development venture of the Pacific Land Improvement Company. This company worked hand in hand with a railroad company trying to develop a customer base along their rail lines. They were responsible for creating the towns of Claremont, Coronado and Fullerton (Brigandi 1997:39). The plat was approved and filed, but lots were slow in selling and the town never developed beyond a few scattered residences (City of Orange Planning Department n.d.). After the short land boom faded away, those few structures that had entailed the little town were moved away to Orange and Olive. By 1895, nothing remained of St. James other than survey posts (Brigandi 1997:39).

**McPherson (1872)**
The town of McPherson started as a raisin operation. Robert and Stephen McPherson start some of the earliest raisin growing operations in the area. In 1872, they bought 80 acres along Santiago Creek north of Chapman Avenue and east of Yorba Street. By 1885, they had over 400 men and women working for them in their vineyards and processing operation. They had 65 acres of raisin drying grounds and built the McPherson Brothers raisin packing house on the west side of McPherson road just north of Chapman Avenue (Brigandi 1997:20-21).

Following the success of their operation, the brothers laid out a new townsite called McPherson in 1886 west of Prospect Avenue and north of Chapman Avenue, extending east almost to El Modena. Other than the brothers’ operations, the town consisted of P. W. Ehlen’s General Store, a few homes and a post office. An unfortunately grape disease hit the area in 1886-1887, nearly ruining the McPhersons’ and leading to the quick demise of their namesake town. Unable to make bank payments, lots turned back into vineyards. The general store left in 1889, followed the next year by the post office.

With the growth of the citrus industry in the early twentieth century, McPherson had a slight revival. The McPherson Heights Citrus Association formed in 1912 and had a large packing house by 1924, employing many local women. In 1928, they consolidated with another group, the Red Fox Orchards, and moved operations to the latter company’s packing house, leaving the McPherson house to decline. Today remnants of its foundation support offices at the intersection of Chapman Avenue and McPherson Road (Brigandi 1997:78-79).

Agriculture and Industry (Circa 1880–1950)

The original town site of Orange clustered closely around the current historic district plaza area and was surrounded by outlying farm land and ranch land under cultivation. Dry farming consisted of grain crops, including wheat, rye, barley, and oats. In 1871, the A. B. Chapman Canal began bringing water from the Santa Ana River to the townsite, with ranchers digging lateral ditches to their farms. In 1873, wells also began being developed, tapping into a water table only 18 feet below ground (Dolan et al. 2003:9). Irrigation added raisin grapes and corn to the area’s agricultural production. Water became a critical element to the ongoing prosperity of the region. In 1873, Chapman and Glassell reorganized the Chapman Canal with the Semi-Tropic Water Company managed by a local rancher. Under the new management, the canal was extended to Santa Ana. When 1877 proved to be a drought year, local ranchers bought out the company and created the Santa Ana Valley Irrigation Company (S. A. V. I.).

The Santa Ana Valley Irrigation Company (S.A.V.I.) as a cooperative water venture was vital to the agricultural development of the arid Southern California region. S.A.V.I.’s control of water rights and its extensive system of canals was essential to the development of the agriculture industry in Orange and surrounding communities. Beginning in the 1880s, the transcontinental railroad system granted growers in Orange County access to markets across the nation. The introduction of reliable irrigation and transportation systems was accompanied by a surge in agricultural production and productivity in Orange County. This is particularly true in Orange where from 1880 to 1950 citrus and other agricultural industries were the predominant factors influencing the economic, political and cultural development of the city.
Farm Subdivision

Grapes, oranges, walnuts and olives all played a role in the development of Orange. By 1885 for instance, a small settlement, including over 400 employees, developed around the McPherson Brothers vineyards and 65-acre raisin-drying grounds. Two years later, “Anaheim vine disease” destroyed vines throughout southern California and farmers replaced their vineyards with walnut and apricot orchards. By 1900, Orange County was the largest walnut producer in California (Dolan et al. 2003:9-10).

Also during the 1880s, orange cultivation began to take hold. The towns of Orange, Modena, and McPherson began to emerge as small agricultural settlements. To connect them, a local horse-powered, four-wheel street car system was constructed, called the Orange, McPherson and Modena Railroad. It was competed January 28, 1888. Hopeful citrus growers pooled their resources into cooperatives, including the Villa Park Orchards Association (48 growers organized in 1912), the Santiago Orange Growers Association, and the Placentia Orchard Company (Dolan et al. 2003:10).

What began as an optimistic land boom, however, softened when the expected new growers did not purchase land, causing real estate prices to drop. After the problem with vine disease in 1887, much of the anticipatory zeal had been spent. New endeavors, such as the Orange, McPherson and Modena Railroad, the local newspaper, and a new hotel, all failed quickly. The newspaper shut its doors after 31 issues, while the railroad and hotel were not built after flood and fire respectively (Chattel Architecture, Planning and Preservation 2004). The area survived and continued to grow, but with more realistic expectations and the help of a millionaire investor, David Hewes.

With these agricultural successes, land developers continued their concerted effort between 1895 and 1905 to promote the Town of Orange as a citrus growing mecca. Improvements to the city included a sewer system, sidewalks, paved streets and an improved water system (Dolan et al. 2003:11). The city limits continued to grow as newly annexed tracts and subdivisions were added to Orange. Growth was, nonetheless, modest and hampered by events such as floods, a freeze, and World War I, which temporarily diminished the European market for California produce (Dolan et al. 2003:11).

In addition to the development of towns, the division of large ranch tracts into small farms of 10 acres or more resulted in a growth of farmsteads. These farms were generally built facing newly-laid out roads (e.g. Tustin, Meats, Collins). By 1900, farmsteads lined the roads, or were set back by tree-lined driveways. Orchards and fields spread out behind the houses. A few of these Victorian farmsteads are still present today (United States Geological Survey 1902).

Citrus Industry

Citrus did not become the area’s predominant agricultural product until the early 1890s, after an earlier grape crop failed, and other fruits and nuts were harvested in the 1880s. Other early industries in Orange included rope and wire manufacturing, a cotton mill, and a lumber company. But by 1893, citrus had become so dominant that the Orange County Fruit Exchange...
(now known as Sunkist) was organized and incorporated. The headquarters for this agricultural cooperative was constructed at the northeast corner of Glassell Street and Almond Avenue. The location of the Atchison, Topeka & Santa Fe rail line three blocks from the center of the Orange business district provided opportunities for the development of industrial facilities for the receipt, packing and shipping of locally raised agricultural products. This arrangement led to the construction of several fruit packing houses in the late nineteenth century. These facilities were quickly inundated, shipping approximately 350 train-carloads of oranges yearly, in addition to lemons, walnuts, dried fruit, potatoes, peanuts, grapes, and cabbage (Brigandi 1997).

Several rail stations were set up to accommodate the agricultural industry. The 1902 United States Geological Survey (USGS) topographic map for the area depicts six stations within the current city limits: Orange, El Modena, Marlboro, Wanda, Olive, and McPherson. It is likely that these stations consisted of little more than a boxcar on a siding or a loading platform.

The packing houses in Orange were so busy during the 1920s that several packed more fruit than any other facilities in California. With the growth of the citrus industry, there was a demand for more workers in the area. In addition to the farm managers, there was a need for field workers, irrigators, packing house workers, and truckers. In turn, more workers in the area brought a need for more stores, shops, and goods. This trend brought about a rise in the merchant class, which further increased the demand for housing.

The speed of citrus production waned during the Great Depression, and from 1933 and 1935 unemployment in Orange County reached 15 percent (Brigandi 1997:105). By the 1930s the pickers began to organize; the largest agricultural union was the Confederation of Mexican Farm Workers’ and Laborers’ Union or CUCOM (El Confederacion de Uniones de Campesino y Obreros Mexicanos) created in 1933. Shortly before the 1936 Valencia orange picking season, Celso Medina, an El Modena resident and chief organizer for CUCOM, held meetings all around Orange County in an effort to rally support for union demands. On June 11, 1936, after the growers refused to meet with union representatives, the largest strike in the history of the citrus industry began, as nearly 3,000 pickers across Orange County walked out during the height of Valencia season (Brigandi 1998:100). The strike did not end until July 27, 1936, when the Mexican Counsel in Los Angeles helped negotiate a settlement. In the wake of the strike, growers changed their employment approach and started hiring outside picking crews, including Asian immigrants, eventually leading to a system of seasonal employment for Mexican nationals (Brigandi 1997:100-104).

During the 1950s, with the “Quick Decline” disease affecting the orange orchards and the strong demand for developable real estate, the once-powerful role of the citrus industry began to diminish, making way for the postwar construction boom. The infrastructure created for the citrus industry, however, vastly facilitated Orange’s rapid suburbanization. Packing houses in Orange accommodated the changes brought by postwar subdivision development and the loss of orchards by packaging fruit from around the state, and shipping as far as Asia. By the late 1990s, however, the citrus packing industry had steadily moved north to the San Joaquin Valley, and one of the last operating packing houses in Orange County, the Villa Park Orchards Association, will soon close.
**Immigration and Ethnic Diversity (circa 1870s-1950)**

From the earliest rancho days Orange has been home to a mixed population from many different diverse cultures. The Yorba and Peralta’s brought a rich Spanish/Mexican tradition to their ranchos. The Indian vaqueros emulated on the ranches, while embracing many Californio customs, retained their Native American traditions as well. When Orange was settled in the 1870s both Californio’s and Native Americans resided in the area, blending their long-time cultural traditions with new customs introduced by the American settlers.

**Religious Groups**

The rapid development of agricultural land attracted both religious and culturally diverse groups. Among them were the Quakers and the Mennonites. Both tended to live in tight-knit communities, perhaps based on their specific beliefs and customs, as well as an interdependent economic support system. A Quaker group from the Midwest helped settle El Modena (and is mentioned more fully in the section on El Modena). They dedicated their first church in December, 1887. Their congregation moved into three subsequent churches and remained active into the 1990s as the Hillview Friends Church. The Mennonites started their first church in Orange in 1912. After a brief move to Garden Grove, they built another church at the intersection of Olive and Sycamore, which is no longer active today (Brigandi 1997:37, 93).

**Germans in Orange**

Germans also moved into the area around Orange in the early 1880s, many from the large German community in nearby Anaheim. Many of Orange’s prominent pioneer families were German, including the Ehlen, Dittmers, Dierkers, Grotes, Guenthers, Pargees, Loptiens, and Eisenbrauns. The establishment of St. John’s Lutheran Church in 1882 and a German language school in 1883 encouraged their continued growth in Orange. By 1907, there were 104 children enrolled in the school, the children of German immigrants. German language services in the church continued as late as the 1950s. These immigrants also established the German Methodist Episcopal Church by 1907, but its congregation dissolved by 1935 (Brigandi 1997:29-30, 93).

Many of Orange’s prominent businessmen were Germans after the turn of the century, such as Adolph Dittmer, a prominent druggist in town by 1907. Others built many buildings in the business section of town, including the Guenther & Duker building (1905), Ehlen & Grote Building (1908), Smith & Grote Building (now Friedemann Hall [1914]), and the Kogler-Franzen Building (1916). These buildings are some of the most distinctive architectural features of historic Orange (Brigandi 1997:46-47).

**Chinese Immigrants**

Chinese immigrants began arriving along the west coast of California by the 1850s. The first clear evidence of Chinese in Orange began in the 1870s, when Chinese laborers arrived to construct local irrigation ditches and other agricultural work. Chinese laborer contractors in Los Angeles brought workers for large projects, such as ditch tunnels built in Olive in 1878 (Brigandi 1997:59).
In 1875, a Chinese laundry opened on North Orange Street. While a few other laundries opened, the immigrants never created a distinct Chinese community. In the 1890s, a new city ordinance prohibited Chinese laundries. A local rancher, Henri Gardner, provided part of his property outside the city limits for rent to the Chinese who remained in Orange. He constructed a series of buildings and piped water from his residence for their use. The buildings were occupied by Goon Gay’s laundry, the Wing store, and a two-story boarding house for laborers. Another building was rented by Yick Sing, who became a spokesman for the Chinese with the outside community. These four buildings, located on South Glassell Street just above Santiago Creek, became a refuge for the Chinese and a novelty to the local non-Chinese community. The population was small and does not appear to have ever exceeded 16 to 20 men. By 1920, there were reportedly only three or four older men living there. In 1921, Orange County ordered the Gardners to demolish the buildings, bringing an end to Orange’s little Chinese district (Brigandi 1997:59-60).

Hispanic Immigrants

Conflict in Mexico and abroad began to change the character of the project area, as local men were drafted into military service at the same time hundreds of Mexicans began migrating to the area fleeing chaos arising from the Mexican Revolution. The new immigrants served as replacements for fruit harvesters and processors. Gradually they began to acquire their own businesses and bought land (Chattel 2004b).

Two international events had a significant impact on El Modena and Orange in the 1910s: the Mexican Revolution and World War I (Climaco 1997: A1). Beginning around 1910, many Mexican families came to the U.S., seeking refuge from the chaos sparked by the Mexican Revolution. Due to its vicinity, Southern California was a popular destination for these wartime refugees. When the United States entered World War I in 1917, men across the country were drafted into the war effort, and El Modena and Orange were no exceptions. As a result, the fruit harvesting workforce dwindled, providing job opportunities for hundreds of Mexicans who had been migrating to the area. Many Mexicans had started work for ranchers and farmers, and soon they started their own businesses and purchased land. The increased demand for workers and the influx of Mexicans during the Mexican Revolution supported two vibrant communities: the Cypress Street Barrio and El Modena (Chattel 2004b).

Cypress Street Barrio

Mexican citrus workers had settled on Cypress Street beginning in 1893 when a packinghouse was built on the 300 block of North Cypress to facilitate shipping using the nearby Atchison, Topeka and Santa Fe Railroad. The approximate boundaries of the Cypress Street Barrio are Rose Avenue (or Collins, further north) to the north, Glassell Street to the east, Almond Street to the south and the railroad tracks to the west.

Between 1918 and 1924, Mexican labor became indispensable to the citrus industry throughout California. For growers, having an easily accessible, stable, and housed workforce assured a lessened chance of labor problems (Gonzales 1990:24). Initially, Mexican families in
Among many Cypress Street Barrio families, husbands picked and hauled, children picked, and women washed, graded and packed the fruit. As citrus work in Orange was seasonal (six months out of the year), Cypress Barrio residents would migrate to work in other areas in the late fall and winter. To support this population, Cypress Barrio’s small businesses included grocery stores, bakeries, tortilleras, restaurants, bathhouses, automobile shops, barbershops and pool halls. Although the Cypress Street Barrio was residential for many years, in 1946 the City of Orange instituted new zoning laws that designated much of the area for light industrial use. Because of this zoning, residents could not qualify for permits to rebuild or remodel their homes (Wheeler 1973:n.p.). This zoning led to further deterioration of the housing stock, and many houses were eventually condemned and torn down.

**El Modena**

Although the Quaker presence in El Modena continued, by the 1920s the town began to take on a distinctly Mexican character, developing its own small Mexican neighborhoods. These sub-communities included El Pirripe, north of Chapman Avenue and named after an area bakery; Hollywood, south of Chapman Avenue; and La Paloma in the hills (south of Palm myra Avenue) (Chin 2003). As in the Cypress Street Barrio, many Mexican-American El Modena families worked in packing houses and orchards in the nearby neighborhoods of Villa Park, Placentia and Orange (Pepper 1995:B1). Groves and groves of orange, lemon, avocado and eucalyptus trees surrounded El Modena, making the town feel like a “vacuum,” isolated from the surrounding world (Pepper 1995:B1). Early housing in the area consisted of small, poorly constructed shacks, often rented for $7-$10 per month, that made for cramped, quickly deteriorating conditions. Later, some of the Mexican-American farmworkers in El Modena moved into small bungalows, modeled after the somewhat larger contractor-built types located in downtown Orange (Gonzales 1994).

**World War II and Postwar History**

Throughout World War II and the postwar period, Mexican-Americans found work in fields previously closed to them, including jobs in construction, manufacturing, and defense work. Cypress Street Barrio resident Santiago Ramirez became Secretary-Treasurer of the International Hod Carriers’, Building and Common Laborers’ Union of America in 1946; nearly 50 percent of all men in the barrio found jobs in the construction industry (Guzman 2005). In addition, several men from the Cypress Street Barrio enlisted for military service during World War II. Growers in Orange County found themselves with a shortage of labor and supported the widespread use of temporary contract workers: Filipinos, German prisoners-of-war, wartime refugees, Jamaicans and Navajos were hired throughout these periods to fill the void. By 1946, 80 percent of Orange County’s picking force was comprised of Mexican nationals through the bracero program (Guzman 2005).
With the diminishing role of the Cypress Street Barrio families in the citrus industry, burgeoning wartime and postwar industrialization with increased job opportunities for Mexican Americans, and the rapid suburbanization of Orange and other surrounding cities of Orange County, the Cypress Street Barrio gradually became a blue-collar barrio.

**Interwar Development (circa 1920–1945)**

As the citrus economy continued to flourish into the 1920s, the demand for housing grew and residential styles once again changed. In place of the California-oriented Craftsman houses came European-influenced Tudor, Provincial, Mediterranean, and Norman Revival styles. These were the style preferences that World War I soldiers brought home with them. Having seen the country houses while doing battle in Europe, they instructed local contractors to build in the European manner. The Mediterranean Revival style was by far the most popular in Orange, and those that remain exist primarily on the outskirts of the Old Towne boundaries.

The City of Orange was hardest hit by the Depression between 1931 and 1935 when citrus prices fell. “Between 1933 and 1935 unemployment in Orange County ran as high as 15 percent of the work force, and even at the height of the citrus season it never fell below nine percent” (Brigandi 1997:105). Even during the citrus season, many citrus farmers were forced to take on other work, such as in packing plants, to pay for irrigation of their orchards. During these hard times squatters’ camps developed along Santiago Creek.

**Postwar Development (circa 1945–1975)**

World War II had brought prosperity to southern California’s economy and ended the ravages caused by the Great Depression, which devastated fruit prices. Military personnel, facing housing shortages in other areas, moved into the area (Padon 1998:19).

After World War II, returning soldiers and a massive influx of new residents to the state changed the face of California forever. Orange, located centrally in the Los Angeles basin, was no exception; its remaining open and agricultural space attracting developers of bedroom communities. This trend has continued in subsequent decades (Padon 1998:19).

Orange’s explosive suburban residential growth began in 1953 and peaked in 1962 when thousands of acres of land were sold for development. Many WWII servicemen who trained with the 30th Field Artillery Battalion (stationed in Orange) returned to the city to raise their families. New housing tracts also housed aerospace workers and their families. Between 1950 and 1960, the local population swelled from 10,000 to 26,000 as former orchards were torn out and replaced with subdivisions of single family homes (Dolan et al. 2003:12). By the 1950s, many ranchers readily sold their acreage: orange orchards succumbed to the “Quick Decline” disease and concurrently, the demand for real estate for housing construction soared. Most of the larger tracts (50 to 100 homes) were built by outside developers, though there were a few local developers who worked on a smaller scale. One of the more notable developers working in
Orange during this period was Joseph Eichler, who built three tracts to the north and east of Old Towne.

Long time mayor and civic booster George Weimer encouraged the concurrent development of residential, commercial and industrial development to provide a reliable job and tax base for the city. New business districts were created during the mid-1950s, diminishing downtown Orange’s importance as the city’s major commercial center. Major shopping centers opened on the corners of Tustin, Chapman, Collins, Glassell Street, North Batavia, East Katella, Meats Avenue, Main and La Veta Avenue, attracting supermarkets, restaurants, hardware stores, banks, and gas stations, among other businesses. Among the businesses to open during this boom time was California’s first Marie Callender’s Restaurant on Tustin Avenue in 1963. Shopping centers built during the 1960s and 70s include Town and Country Village Shopping Center, the Mall of Orange, and The City Shopping Center.

Access to water and transportation corridors are crucial for any type of development, particularly in Southern California. The Orange County Feeder #2 was constructed in 1963 along Tustin Avenue. This line tapped into the Metropolitan Water District’s (MWD) feeder line, assuring residents a water supply that would meet their demands for decades. Prior to and along with Orange’s rapid suburban growth came the many freeways that dissect or skirt the city: the Santa Ana Freeway (Interstate 5), the Costa Mesa Freeway (State Route 55), the Garden Grove Freeway (State Route 22), the Riverside Freeway (State Route 91), and the Orange Freeway (State Route 57).

In the 1960s and 70s, the ever-growing City of Orange annexed areas surrounding El Modena, but the original town proper, north of Chapman Avenue, continues to be an unincorporated part of Orange County. Over the years, El Modena grew with Orange. New stores and restaurants were added to Chapman Avenue, and new homes, including small bungalows and bungalow courts, were constructed over all the neighborhood’s fruit groves. Jordan Elementary School (1962), the Prospect School (1966), and the El Modena Branch Library (1978) were constructed in the southern part of El Modena, covering more open space, although pockets of undeveloped land still exist in the area. Despite numerous additions and alterations to the area’s older homes the single-family, working-class residential character of El Modena remains.

**Today’s Orange (1975-Present)**

During the postwar suburban construction boom, the most desirable land for subdivisions was the flat coastal plains where cities such as Garden Grove, Westminster and Costa Mesa developed (Brigandi 1997:150). By the late 1960s, however, construction slowed. Further development stalled with the energy crisis of 1973. By the 1980s, however, the foothills to the east of El Modena became prime real estate. Orange Park Acres, which lies between Chapman Avenue and Santiago Canyon Road was first subdivided in 1928, but most of this area was annexed by the City of Orange during the 1990s. Together with the Irvine Company, the City of Orange adopted the East Orange General Plan in 1989, a proposal that encouraged a mix of residential, commercial and recreational uses for the area east of Orange Park Acres toward Irvine Park and Peters Canyon. The Orange campus of Rancho Santa Fe Community College
was constructed in 1985 and became Santiago Canyon College in 1997. The Eastern Transportation Corridor, which connects Orange County to Riverside County, is nearly complete, further facilitating development in East Orange.

RESEARCH DESIGN

There are many archaeological sites in California and most contain some type of information. The key to productive archaeology is to assess whether a property is likely to contain important information. A research design identifies important regional research issues in light of prehistoric, ethnographic and historical context and land use patterns and also identifies relevant data requirements for prehistoric, ethnographic, and historic era sites. Through time changes occur in the way land is used and developed, resulting in a variety of site types that develop during each occupation era. Potential site significance is indicated relative to the research issues, site types and data requirements. A design outlines the types of questions that could be addressed given the kinds of data that a particular property is likely to contain, and evaluates if that information can be gained from any other source.

Under the California Environmental Quality Act (CEQA), Public Resources Code (PRC) Sections 21084.1 and 21083.2, a project that causes substantial changes in the significance of a cultural resource is considered a project that may have a significant environmental impact. Because of this, pursuant to the CEQA Guidelines, CCR Title 14, Chapter 3, Section 15064.5, it is necessary to identify and evaluate potentially significant historical and archaeological resources. The Guidelines explain that a significant resource is defined as a resource included on a local list per PRC 5024.1(k) or a resource identified during a cultural resource survey as a significant resource meeting the criteria of PRC 5024.1(c).

PRC Section 5024.1(c) lists the criteria an historic resource must meet to be considered eligible for listing on the California Register of Historic Resources (CRHR). These criteria are as follows:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; and
4. Has yielded or may be likely to yield, information important in prehistory or history.

Federally funded or permitted projects require significance evaluations of resources in light of National Register of Historic Places criteria as cited in 36 CFR 800.64. These criteria are nearly identical to the California Register and apply to projects subjected to federal review.
Historic period archaeological sites may be found eligible for the CRHR under any of the criteria. Prehistoric sites are most often evaluated under Criterion 4 (although there are examples of rock art sites evaluated under Criterion A). In other words, in order to be considered significant an archaeological site must have yielded or have the potential to yield:

Important information about some aspect of prehistory or history, including events, processes, institutions, design, construction, settlement, migration, ideals, beliefs, lifeways, and other facets of the development or maintenance of cultural systems. Any consideration of a property’s eligibility under Criterion D must address (1) whether the property has information to contribute to our understanding of prehistory or history and (2) whether that information is important [National Park Service 1982:28].

In addition, an archaeological resource must retain substantial integrity (i.e., the resource must retain sufficient structural and material coherency so that useful scientific data can be collected from it). In effect, to be considered a significant resource an archaeological site must be capable of providing information that can be used in elucidating research questions of importance to the local, regional or national scientific community.

The following discussion begins with a summary of previous work and known or predicted property types within Orange. It then presents a series of topical research themes pertaining to both prehistoric and historical archaeological sites and provides the data requirements necessary to address those themes. This discussion is not exhaustive but is intended to address significant characteristics in the archaeological record of the City from reasonably expected data sets.

Prehistoric Research Issues

This discussion provides a brief background of the known prehistory of the City of Orange, and presents a summary of the types of properties and artifacts associated with prehistoric sites in Orange. It is followed by a sampling of a few potential research issues, which may be addressed using data from archaeological resources that exist or are likely to exist within the City of Orange and its sphere of influence. The example research issues below fall within a range of research questions that many American archaeologists consider relevant aspects of the pursuit of prehistoric archaeology. The initial topics, Chronology and chronometry, are subjects near and dear to all practicing archaeologists. The chief purpose in discussing the various chronometric methods is to make the reader aware that there are other means of investigating a site’s age beyond the standard obsidian hydration and radiocarbon typically employed in California. The presence at an archaeological site containing any of the materials discussed in the chronometrics section will have an important influence upon the potential significance of the site, and the presence of these materials should be considered in any site evaluation. Following the discussion of chronometrics are several additional potential research topics. These do not constitute an exhaustive list of the research potential of prehistoric archaeological sites in the City of Orange. A multitude of similar, related issues can and have been delineated by archaeologists working in the region. Data from City of Orange archaeological sites could readily prove important, even critical, to any of these additional issues. Again, it should be clearly understood the following is not a comprehensive list of research questions.
topics for the City of Orange. An indeterminate number of other equally legitimate, relevant research questions can be formulated.

**Previous Archaeological Studies**

Numerous studies have been conducted in or near Orange, resulting in the recordation of some 28 prehistoric archaeological sites. These studies have been confined to surveys and a few test excavations related to project development and cultural resource management studies. The majority of the sites are located to the east of Orange and occupies upland, hill and valley locations with few exceptions. Understanding the patterns of land use through time is essential in formulating valid research questions and identifying pertinent issues.

The area west of the Santa Ana River has long been prone to seasonal floods that, prior to flood control efforts and development, would have created marshes and sloughs. It is reasonable to assume that similar conditions existed along Santiago Creek and the land southeast of the Santa Ana River where the City of Orange now stands. This environment likely provided abundant food and material resources and served as a procurement area for regional populations. Settlements would likely have been established along high ground near the streams, including bluffs, knolls and natural levees. Documented and investigated in land prehistoric sites in the vicinity of Orange are located along bluffs overlooking the river or on tributaries less prone to flooding.

Prehistoric sites, primarily surface scatters of flaked stone tools and tool byproducts or milling areas, have been recorded near Santiago Creek and on the bluffs overlooking the Santa Ana River. Other sites, including apparent special purpose sites and one rock art site, have been found on hills and ridge tops. The known site distribution, however, is strongly biased by the presence of open land at the time of the survey or site record. The fact that arbor areas do not have similar resources is not an indication of their historic observance. These sites are generally located in upland areas along drainages or on ridge or hilltops that have not yet been subjected to modern development.

The distribution of prehistoric remains within the developed lowland area in Orange is poorly understood. Episodes of early flooding and the subsequent development of the existing urban area may have buried or destroyed sites that once existed in the valley areas. While at least two sites are known from the lowland area, their nature was never successfully established and they are believed to have been destroyed or buried by development. One of these sites, located southwest of Santiago Creek near the confluence with the Santa Ana River, may have been an ethnographic village site. The other, located on the right bank of Santiago Creek northeast of El Modena, is known from limited data on a site record and cannot be characterized. It should be noted that while urbanized areas do not have similar numbers or kinds of prehistoric sites recorded in them, this cannot be taken as evidence that such sites did not or do not exist.

**Property Types**

Archaeological site type classifications are often used as a basic kind of data summary, employed by archaeologists in interpretations, site records and evaluations. Taylor and Mabry
(1979) for example applied a six-level site classification in a study of CA-ORA-369. This classification system identifies Habitation Sites, Processing Sites, Production Sites, Resource Sites, Disposal Sites and Service Center sites. Their system is tightly defined, but it offers some difficulties when considered in light of the likely contents of a prehistoric deposit and in light of known ethnoarchaeological behavior (Binford 1976, 1980, 1981, 1982; Gould 1980).

Archaeological assemblages contain the residues of human activity consisting of associated material remains that are employed as the basis for archaeological understanding. More importantly, the assemblage contents are dominated by the least perishable remains of a material culture whose true range of materials is actually indeterminate due to the loss of some materials from the assemblage through time. That is, most of a cultural inventory tends to be perishable materials derived from plant and animal sources. In addition to stone, such materials include bone, fiber, hide, ivory, shell, tendon and wood. Ethnohistoric sites may also contain glass, fabric, metal, and other materials of historic origin. All of these materials have differential survival rates in archaeological contexts, and they also have different survival rates in different archaeological contexts.

In addition to this difficulty, several of Taylor and Mabry’s classes are activity defined. As Binford and others have emphasized, such activities may occur in the same place at the same time, or in the same place at different times. The location of such activities is very dependent upon other aspects of the culture that produces the assemblage or assemblages. Binford (1981, 1982) notes that site function for the same users may vary dependent upon issues such as seasonal rounds and long term changes in how a group uses their territory. A site that is used seasonally as a village may at other times be occupied by just a few caretakers, or may be visited briefly by the seasonal occupants at other times of the year for special purposes. Binford also discusses "economic zonation" (1982:358-360). This is a concept that articulates a model of functionally-defined mobility patterning in logistically-based hunter-gatherer societies. Such societies are considered to maintain primary residential bases. In the immediate surround of such settlements Binford describes a "foraging zone" where economic support activities can be engaged in without remaining away from the main settlement overnight. For specific tasks that require extended stays away from the main settlement specialized sites may be prepared. These sites would fall within a "logistical zone" (Binford 1982: 358-360).

In light of the above, a very useful summary of the regional archaeology and ethnology for the developed coastal plain in Orange County was advanced by Padon in 1998. This summary, citing work by Kroeber (1976), Johnson (1962), Hudson (1973), Bean and Smith (1978), and McCawley (1997), indicates that Gabrielino settlements were distributed throughout the environmental range (c.f. Bean and Smith 1978). The key criterion for locating a settlement or camp is the availability of water in a stream or spring. Based upon work by Hudson (1970), Bean and Smith discuss "primary subsistence villages" and "secondary gathering camps." Villages appear to have had permanent populations of 60 to 90 people and as many as 100 villages were occupied throughout Gabrielino territory at historic contact (Bean and Smith 1978:540). Villages were located along the sides of major waterways in the interior and on estuaries near the coast. Hudson evidently found that villages were not located along the exposed coast zone between San Pedro in the north and Newport Bay to the south. In this area villages were located inland. Secondary gathering camps were presumably used on a seasonal
basis, and while the occupants would require water during the site's use period, such camps would not require permanent water as a sine qua non for use.

In addition to the Village and Secondary classes, there are a number of sites that are classified as Special Use sites. Some of these may have been sites where specific kinds of tasks were organized. Others were likely actually Secondary sites whose functions have simply been misidentified. Specialized task sites may have included hunting camps, resource collecting areas, and potentially crop areas. Others may have had ritual significance. One quarry was recorded. This site included a significant area overlooking Santiago Creek.

In summary this scheme thus advances the following classes:

- **Village**: these sites will be characterized by extensive deposits located near permanent water. Site contents may include midden, workshop and maintenance debris, cemetery association, diverse technological and subsistence assemblages and indications of extended material exchange networks such as obsidian and other exotic material. Within the City of Orange "exotic" may be considered to include material brought inland from the coast such as shell, ivory, whale bone, and other materials of marine origin.

- **Secondary Occupations**: Bean and Smith (1978) describe these as "secondary gathering camps" which would indicate a "logistical zone" occupation following Binford's concepts. Assemblage contents are likely to include a limited subset of the materials found in the assemblages at Village sites. Some site records indicate single or small numbers of interments at what are otherwise small sites.

- **Special Use**: These sites represent a mix of activities that would constitute both foraging and collecting classes of economic behavior. They can be expected to contain a limited range of materials related to a single task and might also contain material indicating short term occupations. Special use sites may include milling locations, roasting pits, lithic workshops, and similar activity focused assemblages. Based upon site records on file with the South Central Coastal Information Center, there occasionally may be interments associated with these sites.

- **Quarry**: These can be considered a subset of the Special Use site, but because of the readily diagnostic characteristics of a quarry, they are called out here as a specific site class. One quarry in or near Orange is included in the site records maintained by the South Central Coastal Information Center. Table 2 correlates site type and some potential assemblage contents.
Table 2. Prehistoric Archaeological Site Classes

<table>
<thead>
<tr>
<th>Site Type Assemblages</th>
<th>Villages</th>
<th>Secondary occupation</th>
<th>Special use</th>
<th>Quarry</th>
</tr>
</thead>
<tbody>
<tr>
<td>General utility (flake tools, cores, debitage, etc.)</td>
<td>X X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Special use (projectile points, fishing imple ments, etc. Potentially isolated interments or small cemeteries)</td>
<td>X X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Manufacturing, extraction (debitage, performs, cores, bone waste, hammerstones, etc.)</td>
<td>X X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Milling gear (manos, metates, mortars, pestles, etc.)</td>
<td>X X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sociotechnic and idiotechnic (interments, beads and ornaments, etc.)</td>
<td>X X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subsistence related (midden development, ash, bone waste, shell)</td>
<td>X X</td>
<td></td>
<td>?</td>
<td></td>
</tr>
</tbody>
</table>

**Chronology and Chronometry**

Archaeologists working in Orange County, including Erlandson and Yesner (1992), Padon (1998) and others, have long considered chronology one of the potentially important research issues. Chronology is the keystone of archaeological investigation. Archaeology attempts to relate changes in human condition and behavior through time. Without the temporal dimension, archaeology could offer very little to our understanding of the human past. Because of this, chronology is a critical aspect of all archaeological investigations and it is reasonably safe to suggest that if an archaeological deposit lacks any means of acquiring a temporal fix, the site fails to meet the test of significance for its ability to meet Criterion 4. Archaeologists use a wide array of tools to investigate the age of archaeological remains and work continues to be done on developing new methods.

Michels (1973) provides a broad overview of the issues and goals of archaeological dating. He identifies two broad categories of archaeological approaches to dating a deposit. These are “relative” dating methods and “chronometric” dating methods. Relative dating methods include studies of the physical (stratigraphic) relations between deposits, the presence of artifacts or fossils whose temporal relations have been previously established elsewhere (cross-dating), and seriation.
Archaeological stratigraphic investigation is sometimes considered a subdiscipline in itself (Harris 1989). This method relies upon modifications of the rule of superposition derived from geology. Harris (1989:29-34) goes into considerable detail in explaining the necessary modifications of the basic geological rules that must be taken into account to deal with archaeological phenomena. While archaeological stratigraphy is important in defining structure within a site, geological stratigraphy and geomorphological relations of the natural soils and landforms upon which an archaeological component is found may also be of significance in understanding an archaeological component and in placing the component in time, as well as in understanding the economic adaptations of the population that left the remains.

Seriation is actually a measurement of similarity between archaeological components. It assumes that the greater the similarity between two components, the closer they will be in time. Without an external factor that can be used to order seriated components in time, seriation is directionless and can order components relatively, but not chronologically.

Archaeological cross-dating relates assemblages chronologically and is another tactic borrowed from the earth and biological sciences, this time from paleontology. Cross-dating depends upon the presence of “index fossils,” (i.e. highly identifiable fossils or artifacts that have a known historical position). Cross-dating argues that if an index fossil is present in an original deposit, that fossil offers a fix upon the earliest date to which the deposit can be assigned. In addition, where both ancient and recent indices are present, the youngest indices are the indicators for the age of the deposit. Thus, if a Clovis fluted point appeared in association with late prehistoric artifacts such as Desert Side-notched points and clam shell disk beads, the latest artifacts will be the ones employed to date the deposit.

Chronometric methods are employed to provide approximate calendrical dates for archaeological components. These methods are of great importance in studying the rates at which archaeological changes occurred, as well as in placing archaeological components in time. These methods depend upon physical laws and known physical properties of archaeological materials and of the environment within which these materials had their origin.

Radiocarbon dating, another well-known method of dating falls with a group of methods termed “radiometric” methods. Radiocarbon uses the proportion of the ¹⁴C radioisotope of carbon to the stable carbon isotopes ¹²C and ¹³C. Radiocarbon arises in the upper atmosphere as cosmic radiations bombards the planet. When the radiation encounters specific Nitrogen isotopes, the nitrogen is transmuted to ¹⁴C. Over time, this material gradually converts back to nitrogen (Taylor 1987).

The process of radioactive decay of the isotope takes place at a fixed rate measured in “half-lives.” A half-life is the time taken for one half of the ¹⁴C in a sample to decay. Because new ¹⁴C forms continuously and decays continuously, the rates of formation and decay create an approximate steady state in the proportions of stable and radiogenic carbon in the atmosphere. Plants take up carbon from the atmosphere and in turn are consumed by herbivores, who in turn are consumed by predators. This leads to portions of stable to radiogenic carbon in living organisms that mirror the atmospheric composition during their lives. As soon as an organism
dies however, carbon uptake from the environment ceases and the amount of $^{14}$C in organism begins a steady decrease at a fixed and more importantly a known rate (Taylor 1987).

All other things being equal, a measurement of the radiocarbon in archaeological organic remains will provide an estimate of the calendrical age of the material. Because the amount of $^{14}$C in the atmosphere is dependent upon the bombardment of the atmosphere with cosmic radiation, variations in the amount radiation can affect the atmospheric isotopic ratios. Similarly, volcanic eruptions and the combustion of fossil fuels can dilute atmospheric radiocarbon. The latter effect is known as the “Seuss effect” and has been observed in carbon dates from the later historic period comprising the industrial revolution and modern periods (Taylor 1987). These variations have lead to “calibrations” of radiocarbon dates in order to achieve better accuracy. Calibration methods include direct measurements of carbon isotopes taken on individual tree rings and of the isotopic composition of atmospheric gases trapped in the Greenland and Antarctic ice sheets (Fiedel 1999). Taylor (1987) provides a thorough introduction to radiocarbon dating issues, and the results of ongoing studies and investigations can be found in the journal *Radiocarbon*.

Other absolute methods of dating include obsidian hydration, thermoluminescence, paleomagnetic dating, Uranium series (Uranium/Thorium) dating, fission track dating, and other methods (Michels 1973). Obsidian hydration (OH) is widely used in the western U.S. Its utility as a chronological method has occasionally been questioned because the hydration process is dependent upon the source of the obsidian and a number of environmental factors, including the ambient mean temperature, the exposure of the obsidian to insults such as burning, and soil chemistry (Taylor 1976).

Paleomagnetic dating can be applied hearths and other features where human or natural activities conspire to freeze the magnetic properties of a material at the time of its manufacture, use, or destruction. Because the magnetic poles wander (the north pole has wandered over 20 degrees of longitude over the last 2,000 years), compass directions have not been constant, even within the historic period. When an event such as the firing of the clay lining of a kiln, or a hot fire on an open hearth fires clay or soil in to a fixed solid, the magnetic minerals will tend to be fixed in their orientation at the time of the firing. This provides a snapshot of the compass direction of the pole at the time of the event. By carefully moving an oriented sample, and by measuring the direction, dip, and intensity of the residual magnetic field of a feature such as a hearth, it can be dated by comparing its properties against a known standard table of geomagnetic variation (Michels 1973).

Thermoluminescence (TL) dating is a technique that can estimate the ages of some cultural materials that have been subjected to the effects of intense fires (Michels 1973:189-200). TL has been applied to materials such as ceramics, brick, hearths and heat-altered chert. The process depends upon the fact that TL susceptible materials “trap” visible wavelength light generated by the exposure of the material to radiation. This light is released when a susceptible material is subjected to intense heating effects. Since most mineral ental and even organic ones give off some background radiation, a newly “zeroed” material will begin to accumulate a new reservoir of TL as soon as it cools from the heating that erased its historical does. By carefully collecting such materials and measuring the background radiation of the
archaeological environment where the material was recovered, a sample can then be heated until it once more releases the trapped light. Archaeologists can then calculate an estimated age of the TL sample by heating the material and measuring the released light. An accumulation of “trapped” optical radiation within the mineral constituents of the material being dated.

**Data Requirements**

The significance of this discussion of these various dating methods for the City of Orange lies in the potential of archaeological sites that exist within the City limits or sphere of influence. Organic materials, including shell, bone and car bon are all materials that may have a potential for use in dating an archaeological deposit and have been recovered from sites in or around Orange. Fire hearths are common features in archaeological sites and are identified by the presence of reddened earth, ash and charcoal. Charcoal in even comparatively small quantities can now be dated. The reddened earth from hearths may have the potential to be dated using both thermoluminescence and paleomagnetic assays. In a study at CA-ORA-269, an Orange County archaeological site in the San Joaquin Hills east of Newport Bay, the excavators recovered evidence of a wattle and daub structure (Strudwick 2005). The ORA-269 study acquired 32 radiocarbon dates from shell, and carbonized bulbs. Strudwick also recovered numerous fragments of fired daub structural remains. While no samples of daub were submitted for thermoluminescence dates, the fired clay should have potential as a datable material.

It is evident that a broad range of potential methods and materials may be employed to estimate the age of an archaeological component and most are applicable to the kinds of materials recovered in the Orange area sites. Such materials may include organic materials such as plant material, charcoal, bone and shell, fire clay from hearths or ceramics, obsidian and fired lithics. Other materials that can aid in dating the component include typeable artifacts such as shell beads and ornaments; ground stone and chipped stone tools and ornaments. If an archaeological deposit contains one or more of these data sets, its potential to render important archaeological data should be carefully evaluated.

**Early Human Colonization and Paleoindian Prehistory**

One issue of perennial interest is the question of when the first Paleoindian colonists arrived in the Americans in general and in California specifically. The traditional view of North American prehistory, held for more than four decades, suggests that the earliest human occupants of the continent are represented by the early “fluted point” technology, recognized as the Clovis tradition or culture. The Clovis assemblage is commonly recognized through the comparatively large, bifacially worked weapon tips of lanceolate form. The base of the typical Clovis point is concave, and the near edges of the blade and the basal edge are heavily ground normally. The flutes, which provide the distinctive feature that makes the artifact an icon of Paleoindian America, consist of one or more pronounced, longitudinal flake scars on the opposite faces, and extending toward the tip of the point from the base. These scars give the Clovis point a concave cross section in the proximal quarter or third of the length. There is a great deal of regional variation among the artifacts referred to as Clovis points. Dixon (1999:152, 196-202) goes so far as to define a distinct Western Fluted Point tradition in Arizona, California, Oregon, Idaho and Nevada.
The Clovis tradition was identified historically as the earliest known human occupation through a series of investigations, syntheses and early radiocarbon dating work conducted by such people as E. H. Sellards, Marie Worman, C. Vance Haynes, and many others (e.g. Dixon 1999:13-17). Indeed, Haynes’ (1969:709-715) work has been an essential keystone in establishing a set of strong criteria for identifying early sites. Initial dating of Clovis components defined a range of radiocarbon dates for the complex ranging from 11,500 to 11,000 years B.P. As outlined by Fiedel (1999), however, late Pleistocene radiocarbon dates are subject to serious anomalies that consistently reduce the radiocarbon dates compared to Uranium-Thorium and annual varve dates by as much as 2,000 years, thus pushing the antiquity of Clovis back to 13,500 B.P.

Currently the antiquity of human occupation in North America has become a matter of intense discussion and debate among Americanist prehistorians. While authors such as Moratto (1984) and Chartkoff and Chartkoff (1984) have held the door open for pre-Clovis occupations, and others (Adovasio et al. 1980; Dillehay 2000; Dixon 1999) have more or less demanded that the traditional Clovis-first scheme be rethought, many archaeologists still adhere to the "Clovis first" view as articulated by Haynes (1969).

One clear objection to the Clovis-first model is that the distinctive fluting technology is unknown outside the Americas. Lacking any evidence from outside the Americas for the development of Clovis, it would appear that Clovis must have developed within the Americas, after the initial migration. This means that an ancestor to Clovis is ought to be present. Several sites have been offered as evidence of such pre-Clovis cultural, but as yet, no undisputable pre-Clovis occupation site has been identified in North America.

The most serious challenge to the Clovis-first model of the populating of the Americas was probably the discovery of the Monte Verde site in southern Chile in South America. The site, which has yielded a series of stratigraphically concordant radiocarbon dates, was evidently occupied by about 13,000 B.P., making it at least a contemporary of Clovis and possibly even older (Dillehay 2000; Dixon 1999). Short of an extended sea voyage to reach the southern extremity of South America, the ancestors of the people living at Monte Verde must have come through North America or along the continental coast.

It is here that the potential importance of Southern California becomes apparent. Evidence from locations in California such as the Arlington Springs site on Santa Rosa Island may be critically important to clarifying some aspects of this debate. The Arlington Springs "man" was discovered by Phil C. Orr in 1959 in a deposit more than 11 meters below the surface. Orr initially dated the discovery to about 10,000 years B.P. employing radiocarbon from the stratigraphic unit within which the remains were discovered. In 1989 a date of 10,080 +/- 810 years B.P., obtained on the bone, was reported by Berger and Protsch (1989:59). Considerable dissatisfaction has been voiced in the archaeological community over this date and in another date was acquired in the late 1990s. This new date gave the remains an estimated age of 10,970 radiocarbon years (Johnson et al. 2000). The revised date for the bone, based upon the late Pleistocene anomaly is therefore ca. 13,000 years B.P. (Johnson n.d.).
Arlington Springs is a clear indication that ancient humans were present on California’s coast as much as 13,000 years ago. Deeply buried, the discovery of these remains was due to the systematic research conducted by the staff of the Santa Barbara Museum of Natural History on Santa Rosa Island. However, the physical location of such finds cannot be predicted with any degree of certainty. Deeply buried, their presence is the result of processes and activities that took place in the distant past. The importance of such finds cannot be underestimated.

Fortuitous discoveries may occur wherever geographic conditions have happened to preserve and protect such remains through processes such as rapid burial through alluvial or colluvial sedimentation, or inundation and marsh formation. The urban portion of Orange is established on what was an active, developing alluvial plane up through the nineteenth century. There is a potential for extremely ancient remains to be discovered in ancient sediments beneath the city’s urban core.

**Data Requirements**

Archaeological remains that offer insight into very early human occupation must contain remains that can be used to fix their ages chronometrically. Such materials may include stratigraphic associations (e.g., associations with ancient terrain features, sedimentary deposits, or lacustrine features) or directly dateable materials such as organic remains including charcoal, bone, and shell, or materials such as obsidian, fired chert, and earths. Typeable artifacts are another highly desirable element. The chief issue is locating such materials. Due to the depth of time involved and the geographic and environmental changes which have ensued since that distant period, predicting where such deposits may be present is largely impossible.

**Growth of Marine Adaptations**

One important research issue of current concern in the maritime regions of southern California concerns the origins of the plank canoe built and used by the Chumash and Gabrielino—tomol or tiat respectively. Fagan argued that on logical grounds, the sewn canoe must have a lengthy developmental history (Fagan 2003:114-119; 200). This view is contrary to that of Arnold (1995) and Gamble (2002) for example, who both suggest that sewn plank canoes appear abruptly about 1,300 to 1,500 B.P. Another and radical suggestion has been made by Jones and Klar (2005). They argue that the sewn plank canoe, and the names used for these craft by the Chumash and Gabrielino, are potential examples of diffusion from Polynesian sources. Like Arnold and Gamble they argue that the sewn plank canoe is of comparatively recent origin dating to the beginning of the late prehistoric. Jones and Klar build the case using both archaeological and linguistic data, arguing for example that the simple shell fishhook used by the Chumash and Gabrielino in the late prehistoric, is identical in design to that used in eastern Polynesia and may also represent an instance of cultural diffusion. Klar builds an interesting argument that the terms tomol and tiat cannot be traced to roots in the Chumash and the Gabrielino ti’at and also tarayna are difficult or impossible to derive from Uto-Aztecan roots. Klar argues that these words are readily derived as donor words from Polynesian.

These are just three of many examples of the literature on the growth and antiquity of marine adaptations along the Pacific coast and relevant to Southern California in particular. The
relevance to Orange lies in the fact that the social structure of the Gabrielino as they were encountered by the advancing Spanish, formed in this era. The significance of the plank canoe as a status possession may or may not have been paralleled in some fashion in the interior, but the people of the interior were active participants in this social system. For interior Orange, understanding the reach and influence of coastal societies is relevant. Pertinent questions include were interior settlements tributary to the coast? Did interior villages have similar status structures and influential members, and if they did in what manner was such influence acquired, maintained and exercised?

Data Requirements

Archaeological data that can prove the position of Jones and Klar is unlikely to be found in the interior. However, the discussion of the late versus early origins of plank canoes is a question amenable to archaeological investigation. Examples of data that may indicate increasing maritime exploitation can include sea mammal bone and ivory, marine fish bones, materials from off-shore sources. Increased and careful note of such materials, their provenance, and datable contexts will be key to shoring up or dismissing one or another of the three alternative arguments. Relevant data necessary for addressing influence of coastal groups on interior Orange may include material of marine origin in assemblages from interior sites, indication of an exchange of materials between coastal and interior villages, and indications of inter-village hostility.

Settlement Patterns and Human-Landscape Interactions

Specialized human use of the landscape is an historically important field of archaeological and anthropological investigation and has been well over a century. From the discovery of "cave men" and their site remains in Europe, to the consistent documentation of preferred settlement locations of Californian natives by anthropologists such as Kroeber (1976), the cultural-ecological work of Julian Steward (1938:1955), and the modern views of authors such as Robert L. Bettinger (1991), Lewis Binford (1976, 1980), and Richard Gould (1980), the human use of the land and social adaptation to varying economic, geological and geographic conditions has been a consistently important theme in Americanist archaeology. This theme is maintained in southern California in the work of Hudson (1971), for example. Others who have addressed aspects of these issues in Southern California include Bean and Lawton (1973), and Shipek (1993) to name just two.

Evidence from ethnographic and ecological investigations strongly indicates that human actions have had a profound effect upon the structure of California's environment extending deeply into prehistory. Jon E. Keeley (2002), for example, cites evidence that naturally-started fires were comparatively infrequent in the project region. He also observes that both modern and prehistoric data reflect a greater incidence of fires than can be accounted for by natural causes, indicating a continuing effect from human activity (2002). Keeley argues that the structure and distribution of chaparral and grassland was deliberately maintained by Native American populations (2002). Numerous other investigators have examined a broad range of information and have come to similar conclusions (Blackburn and Anderson 1993).
Raab (2004) considers the linkage between social changes in Southern California and environmental changes. His view finds a strong relationship between environmental stresses, declining foraging efficiency requiring an intensified use of lower ranking resources, and increasingly frequent and lethal warfare as an incentive to increase social complexity. Raab argues that a decline in climatic quality forced existing populations to adapt to more stringent survival conditions. These conditions in turn spurred increased territoriality and warfare, which in turn required an increasingly stratified society to provide leadership and defensive methods against competing groups. Raab's synthesis is in marked contrast to "land of plenty" models of cultural development that have influenced many California prehistoric summaries. It is also well supported by a range of archeological and paleoclimatic data.

Historic documentary evidence from the Spanish period regarding the Diegueño strongly suggests that native grass seeds were remarkably larger than expected of natural stands and that grasses important to subsistence were harvested and sheaved by the Diegueño. This indicates probable physiological adaptation of the plant to human activity since naturally growing wild grasses are known not to be manageable to such handling. The grasses as described must have been at least partially domesticated (Bean and Lawton 1993:48-50). This kind of information may transform our understanding not only of California but of the gradations between hunter gatherer societies and the transition to agricultural economies.

**Data Requirements**

Settlement pattern analysis requires site location data and information on the original environment of the sites. Information about the spatial distribution of tool stone quarries may aid in identifying why certain materials were preferred and how they were acquired. Societies whose residential locations were fixed or of long term use would necessarily have had to arrange different means of acquiring tool stone than a mobile society with no fixed residential sites. Pertinent data may include archaeological site records, excavation data, burned seeds and other organic remains recovered from flotation samples of midden deposits, and auxiliary data including modern and paleoenvironmental, geographic and geological information. Other pertinent data acquisition locations may include springs, peat accumulations, alluvial beds, spring mats and similar deposits that can hold paleoenvironmental evidence such as pollen and accumulations of charcoal.

**Emergence of Social Complexity**

One primary domain of interest in California incorporates economic and social change and revolves around the question of what causes societies to become more complex. The coastal region of Southern California was regarded by Kröber (1976) as one of the "climax" cultural regions of California. The Chumash and Gabrielson had elaborate societies with large settlements and a complex, stratified society (c.f. Chartkoff and Chartkoff 1984:180-186). How and why this social elaboration came about remains an open question. The development of the planked canoe discussed above is also closely related to the development of late prehistoric Gabrielson and Chumash society. How and why this increase in social complexity took place is a significant and ongoing research interest in the region.
It has been suggested that some locations may have been used as industrial centers rather than simple village or secondary occupation sites. Padon, for example notes, that an unusual number of bone awls (nearly 50 percent of the recovered assemblage of 109 artifacts) was recovered from CA-ORA-283. She suggests that this site may have been the location of a specialized manufacturing industry that produced basketry, beads or possibly hide or other fiber goods. Other data from the site indicates its use as a primary occupation area based upon the presence of shell midden and other artifacts (Padon 1998:13-14). Pertinent research questions on this issue may include: are the large village sites older occupations and can secondary sites be linked to specific villages? Can specific sites or assemblages within sites be used to elucidate the appearance of stratification in Gabrieliño society, social differentiation among interments, increases in specialized task sites reflecting increased specialization through time?

**Data Requirements**

Pertinent data necessary to address social complexity include well-documented, diachronic and synchronic information on the development of the social and settlement systems. Funerary-related artifacts, functionally distinct work areas and differential distribution of wealth indicators (e.g., shell beads) are useful indicators of social complexity.
Effects of Historic Social Contact

Because of the early date of initial historic contact and the effects of missionization, ethnographic data for the Gabrielino and their neighbors are sadly lacking. The actual structure of their societies remains largely inferential and is based on historic accounts whose objectivity can at best be described as limited. Archival and ethnohistorical information reflects the catastrophic effects upon the population health and death rates in native societies that accompanied the advent of historic contact (Cook 1955). Acculturative processes are discernible in the presence of artifacts such as buttons and cloth impressions and metal objects, as well as the more ubiquitous trade beads. Similar data from Southern California can greatly enhance both our knowledge of Gabrielino society at the time of contact, but also the effects of that contact beyond mere missionization.

Data Requirements

Pertinent data include non-locally-manufactured artifacts and materials in protohistoric sites, changes in artifact designs reflecting external cultural influences, and evidence of nutritional and mortality changes in mortuary populations. The presence of trade beads as a replacement for traditional shell beads may also be indicative of this issue.

Historical Archaeology Research Issues

The historical context provided above detailed several periods of development important to the City of Orange. These include Colonization (Spanish/Mission Period), Early Settlement, Agricultural and Industry, Immigrant and Ethnic Diversity, Interwar Development, Postwar Development, and Modern Orange. Archaeologists and historians working in the area have examined land-use trends associated with each period in light of household organization, food preferences, technology, procurement of goods, and changes in use of the environment through time. Many issues overlap in intent and look at similar data through different contexts. Seven general research issues are germane to the project area, regardless of the time period under discussion: demography, consumer behavior, culturally diverse/ideological subcultures, technology, cultural geography and adaptive strategies. Some of these, such as consumer behavior, include sub-themes like subsistence. Many issues overlap with each other; demographic and cultural diversity domains are essential elements of interpreting consumer behavior at a household level, yet are important enough to stand alone as key issues.

Previous Historical Archaeology Studies

Spanish/Mexican-Period Studies

The Colonization period of California, marked by the establishment of missions, presidios, pueblos, ranchos and rancherias in Alta California, has been the focus of many studies by historians and archaeologists. Although historically considered a cohesive part of first Spain’s, and later Mexico’s colonial frontier, in reality the isolation of each mission or ranch created distinct cultural enclaves, each with its own individual economic base, demography, social activities, foodways, and interactive strategies. While the archaeology of missions,
presidios, rancherias, and pueblos has garnered much attention, the early period use of what is now Orange centered around the rancho.

The Spanish government awarded private ranchos to soldiers or citizens who had provided distinguished service to Spain and its colonies. Only 27 ranchos were awarded by 1822, when Mexico gained control of Alta California. Don Juan Pablo Grijalva was given use of the land in 1801, establishing the first and only Spanish rancho in what became Orange (Grijalva 2001; Marsh 1994). By 1850 the Rancho Santiago de Santa Ana had seven compounds, each with numerous buildings, occupied by heirs of Grijalva and each acting as a separate rancho. These included the original site of Grijalva Adobe near Hoyt Hill, the old Santa Ana group at Olive, the Peralta group in Peralta Hills, the Jose Antonio Yorba/Rodriguez group near Collins Avenue and the river, and the T. D. Mott/Fletcher Adobe, all in or near the City of Orange (Marsh 1994; Roberts 1936).

These compounds offer a unique and rare opportunity for archaeologists studying ranchos, adobes, and the lifestyle of the Californios. Documentation of this period of wildly romanticized California history is limited. Most information has been gleaned and extrapolated from church records, government reports, ships’ ledgers, observations by travelers, and disenos. Testimony related to land grant confirmation hearings, wills and probates has also been helpful. Unlike later periods in California history, however, there are very few diaries, journals, letters, and personal observations to provide an understanding into the domestic households of private ranchos, how they operated, the interaction between household participants, and the social and work lives of those occupants. Especially lacking is information on the Native Americans who lived and worked on the ranchos (Costello 2001:35).

Excavations of Mission- and Mexican-period sites, including adobes associated with rancho compounds, have occurred throughout California. Allen (2003:76) notes that Barker et al. provides a lengthy bibliography of historical archaeological research related to material in California. These studies have focused on questions regarding architecture, cultural contact, environmental change, domestic life, and industrial and functional activity areas. Relative wealth and success of individual ranchos has also been included in these studies. Comparisons between the various sites in many locations throughout California are essential in forming a cohesive understanding of life in Alta California.

Many of these studies have occurred in the San Francisco Bay Area, Monterey, San Luis Obispo and San Diego counties (Allen 2003; Costello 2001). Their excavation and analysis has provided new information on dietary practices, lithic sources, production, use and reuse, glass bead types and distribution, groundstone use, incorporation of non-Native items into Native American domestic lives, and arrangement of space. Other studies have examined rancho activities, such as cattle slaughter, hide processing, tallow rendering, beef procurement, entertainment, and production of goods (Costello 2001).

The Ontiveros Adobe in Los Angeles County is useful as an example of a small rancho compound comparable to sites that may be in Orange, such as the Rodriguez Adobe. The site, occupied from 1815 to 1835, resembled a small farm. Archaeologists postulate that the sparse recovery of glass, ceramics, and metal objects reflect the scarcity of goods available in Alta
California during this time period. In fact, while some of the storage and cooking vessels were imported from Mexico, the majority appear to have been made on site by local potters. Polished soapstone, flaked chert, beads of shell and glass indicate a strong Native presence at the rancho. Finally, detailed analysis of plant and faunal remains provided a list of foods grown and used on the site, butchering techniques, and even evidence of the effects on colonization on the native environment (Greenwood 1989, as cited in Costello 2001:35-36).

Site CA-ORA-1324H, located in Olive within the project area, was subjected to test excavations in 1992. The site, located at Old Santa Ana and occupied by the Yorba family from circa 1810s into the 1840s, was buried under three feet of silt and fill, the result of Santa Ana River floods in the 1840s and 1860s. The test program identified a large midden deposit with cattle bones, ceramics (brown and buff wares, Mexican folk wares, European whitewares), Native American artifacts (grounds tone, lithic debitage) and metals. Although damaged by flooding, the researchers believed that adobe wall remnants were also present (Archaeological Advisory Group 1992). The identification of this site suggests that even though development in the region has been rampant, remnants of the adobes and rancho compounds from the earliest non-Native occupation of Orange are present and lend themselves to archaeological research.

**Early Settlement**

The formation of towns and cities is a variable, long term and evolving process. Towns that are founded during an economic or population boom often develop rapidly in response to consumer needs. Others developed gradually around an initial commercial enterprise or ranch. No matter the speed of development or the size of the town, certain characteristics are universal in urban environments.

First, a town or city has a variety of commercial enterprises to serve the populace, including mercantiles, livery stables, saloons, hotels, barbers, laundries, bathhouses, and many others. Second, some sort of industry is usually present on the outskirts of town, such as a flour mill, railroad, packing houses or others. The need to house the industrial or agricultural workers and their families led to the development of neighborhoods extending out from the factory or commercial strip. Employees of commercial businesses, as well as the owners also required housing.

As towns became more stable, institutional facilities and community service-oriented establishments developed. These included churches, schools, cemeteries, social halls, fraternal organizations, governmental agencies, fire stations, and sheriff or police stations. Finally, parks, gardens, sports fields, and city-operated landfills, sewer and water systems developed.

In addition to the range of business enterprises, most towns have a socially and economically diverse population. Homes of the wealthy are often spacious, located on large lots, architecturally detailed and surrounded by formal gardens. Homes of working class are more modest in scale, with small lots. Low income or ethnically diverse groups often lived in closely spaced rental units, small plain cottages or cabins with few amenities.
The presence of archaeological deposits associated with urban businesses and households is somewhat dependent on when a town was established and how it developed. Generally, the earlier a town was established, the greater the potential for archaeological deposits. Nineteenth century towns like Orange and El Modena were planned without organized sewer, water and garbage disposal systems. Most buildings in town, including houses, commercial and industrial ventures, and community gathering places, had an outdoor privy associated with the house or business. They also had a well or water-holding devise. Garbage was either burned in backyard pits or, more commonly, thrown out the back door, raked across the yard and occasionally covered with dirt, creating sheets of horizontally-arranged garbage divided by thin layers of dirt. As public infrastructures were developed and communal service came on-line, the backyard privies, wells and trash pits were abandoned. It was common to use these abandoned hollow features as disposals for household debris, filling them with unwanted items, broken or discarded artifacts and garbage. Once the holes were completely filled they were capped with dirt and were no longer visible elements of the surface landscape.

Characteristically, refuse deposits would contain the by-products of everyday living including domestic and personal items, faunal and floral remains, and miscellaneous items. The nineteenth and early twentieth century was a time when mass-produced items were flooding the market and embraced with great passion by the American consumer. Glass medicine bottles, condiment bottles and jars, and alcohol containers by the hundreds are commonly recovered from urban household deposits. Typically, thousands of porcelain and earthenware plate, cup, bowl, tureen, chamber pot, milk pan and mug fragments may be present in one single deposit. Canned products are not as common in the urban environment, when compared to archaeological rural counterparts, but metal objects, especially those associated with adornment, clothing, furniture and basic household use are present. These deposits often have great research value because they are in effect sealed time capsules representing a single household or business and offer interpretation regarding their ethnic affiliation, technology, gender, or other issues.

Many studies have occurred in cities and towns that support the above patterns. Perhaps the largest took place in Oakland during the aftermath of the Loma Prieta earthquake. As part of the Cypress Freeway Replacement Project, Sonoma State University examined over 200 city blocks. Evidence of boardinghouses, hotels, laundries, mercantile, blacksmiths, tailors, and other business enterprises provide a substantial body of comparative information for similar households, including discussions of social and economic status differences, technology, consumerism, and many other research themes (Praetzellis and Praetzellis 2001).

**Agriculture and Industry**

The roots of agricultural development in the project area came with the establishment of the ranchos and the need to raise grain and produce to feed the cattle and occupants of the rancho. The first attempts at irrigated fields in the region consisted of little more than a hand-dug earthen ditch leading from Santiago Creek or the Santa Ana River into the hay pasture. These early irrigation systems were built by Californios for use in their ranchos. The land boom of the 1880s attracted settlers who steadily expanded agricultural fields from the floodplains to outlying dry lands, importing water through elaborate and expansive irrigation systems. As water was brought into Orange, more and more farms developed. Most farmers raised grapes,
olives and later oranges in their fields but also maintained vegetable gardens and small orchards for their own use or for sale.

Archaeological remains of agricultural development can be divided into three major categories; homesteads, irrigation works, and fields or orchards. Many farmsteads began as a small collection of modest buildings, usually including a small house, barn and corral, privy and water storage device like an enclosed tank house. As profit grew and family size increased houses were often added to and became a rambling collection of rooms. Root cellars, coolers, gardens and orchards were usually located near the home. In the absence of a formal garbage collection system farmers often created a landfill in a nearby gully or artificially created pit. Garbage was burned or deposited, using dirt to cover trash and creating family-specific refuse deposits.

The longer the occupation of a farmstead the more remains archaeologically. Failed home sites may be represented only by collapsed structures, footings or foundation remains, trash scatters and depressions from a privy. In many areas neighbors or new homesteads salvaged boards, nails and goods from abandoned farmsteads, leaving not even a trace of the structural elements that once marked the site. Many farmsteads were forced by isolation, low incomes and lack of a ready market to be self-sufficient and this is often reflected in the archaeological record. Typical artifacts include canning jars, lids, and liners, cans cut into shapes or punched with holes to create strainers, patches, and the like, and hand fabricated tools and modified household items exhibiting evidence of reuse and adaptation.

Excavation of farmsteads has occurred throughout California. Researchers often study how each farm operated within its environment, the relative success of a farm, household composition, dietary habits, and level of self-sufficiency (Guerrero and Komporlides 1995; Maniery and Baker 1996; Praetzellis and Praetzellis 1985).

**Immigrants and Ethnic Diversity**

Towns, especially during the land boom of the 1880s, were international melting pots. Typically, residents sought out their countrymen and formed mini-communities within the larger whole. In Orange, several towns were formed around ideological beliefs, although the church members often from a single country as well. Orange was known for its large German population who immigrated together, bound by their religious beliefs. Orange also had a small Chinese section beginning around 1875. Hispanic enclaves formed in pockets within the various communities of the project area. Immigrant or ethnically diverse groups are often difficult to study. Language barriers, illiteracy, tendency to live and work with others from the home county, prejudice from the mainstream population all account for the difficulty in documenting the daily lives of Native Americans, Chinese, Hispanic, Germans, and other groups.

Over the last 20 years archaeologists have turned their attention toward these ethnically diverse populations. Perhaps the largest studies have taken place in cities such as Riverside, Los Angeles, San Francisco, Oakland and Sacramento (cf. Allen 2003; Costello 2001; Great Basin Foundation 1987; Greenwood 1996; Praetzellis and Praetzellis 2001). These studies have
documented the blending of traditional cultural dietary preferences and practices and ideological beliefs with assimilation of aspects of the dominant society.

**Interwar, Postwar and Modern Development**

In general, archaeological attention has not centered on sites from the 1920s to modern day unless it is associated with an immigrant or ethnic group that has been difficult to document through written records or oral testimony. The exception has been studies focused on the Great Depression of the early 1930s and the ways people adapted for basic survival. Historians and archaeologists have examined the mobility of the American population during this time of hardship and the ways that families managed to eke out a living. As people lost their homes and jobs or left the “Dust Bowl” to escape drought conditions, they often established temporary camps, living out of their cars near water. Hugh federally-funded projects of the time, like the building of Hoover Dam, attracted hundreds of unemployed men, who brought their families with them as they sought work (Furnis 2003). Attention has focused on how these families lived, what they ate, the conditions they endured, and the reception they received in the various towns they approached.

**Historic Property Types**

A property type, such as a dwelling in a city or a farm site, is often characterized by a combination of features that could each stand alone as a site type. Fifteen historical site types are recognized for the study area and are discussed below. Generally, significant properties contain one or more combinations of these site types.

- **Domestic architecture:** architectural remains of residences and domestic outbuildings. Includes foundations, floors, roofing material, footings, pilings, cellars or basements, collapsed or standing structures, and boards, adobe stucco, shingles, or other remnants of buildings.
- **Cooking features:** pits, domed ovens, hearths, campfire rings, roasting ovens, smokers, and smokehouses.
- **Industrial and commercial architecture:** architectural remains of buildings and structures that housed various industrial processes or commercial ventures. Similar to domestic architectural remains in content.
- **Industrial features:** evidence of the industrial processes themselves, distinct from buildings.
- **Waste byproducts:** industrial waste such as slag, metal shavings, coke, charcoal, waste rock.
- **Discrete, domestic, refuse-filled features:** hollow features that, before the days of organized refuse collection, were used as receptacles for the by-products of everyday living. Includes wells, cisterns, basements, out house pits, and lined and reusable garbage pits.
- **Sheet deposits:** stratified deposits of domestic refuse spread horizontally across the landscape.
• **Refuse deposits.** Unstratified deposits of domestic or industrial refuse randomly disposed of on the ground surface.

• **Landfills:** Areas set aside by a town, long-term occupation site, or rural neighborhoods for indiscriminate dumping of refuse over long periods by multiple household groups.

• **Animal Husbandry:** Corrals, barns, fences, feeding areas, watering holes or troughs, salt licks, cattle guards, and pastures used in the raising of stock.

• **Linear corridors:** Foot paths, trails, wagon roads, railroad beds, or highways. Defined by a linear track, cut, or raised bed exposed or containing a cover of oil, gravel, asphalt, wood, metal, concrete, wood ties and rails, gravel ballast, or crushed cinders. Sometimes supported by rock walls and containing ditches, concrete channels, brick or wood culverts to store or divert water from or under a roadbed.

• **Water-related features:** Linear water-conveyance structures, such as earth or gunite-lined ditches and canals, steel penstock pipelines, or siphons, concrete or wood culverts, and the like. May also include reservoirs, dams of any design (small check-dams, timber-crib dams, hydraulic or rubble-fill dams), pump houses, windmills, wells, piped water systems, and tank houses.

• **Infrastructure/Utilities:** Series of poles, trees, post holes, steel towers, or post-supporting rock piles used to hold electrical, telegraph, or telephone lines. Often marked by the presence of ceramic or glass insulators. Also includes sewer pipes (clay or metal) and water lines (metal or wood),

• **Funerary:** Any site associated with human interment. May include a single grave, small family plot, or well-recognized communal locations with multiple human interments.

• **Managed habitats:** Artificial habitats created by humans, including domestic fruit and non-native trees, landscaped areas, planned parks, formal gardens, vegetable or flower gardens, orchards, vineyards, fence lines, and cleared areas.

Depending on complexity, these sites may contain from one to five functionally distinct types of artifact assemblages (Table 3). The first relates to personal use and includes medicinal products, grooming items, toys, clothing and footwear, adornment, drug-related containers and paraphernalia (alcohol, tobacco, opium). Artifacts related to child and infant care is included in this category.

**Table 3. Typical Historical Artifact Assemblages by Site Type**

<table>
<thead>
<tr>
<th>Site Type</th>
<th>Personal</th>
<th>Domestic</th>
<th>Structural</th>
<th>Activity</th>
<th>Miscellaneous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Architecture</td>
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<tr>
<td>Commercial/Industrial Architecture</td>
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<tr>
<td>Cooking Features</td>
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<tr>
<td>Industrial Features</td>
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<tr>
<td>Waste</td>
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</table>
### Byproducts

<table>
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<tr>
<th></th>
<th>★</th>
<th>★</th>
<th>★</th>
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<th>★</th>
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</thead>
<tbody>
<tr>
<td>Refuse-filled features</td>
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<tr>
<td>Sheet deposits</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
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<tr>
<td>Refuse deposits</td>
<td>★</td>
<td>★</td>
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<td>★</td>
<td>★</td>
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<tr>
<td>Landfills</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
<td>★</td>
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<tr>
<td>Animal husbandry</td>
<td></td>
<td></td>
<td></td>
<td>★</td>
<td>★</td>
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<tr>
<td>Linear corridors</td>
<td>★</td>
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<td>★</td>
<td>★</td>
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<tr>
<td>Water-related features</td>
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<td>★</td>
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<tr>
<td>Infrastructure/ utilities</td>
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<td>★</td>
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<tr>
<td>Funerary</td>
<td>★</td>
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<tr>
<td>Managed habitats</td>
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</tbody>
</table>

A second category of artifacts, and usually the most prolific, reflects domestic use. Domestic assemblages include food-preparation and storage items (dishes, cooking vessels and implements, food remains, storage containers, and condiments), furnishings, interior lighting and heating (adobe brick, tile, gas lamps, wall sconces), cleaning and sanitation items, and other household objects (irons, washboards, basins, laundry pins).

Structural remains comprise the third functional assemblage. Included in this category are both gross building materials (adobe brick, tile, lumber, brick, stone, etc.) and hardware (door knobs, latches, hinges, lock boxes).

The Activity category includes any item related to a specific action that is considered a sub-theme under this category. Slate pieces, graphic pencils, scissors, pen nibs and similar items may all represent an educational activity. Blacksmithing may be represented by slag, metal, files, metal shavings or charcoal. The activity category is flexible to allow for specific actions at individual sites.

The final assemblage is labeled “Miscellaneous” and includes those fragments of artifacts that cannot be assigned to a specific functional assemblage. Non-diagnostic fragments of glass, bits of metal, ceramic sherds, and fragments of cloth or leather are candidates for the Miscellaneous category.

Significant sites often contain a wide variety and quantity of artifacts from each category and a range of activity-related material. Sites that are dominated by only one functional classification with homogenous assemblages (i.e., trash scatters where food cans make up 80 percent or more of the total artifact assemblage) are usually less significant – that is, they contain less data potential – than those with a well-balanced functional representation.

Along with the functional assemblages, the presence or absence of intact, subsurface cultural deposits can be a key indicator of site significance. Subsurface deposits, especially those...
with a clear historical association on a site occupied for a short period of time, can contain important associations of features, artifacts, and dietary constituents. Subsurface deposits can occur in association with most of the site types described above, but are generally more likely to be found at sites with some level of habitation (see Table 3).

As with prehistoric sites, the structurally complex sites with a wide range of artifact and feature inventories are often more likely to meet the data requirements for the research issues discussed below. Properties with numerous site or features types, a full palette of functionally ascribed artifacts, a strong thematic context, and features with a high subsurface potential represent the higher levels of significance under Criterion 4 and, depending on architectural features and historical association, may also meet Criterion 1, 2, or 3. Researchers should be cautioned, however, that historical archaeological sites lose importance if they do not have a clear thematic association.

Demography

The issue of demographic patterning has long been of concern to researchers working in California (cf. Costello 2001; Praetzellis and Praetzellis 1993; Praetzellis, M. 1994). Demographic profiles have been extended to the study of ranchos, neighborhoods, towns, farms and any places where people lived together in a household. Demographic studies attempt to reconstruct household composition (including gender), social stratification, and ethnicity. Understanding who lived in a household, where they came from, and what they did for a living are key to interpreting consumer behavior and comparing sites to one another.

Demographic interpretations are arrived at in a variety of ways. Hardesty (1988) notes that estimates of population size can be made based on house sizes and quantities and size of domestic refuse. Composition of households can be grossly interpreted from the archaeological record through identification of artifacts associated with age (i.e., toys) or gender (i.e., corset hooks or stays, perfume and cosmetic containers). Demographic studies are useful for examining changes in household composition through time, growth of families, and care of the elderly, to name a few (Hardesty 1988). At ranchos, demographic analysis lends itself to interpreting the relationship between Native Americans and Californios, com position of the household, and other pertinent issues (Costello 2001). Archaeological deposits are useful for interpreting demography especially in the years between federal censuses and for those marginal sites where written records are sparse.

Data Requirements

Reconstructing demographics often is dependent on solid historical research of written records. Homestead records and case files, state and federal census records (population, agricultural, and industrial censuses), registers of voters, tax-assessment records and rolls, regional histories, and contemporary newspaper accounts all may contribute important demographic information regarding a homestead, factory, town, or camp. Company records are crucial elements in reconstructing a work-camp labor force in company-operated towns such as Olive. These types of information, supplemented with oral interview data where available, provide a basis for interpreting sites through the behavior of the household members.
Archaeological remains associated with women, children, ethnic groups, bachelors, and the like also contribute to demographic studies. Of more importance in demographic estimation are definable living surfaces to estimate size of shelters, associated trash scatters and known or postulated function of a site. Toys, cosmetic containers, feminine-hygiene products, nursing implements, baby bottles, items from women and children’s apparel, school-related items, and the like all contribute to an understanding of household demography.

**Consumer Behavior**

The study of individual households and the response of each to economic and social conditions of the time have been under investigation for over a decade. A household is defined as a group of people living together (not necessarily a family) for domestic purposes and is a convenient unit of study (Beaudry 1984:30; Praetzellis and Praetzellis 1985:94). According to Deetz (1982:724), most aspects of household behavior reflect that of the greater society. In Deetz’s words, “we will probably never excavate an entire state, but tens of thousands of households await our attention” (1982:724).

Hardesty (1980:71) notes that a household “is a visible assemblage of persons sharing a common life space in a specified manner” whether related to a single prospect or a company camp, attendants of a train depot or way station, or a domestic farm household. He suggests that the visibility of the household makes it a useful unit for study through both the documentary and the archaeological records, and that “transformations brought about by household processes can be recognized, for example, by architectural modifications or other changes in patterns of material culture.” Self-sufficiency, use of manufactured products, gender issues, and occupational productivity can all be addressed at the household level, and studies of individual households can be combined to examine broader regional patterns.

This approach has a number of proponents in historical archaeology (for example Beaudry 1984, 1986; Beaudry and Mrozowski 1987; LeeDecker et al. 1987; Mrozowski 1984; Starbuck 1984). Wilke and Rathje (1982:613, 618) write that the “archaeology of the individual household is an essential building block in reconstruction of past societies,” and that the material culture seen in individual households reflects the demographic composition of those households. Some of the concepts relevant to household studies include household composition, life cycle (of the household itself, not the individuals living in it), income strategy, and status. All of these topics influenced consumer behavior and need to be taken into account when interpreting material culture derived from a household.

The organization of a household, whether residential, commercial, or industrial, is multifaceted and includes demographic composition, functional organization, and spatial layout. For example, a rancho compound may include a blacksmithing station, cookhouse or living center, or a multitude of functionally discrete areas placed across the landscape. Refuse-disposal areas, wells, privy areas, orchards, animal-husbandry stations, or other use areas may represent households. Examining the organization of a site, both demographically and spatially, is useful in defining historical patterns of behavior, technology, and personal preferences on a regional scale (Maniery and Baker 1996).
Subsistence is a basic unit of any occupation site and is reflective of consumer choices. Generally, subsistence issues revolve around consumer preferences and availability of resources. Subsistence is also influenced by gender, for example, a bachelor living in a small cabin near his work site eats differently than a nuclear family on a ranch where the woman is responsible for the majority of the food preparation. Subsistence also varies between, for instance, a boarding house or hotel that employs one cook to prepare meals for a group, and small, loosely-organized community trading food-preparation duties, like a Chinese district.

Consumer behavior and social and economic status also can be studied through the examination of refuse. Refuse, quite simply, is garbage, and includes remains of food preparation and consumption, such as bottles and cans, leftover food, seeds, bones, and broken and discarded household objects (dishes, personal items, etc.). Refuse deposits associated with specific households can be studied to answer questions about how people lived, what they ate, how they spent their money, where they obtained their products; how (and to what degree) they were influenced by marketing, social movements, or their bosses; what medicines they used; whether women or child ren were living in the house; and a multitude of other questions. Faunal remains, in particular, are crucial in reconstructing diet, economic status, consumer preferences, social status, and in some cases, ethnicity. Studying the cuts of meat and their economic value, butchering marks on bones, and percentages of meat and poultry types represented in individual households is an efficient way of interpreting ethnicity, quality and quantity of the diet, economic status, and adequacy of company-provided food. Faunal remains also provide information on efforts to supplement domestic food sources with wild game.

Data Requirements

Data needed to address the research issue of consumer behavior in households include archival information focused on individual sites, oral interviews with knowledgeable individuals or past residents of sites, and remains of material culture. Product availability can be interpreted from store inventories, credit sheets, and newspaper ads. Court records are invaluable sources for reconstructing product availability due to the detailed inventories of businesses and households that accompanied labor-wage disputes, probate documents, or other legal papers. Economic/status information from documentary sources, documentary evidence of residents by area, their occupations and military ranking on bases, and length of occupation are also useful.

Archaeological assemblages could include functionally and temporally identifiable archaeological features, interfaces, and artifacts, faunal remains with butchering marks, and botanical remains. Functionally, artifacts related to personal use and health, domestic use, structural remains, household activities, agriculture, education, animal husbandry, and miscellaneous functions contribute to an understanding of a household and of consumer behavior. Materials required to address subsistence issues include food-consumption and preparation items, such as cans, bottles, dishes, stove parts, and utensils. Orchard remains, floral and faunal material, and remains of cooking areas also are useful in addressing dietary habits and food preferences.
**Ethnicity/Ideological Subcultures**

Cultural heritage and gender-related choices can also be examined through material-culture remains. In some studies of areas with a high degree of faunal preservation, distinctions between Chinese, African-American, and Hispanic households have been made by comparing the faunal record with historic data on food preferences (Praetzellis and Praetzellis 1993). Ethnic diversity may be evident in deposits associated with a variety of themes and could add to a reconstruction of the lifeways of the region’s inhabitants.

For the past ten years there has been an effort among some researchers to examine ethnic use of sites in terms of their cultural heritage and traditions. Researching traditional farming practices, cooking methods, and engineering devices through oral interviews, examination of ongoing methods used in the country of origin for the household under study, and photographic documents all have provided new depths of understanding of some features and identification of others. Before excavating or interpreting an historical site, researching the ethnic heritage of its occupants is as commonplace as understanding the demographic make-up of the house.

Material remains can demonstrate the relative influences of economic distinctions and the development of mass production and world trade of materials. Artifact assemblages found in sealed deposits are literally time capsules, normally created over a short period. A study of these time capsules results in an understanding of what was purchased and used in a household. These choices are affected by primary age, gender composition, income level, social standing, education, family background, and personal beliefs.

Recently, attention has been given to the examination of individual nineteenth-century households in light of the Victorian attitudes that prevailed at the time. The values touted during the Victorian era ("piety, purity, submissiveness, domesticity in women [Welter 1966:152]; rectitude, thrift, sobriety, and hard work in men [Wiebe 1967:4]; self-discipline, temperance, and respect for authority [Mann 1982:210]; and steady work, punctuality, and compulsive behavior in general [Howe 1976:210]" as outlined in Praetzellis et al. 1993:26), were readily adopted by middle-class commercial and professional interests. Victorianism filtered down into the artifacts chosen by households, behavior patterns, and specific historical events and processes on many levels, including household decorations, municipal work projects, and children’s toys. In contrast, working-class consumer practices were distinctive, perhaps a form of rebellion or resistance to the overbearing Victorian values of the middle-class (A. Praetzellis 1991; Praetzellis et al. 1993:26-27).

The archaeological deposits associated with mid-nineteenth-century households often contain material that provides evidence of the degree of participation in or rejection of the Victorian patterns of domestic behavior. Artifacts associated with formal dining and socializing can offer evidence regarding the increased importance of these activities through time. The context of the influences of Victorian values on individual households in urban environments (Allen 2003, Praetzellis [ed.] 1994) has been a focus of study for the last two decades.
Along the same lines as Victorianism, some archaeological sites developed as one piece of a colony or organized group of sites centered around a religious belief. Mormon colonies have been researched in Nevada by Hardesty (1988) and others. Communities that developed as part of religious movements such as El Modena with its Quaker background did occur in the project area and may also be distinct archaeologically.

**Data Requirements**

Archival research, particularly federal-census information, is useful in identifying ethnically-related sites. Extrapolation of ethnic heritage is also possible by examining tax-assessor plats and rolls and projecting ethnic affiliation from nomenclature of ownership. While this technique works for property owners, it does not account for tenants or squatters. Homestead records, case studies, and newspaper accounts may also be used to assess ethnic affiliation of sites. For some sites, oral interviews are a more practical way of identifying cultural traditions and their generational influence.

Archaeological assemblage and features provide another way to identify ethnic or ideological sites. Some cultures, such as Chinese and Japanese, are easily identified through their porcelain plates, bowls and cups, and food-storage containers. Their artifact assemblages are well known and documented and are distinct from the surrounding non-Asian material culture. Food preferences of Irishmen, African-Americans, Italians, Greeks, and Basques are documented in culinary studies, social histories, and the like, and can be identified through a study of faunal and floral remains, if preservation is adequate, and through structures, such as domed bread ovens.

Pollen analysis has also been useful in reconstructing Victorian formal gardens. Artifacts often attributed to Victorian ideology include decorative vases, china, and white improved earthenware of many patterns, fancy centerpieces and serving dishes, highly stylized and elaborately-decorated furniture handles, light sconces, clothing fasteners, personal-grooming items, and parlor decorations (Hardesty 1988; Praetzellis 1991). Other artifacts, such as temperance-league badges, may also be present and are indicative of Victorian ideology.

**Technology**

Currently, the historical-archaeological study of technology is in its infancy. George Teague (1987) has been studying waste products from industry, such as slag, and has found that the waste can often provide information on undocumented technologies not available through historical research. Unglik (1984, 1990) and Council et al. (1982) have also examined and analyzed cast iron products and by-products recovered in archaeological contexts.

While some activities are likely to have visible byproducts, carpentry and other activities associated with industrial sites are often less represented in the archaeological record. Carpenters usually owned personal tools and took them when they moved from job to job following the watersystem development, mining, railroading, or any other activity that required construction of buildings for housing or industry. Some companies retained carpenters on a permanent basis; other, smaller enterprises often hired free-lance workers for a shorter duration.
In general, carpenters were economical and reused everything, leaving few byproducts of the woodworking industry associated with building (Praetzellis and Praetzellis 1993).

Studying industrial processes associated with milling, blacksmithing, or other activities could provide data on undocumented technologies or could indicate evidence of local innovations as opposed to use of standardized technologies. Extensive reuse of equipment, artifacts, or sites may also be discerned through the archaeological record.

Of more importance is the potential comparative information obtainable through intact deposits from industrial activities, particularly those associated with the smaller business enterprises. There is little documentation from mid-sized or small-scale, independently-owned flour mills, mines, and other industries. Most of the knowledge comes from studies of historical photographs that often cannot provide detailed data on construction methods, work activities, or technology. Of particular regional interest are studies of how accepted industry technology was adapted or redesigned in response to regional environmental and procurement conditions, how technology changed through time as conditions improved, and how poorly understood or undocumented processes are interpreted through a study of the archaeological record.

**Data Requirements**

Data requirements include documentary evidence of technological change or advances as found in company records, comparative operations, and trade journals. In addition, technical colleges, trade schools, and other educational facilities often have historical books or studies documenting changes in their trade’s technology through time, including histories of mines, and photographs or line drawings of equipment and operations.

The study of industrial processes is often enhanced by consulting with an expert in the field. “Old-timers” and retirees who have spent their lives working in, or energy-generating facilities, or assessing claims, provide unique outlooks on site interpretation and are often crucial components in assessing site significance.

Finally, artifact assemblages, including waste-byproduct areas, foundations, abandoned equipment, and work-related tools, are important components of technological interpretation. Vertical and horizontal deposits, slag, coke, metal shavings, forges, milling equipment and other equipment are some of the archaeological remains useful for interpreting sites within a technological framework.

**Cultural Geography**

Archaeology offers an ideal means of examining changing land use and spatial organization through time. On a household level, examination of botanical debris is useful in identifying location and composition of backyard gardens. On a wider scale, placement and layout of water systems, sewer and drainage systems, and trash-disposal areas in urban environments can be enhanced by combining the historical and archaeological records. Archaeological remains can significantly add to the description and study of the evolving formal and informal landscape and layout of homesteads and towns through time. Identification and
study of architectural remains (building foundations, cellars) can be compared to the historical record to complement the study of design and layout.

No matter what the theme or setting, certain areas are set aside for specific purposes. Space is often arranged so that odorous or unpleasant activity areas are placed as far as possible from the residential or occupied lots. For example, the placement of privies is strategic and takes into consideration prevailing winds, distance from the house in winter cold and storms, privacy, and other issues. Slaughterhouses and branding and castration stations are usually located on the outskirts of town or away from the main ranch complex, again with consideration of wind, exposure, and vegetation screening. Other areas, like gardens, are normally placed close to the house to allow easy access for care and harvesting and close proximity to the kitchen. Root cellars, coolers, and smoke houses are also close to the house (Maniery et al. 2003).

Design of space is also important in situations with an in-place social hierarchy, like company-operated town. In general, there is a separation of space between company owners, foremen, and workers. This separation may be a physically empty area between housing, or a physical barrier such as a picket or split-rail fence or vegetation screen. Where topography permits, social hierarchy can also be seen in elevation; those belonging to the upper ranks of the social system live on top of the hill.

Cultural geography studies are essential elements in examining landscapes associated with a particular activity. A cultural landscape associated with a particular homestead, for example, may include a study of the layout of the farmstead, as well as its relationship and proximity to surrounding agricultural fields or orchards, related irrigation features, roads that connect the farm to the outside world, gardens, orchards, or other features that are components of a whole.

**Data Requirements**

Data sets needed to address issues of cultural geography include intact structural remains (privies, wells, foundations, walls, root cellars); functionally and temporally discrete archaeological features; intact water, sewer, and refuse-disposal systems; documentary evidence of town, camp, homestead, or base layout and design; photographs; and botanical specimens from intact archaeological deposits. Oral interviews of ten identify subtle features of the landscape that are not evident archaeologically and are important for interpretive purposes.

**Adaptive Strategies**

For the past 20 years, researchers in Nevada and California have investigated the relationship between consumers and their environment. Donald Hardesty (1980) has provided a list of scientific research questions for ranching sites in Nevada, for example, that takes into account the arid environment and people’s adaptation to their surroundings. Hardesty’s work examines the effects of a managed ecosystem created by ranchers on the natural environment; how droughts affected local adaptations and the responses of ranchers; the flexibility of ranchers to change from dairy to sheep to beef cattle ranching, as needed, in response to local demand and environmental conditions; and the differences in technology and adaptive choice made by
long-term ranchers and short-term homesteaders, and whether that translated into successful ventures or abandonment (Hardesty 1982; Praetzellis 1985). Ross’s studies of homesteading in Oregon note that successful operations are those that have learned to work with the environment; become self-reliant; and adapt to conditions, resources, and water shortages in inventive ways. Costello (2001) notes that understanding the interaction between ranchos and the environment is an important research issue.

Self-sufficiency refers to “a type of society which may or may not be on the geographic frontier. The people living in this kind of social system, industry, area, or site are self-sufficient, isolated and independent; the area or industry undergoes permanent development; the population reproduces its own labor force (women and children are a key part of self-sufficient society); and society relates closely to and is heavily influenced by the environment. Praetzellis and Praetzellis (1985) note that successful households often have been occupied over a long period of time by a single family that had the ability to “reinvent” themselves and diversify their occupation in response to changing economic times, evolving consumer demands, and environmental conditions (1985). Self-sufficient homesteads are usually successful ventures. Ranchos and farms are the best examples of self-sufficient enterprises within Orange.

Data Requirements

Several data sets are useful in addressing the above questions. Evidence of water management (irrigation ditches) are important data sets regarding environmental adaptation. Resource adaptation on a ranching site may be evidenced through the clearing, defining, and improving of garden plots and pasture as seen through fence-building, rock-clearing, and water-importation. Analysis of historic pollen and soil characteristics can also be used to reconstruct adaptive strategies.

Archaeological material is critical in examining self-sufficiency issues. A high percentage of canning jars, tools, products adapted for other uses, and gender-related artifacts, may be indicators of a self-sufficient household. A wide variety and large number of commercially available products, combined with a lack of home-preserved items, may indicate a more dependent household. Chronologically sensitive materials such as bottles, ceramics with manufacturing marks, and patented items, are useful in ascertaining if self-sufficiency was motivated by economic downturns.

ARCHAEOLOGICAL SENSITIVITY ASSESSMENT

One goal of this document is to identify areas likely to contain archaeological sites that may meet legal significance under CEQA or meet National Register criteria. Legally significant sites are those that retain integrity, have quantities and variety of material cultural remains (including artifacts, flora or faunal remains, physical features), and, in the case of historical sites, have a defined association with an identified household, ethnic group, ideological belief, or the like. Areas that may contain sites are defined from environmental characteristics, previous ly
identified locations of known sites, historic documents, or oral testimony. Areas of archaeological sensitivity identified for Orange are depicted on maps contained in Appendix A. It should be noted that these maps are not meant to be all inclusive. In reality, prehistoric or historical sites that may meet significance criteria can be found virtually anywhere within the City. The maps identify only areas most likely to contain intact and significant archaeological resources.

Prehistoric Archaeological Sensitivity

Archaeologists have long held the notion that the choice of sites for living and conducting tasks is governed by behavioral regularities. The essential idea is that a proper knowledge of how choices of living sites are made should offer not only important archaeological insights, but also have the potential to make the management of archaeological resources a more systematic process. This goal is of sufficient promise that the Bureau of Land Management (BLM), for instance, sponsored the BLM Cultural Resource Predictive Modeling Project in 1983 (Judge and Sebastian 1988). Archaeological predictive models are based upon the assertion that the geography and history of region have a direct (if not determining) influence upon the distribution and kinds of archaeological resources that can be identified in a region (c.f. Kohler 1988:19-59).

Archaeological predictive modeling can fall into two general classes: 1) inductive, correlative models, and 2) deductive, truly predictive models. Archaeological models in general tend to lean heavily upon the correlative model (Sebastian and Judge 1988:4-5). Such models look for, or expect, correlations between geographic, ecological and landscape features and the locations and kinds of archaeological resources. They may also, especially for historical archaeological resources, argue correlations between known historical occupations and expectable types and locations of resources. Geography and ecology are considered to affect site distribution through the occupants' choices made with regard to environmental factors. These include such locational traits as its proximity to potable water sources, topography and insolation, resource availability, game and subsistence plants, defensibility and others.

An occupation site for instance must possess a reliable water supply that is available during the time the site is being occupied. The sole exception to this rule might be for small, short-term (overnight) camps made by people capable of carrying their own water. Since water can be acquired from either intermittent sources such as seasonal streams or perennial sources like rivers and springs, not all water source types are equally available for use throughout the year. Thus the site use-period may reflect either an extended period or a pattern of repeated seasonal use, or even a changing type of use that is dependent upon seasonality of a critical resource like water.

Insolation, the amount of sunlight a location receives, is a function of season, topography and tree cover. It may be critical to site selection where more extreme climatic effects can affect the livability of a location due to summer heat or winter cold. Topography is also of critical importance in other ways. Shelter from the wind during storms may be important. A location may possess all the critical elements except sufficient level or near-level ground to locate a settlement but, lacking the suitable topography, the location may be limited to how many people could occupy it at any one time.
Resource availability is essential to a population that is dependent upon naturally occurring plants and animals for subsistence, and for the local production of tools and essential devices and structures of daily living. For societies dependent upon the natural production of a landscape, the presence, density, and distribution of game ranges and stands of plants critical to subsistence can affect site location decisions. Note here that "game ranges" include deer herds, shellfish beds, off-shore fishing and whaling grounds, nesting sites, and seal and sea lion colonies. A site location choice will generally weigh many of these aspects against suitable topography in order to select an optimal location for a camp or settlement.

Not all site types will be equally (or at all) affected by every environmental factor that can influence site location. A special-use location for instance will give much greater weight to the specialized site function than to other factors. A quarry or toolstone collection location choice is strictly determined by the presence of useable stone in some form. Once the material is acquired, toolstone may be reduced quickly to useable pieces at the quarry and then transported to a more habitable workshop/camp for further shaping.

Social economy can also play an important role in site location, structure, and content (c.f. Binford 1980, 1981, 1982; Clarke 1978:84-148). Work such as that of Binford (1980) and Bettinger (1991:64-73) classifies "hunter-gatherer" societies according to a spectrum ranging from foraging behavior to collecting or logistically based economies. Binford (1980) argued that the degree of logistical planning necessary to ensure a hunter-gatherer society's survival from year to year was dependent to a great degree upon the amount of seasonal variability in the availability of critical resources and possibly the degree to which a society's spatial mobility was constrained by social and environmental factors.

Foraging behavior at its most extreme would require little planning and few specialized tools. Because of minimal seasonal effects on the availability of food and water no significant amount of food storage would be necessary. Camps would tend to be simple and homogeneous, reflecting similar functional needs and a minimal need for internal spatial organization. This would result in a series of more or less undifferentiated sites with similar content and a limited range of features. Collector behavior comes about as a means of smoothing seasonal and social uncertainties in the supply of critical material. Binford (1980) was able to show a trend of positive correlation between degree of latitude, using "effective temperature" as a proxy for latitude, and dependence upon collected food, and logistically supported activity. Because of the requirements for stored materials and food, a logistically organized society should have a distinct archaeological signature with multiple kinds of sites including special task and material acquisition sites, storage features, central occupation locations (villages) and probably numerous other functionally different locations.

One of the observations made by Binford that may be partially contradicted by current archaeological data is that of a "curated" versus "expedient" technology distinction drawn between Collectors and Foragers. Observations made on sites in the Central Valley suggest that while late prehistoric villages fall into his "collector" economic strategy, lithic technology often reflects two modes of tool production and use. High quality materials, often transported over significant distances, are used for for mal, designed tools (projectile points and ceremonial
artifacts which are carefully made and demand quality material with fracture behavior that can be well controlled during manufacture). Expedient tools are often of lower quality material, often locally available, and seem to dominate in the manufacture and production spheres of the local economy. In short, "collector" societies may elaborate technology rather than simply replace one with another.

Potential prehistoric site types typical of "collector" societies include the following basic kinds: villages – permanent or semi-permanent settlements, which often served as tribal centers; small occupation sites – probably seasonally-used temporary camp sites used by single families or small cooperative task groups; special use areas – these may include hunting blinds, yucca roasting pits, quarries, workshops, material extraction locations (e.g. areas where tree bark was collected or basketry materials obtained), hunting blinds, fishing locations and others.

Historical processes tend to have less visibly systematic effects. "Historical" in this use refers to the discrete, individual choices that determine which one of several equivalent locations is used. In a landscape where more than one location may offer much the same livability, individual choices about where to establish a settlement or locate a special use site will determine the precise geographic distribution of sites and such choices may effect site location in a manner that is not subject to predictive analysis. In historically settled areas social influences such as conflicts between settlements and railroads may be directly responsible for the location of railroad stations, the route a railroad follows and the towns bypassed during the construction of the railroad. It can be hypothesized that functionally similar processes operated in the prehistoric past as well. These kinds of effects are not amenable to landscape analyses.

**Sensitivity Assessment**

Figure 2 shows areas of inferred archaeological sensitivity. The mapped areas were delineated based upon the distribution of known sites and review of historical and ethnographic information presented in the discussion of property types in the foregoing research design. Empirical information on desirable geographic properties of site locations was also used to infer areas of potential sensitivity where development has already obscured the original, natural landscape. The map delineates sensitive areas for the following land forms:

- **Stream margins:** these are primarily the margins of Santiago Creek and the Santa Ana River. Small tributary streams to Santiago Creek may also be considered potentially sensitive. Map indicates these areas for the current study area only. Additional archaeologically sensitive areas will be present in the broader Orange Planning Area and Area of Influence. Villages and secondary occupations are going to be most common in these areas.

- **Valley edges, knolls, and canyon mouths:** these areas are primarily located along the margins of Santiago Creek Canyon. Additional areas of potential and proven sensitivity are present along the boundary between the City of Orange and Villa and Orange parks. Village, Secondary Occupation, and Special Use property types have been mapped along the margins of Santiago Creek Canyon. Secondary Occupation sites have also been
mapped at the boundary between Orange and Villa Park, looking south across the coastal plain addition.

- Knoll, ridge and saddle topography has also been used prehistorically for villages and secondary occupation sites. Trails may have been established through some of these areas to reduce travel between the coastal plain and Santiago Creek Canyon. There is also a quarry mapped in the Orange Park – Peters Canyon vicinity and other resource extraction sites are possible.

Besides these areas, which are known to contain prehistoric resources, there is some potential for additional resources to be found within the developed area of the city. Such resources may have been concealed during the process of development, or possibly buried prehistorically as the alluvial plain of Orange was developing. The only practical means of dealing with such resources is to have individuals responsible for subsurface work remain alert to the potential for unexpected and potentially important discoveries.

**Historic Archaeology Sensitivity**

Specific historic features were mapped based on historical maps and records. Known sites, such as historic adobe sites, were plotted as features on the predictive maps. A careful study of Orange primary maps dating from the mid-nineteenth century and well into the twentieth century was conducted and data were used to identify areas with a high probability of containing subsurface deposits or features that could contribute to a greater understanding of the city’s historical development. Features that contain archaeological potential were plotted to include areas with potential associated subsurface deposits (e.g., outhouse pit near residential housing). Most predicted feature locations are not visible on the ground today and were extrapolated based on historic maps compared to streets and creeks currently present in the City of Orange. Because pinpointing exact locations are not possible without excavation, a buffer was placed around each predicted prehistoric and historic location to allow for a margin of error when plotting from historic maps to modern maps.

Once potential areas were identified, projected site locations were compared with known land disturbance activities, such as filling wetlands, grading, road improvement projects, and subdivision development. Many of the sites were then eliminated from the map, as they were most likely obliterated through cut and fill work.

The value of a site varies based on the availability of historical records, knowledge regarding a specific period in time, and the data potential contained in deposits that could address ongoing research questions and domains. Generally, historic archaeological features have the potential to provide important information regarding Orange’s social, economic, industrial and physical history. Data retrieved from intact historic features may also be useful in addressing ongoing research topics in ethnic history, agricultural adaptation, self-sufficiency, cultural geography, and industrial technology.

The contributions of archaeology to the history of the City of Orange are greatest for the early periods of use when records are often sketchy and disposal patterns are most beneficial to
archaeological data collection. After 1900, the historic record can often be constructed through a combination of archival research, oral histories and records, and the contributions of archaeology to understanding this period of colonization and social development lessens considerably. In addition, refuse disposal and sanitation practices underwent major changes in the early twentieth century, decreasing the likelihood of discrete subsurface deposits associated with a particular house or activity. Given these limitations in the value of the archaeological record, identified potential historic features primarily date prior to 1910. The following text discusses potentially sensitive areas by the development eras discussed in the historical context. Figure 2 in Appendix A complements the text.

Colonization (Spanish/Mexican Period)

The City of Orange encompasses several locations that were originally settled during the early period. The earliest, the Juan Grijalva Adobe, was constructed around 1801 and likely abandoned by 1810; it was apparently in ruins as early as 1830 (Brignard 1997; Marsh 1994). This recognized adobe site includes the house site, associated water conveyance ditches, and a work area used after the adobe was abandoned by the Yorbas in their hide-and-tallow trade.

By the 1810s Grijalva’s relatives, the Yorba and Peralta had established individual headquarters for their rancho; Yorba at Olive and Peralta to the east in the hills. Yorba’s compound was covered with silt during several flooding episodes and was abandoned by 1840. One of the adobes at this site and associated refuse deposits were discovered by archaeologists in 1992, attesting to the research value still present at the location, despite the flooding. Peralta’s compound, as depicted on an 1868 map, contained numerous adobes occupied by family members (Reynolds 1868). Another relative, Francisco Rodriguez, established a household with several adobes a few miles south of Yorba’s, near today’s Collins Avenue and Main Street, while yet another settled to the west near the river.

By the time Reynolds surveyed the Rancho Santiago de Santa Ana in 1868, several other settlers had developed households, likely using adobe bricks for construction. These archaelogical remains dating from this time period would likely be significant under CEQA, if they retain in tegrity, primarily because of their early age and because of the relative rarity of sites associated with the early period of California’s history. Refuse deposits, architectural features, remnants of irrigation systems, gardens, hide-and-tallow facilities, vats, and other features could be present. These types of features, with associated artifact assemblages, could be used to address research questions related to demography, cultural geography, adaptive strategies, technology, and ethnic diversity. Native American village sites associated with the ranchos would be exceptionally important for researchers.

Early Settlement

Early settlement focused on towns and outlying farms. The towns in Orange, such as Old Towne, El Modena, Olive and McPherson, were rural in nature, as compared to San Francisco or other larger port cities. Each town within the study area developed under a different set of
circumstances, providing an excellent opportunity for comparative research. Olive, for example, was a company-formulated town. Quakers initially settled El Modena. Orange grew in response to the land boom and was not affiliated with an ideological or ethnic group. Farms developed independently in the countryside surrounding the towns, yet were linked to the commercial centers by the need for goods, public institutions, such as schools and churches, and communal halls.

Comparative studies of deposits associated with different neighborhoods, commercial ventures, or public institutions are extremely important in recreating the lives of all members of the town. Sewer and public utilities were not installed until 1911 and after. Even then, it was a slow process, starting in the core of the towns and extending outward in all directions. The use of privies and outside trash disposal areas prior to the installation of public utilities could have resulted in the conservation of each business; or household’s garbage, lending itself to interpretation by archaeologists.

The commercial districts and neighborhoods associated with the pre-1915 cores of Olive, El Modena, McPherson and Orange likely contain deposits that have high potential to yield information on consumer behavior, adaptive strategies, demographic composition of households, technology, and other research issues. In general, the most sensitive areas would be located in the backyards or sideyards of houses and businesses established in the nineteenth and very early twentieth centuries. Privies were usually placed along the alley, as far away from the house or business as possible. Sheet refuse deposits often began right outside the back door. Many of these early deposits are now covered with one or more feet of soil, effectively sealing them from everyday disturbance. These backyard areas within the cores of the historic towns are considered sensitive areas with high archaeological potential.

Along with the town development came the establishment of small farms. Early maps of Orange show that as land was subdivided, farmhouses were built along major thoroughfares, such as Tustin, Glassow, Collins and Meats. Numerous houses dating between circa 1880 and 1920 have been recorded as part of City Heritage Surveys along these, and other, streets. It is likely that each farm house originally had one or more privies that were filled, abandoned and forgotten with the advent of septic and sewer systems. There is a high probability of encountering these hollow-fill features under the ground in the backyards of these farm houses.

While some farm houses are still evident, many more have been destroyed by development. Vacant lots along the major streets may contain buried foundation remains, sheet refuse or hollow-fill features. Intact features with adequate quantities, variety and integrity of material can be used to address the research issues outlined above and may meet CEQA criteria.

**Immigrant and Ethnic Diversity**

Orange, from its very beginnings, was a melting pot of cultures and ideologies. The Californios brought cultural traditions from Spain and Mexico, hired Native American vaqueros and followed a fairly rigid economic and social separation system. By the mid-1870s a Chinese washhouse was present in Orange; by the 1890s the Chinese settlement was moved south nearer Santiago Creek. El Modena was settled by Germans with strong Quaker ideology. These
immigrants established neighborhoods and commercial districts that served both the town and the fellow immigrants who settled on the outlying farms. Finally, a long tradition of Hispanic laborers in Orange led to the development of several barrios. Some of these barrios were not hooked up to city utility services until the 1960s, increasing the likelihood of encountering abandoned privies in backyards in these areas.

Many of these groups are not well-documented in the written record and archaeological features and refuse are essential in reconstructing life ways and household demographics. Deposits lend themselves to addressing the research issues outlined above, as well as others. Areas of high sensitivity include lots associated with ethnic or ideological groups that may contain backyard privies or trash deposits, sheet reuse or other features. These may be found both in the towns and in the outlying farms.

**Industry**

Orange has the potential to contain deposits associated with a wide range of industries in the city. Remnants of the original flour mills at Olive may be present. Packing houses associated with citrus production, tallow processing areas from rancho days, and coal mines along Santiago Creek are all examples of nineteenth-century industry that may have left physical footprints. Blacksmith shops or stations, both on farms and in towns, represent additional industrial use of the city present before 1910 that could be identified archaeologically.

Deposits may include waste products from work areas (slag), hollow-fill features, foundations, refuse deposits and associated privies. Areas with high potential include lots associated with industries as identified on Sanborn Fire Insurance maps, city directories, or other documents or maps.

**Twentieth Century Settlement**

Generally, subdivisions and tracts that developed after 1915 were built with sewer and utility services, negating the need for privies, backyard trash pits and other features that result in archaeological deposits. As a result, these neighborhoods, businesses and commercial enterprises are unlikely to contain significant archaeological deposits associated with the twentieth century development. There are several exceptions to this general statement, however. First, subdivisions may be constructed on sites of previous development, either destroying deposits from the past or sealing them under fill or new buildings. For example, the 1920s packing house near Lincoln and Olive in Olive was built on top of buried adobe ruins associated with Old Santa Ana.

The second exception are squatters’ camps or illegal camp sites that commonly occurred during the Great Depression of the 1930s. Brigandi (1997) notes that a Depression-era camp developed along Santiago Creek during the 1930s. Deposits associated with this campsite would be important in addressing adaptive strategies, consumer behavior during this hard economic time, and demographics.
CONCLUSION

The City of Orange has a rich cultural heritage stretching back perhaps as far as 15,000 years. From the simplest prehistoric beginnings through the heyday of the Spanish/Mexican period into the expansive 20th century growth, each period left a physical stamp on the land. As the City continues to grow the archaeological remnants of the past are increasingly threatened and preservation has become a priority as the City moves forward into the 21st century.

Archaeology provides an opportunity for the public to connect with the past. Interpreting prehistoric milling stations and other sites, allowing public observations or participation in archaeological excavations and artifact processing and curating or displaying collections in public places help foster an appreciation of the past. More popular outreach programs, such as web pages, booklets relaying results of digs, short video documentaries, or school visits can create a positive preservation experience.

The purpose of this document, prepared in conjunction with the development of the City’s General Plan, is to establish the potential cultural resource base within the City within a cultural context of the prehistoric and historic past. Native American sites and concerns are also an important aspect of Orange’s cultural history. Native American consultation and participation in prehistoric site studies should be an integrated part of the City’s preservation efforts.
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City of Orange

Historic Context Statement

Prepared by Chattel Architecture, Planning & Preservation, Inc.

Prepared for P&D Consultants for the City of Orange General Plan Update

Revised November 2006
City of Orange Historic Context Statement

Introduction and Methodology

This historic context statement for the City of Orange (hereinafter “city” or “Orange”) is a synthesis of existing documentation and new research. The city currently contains two historic districts listed on the National Register of Historic Places (National Register) – The Plaza Historic District (Plaza District, listed in 1982) and the Old Towne Orange Historic District (Old Towne National Register District, listed in 1997). The City also contains a locally designated Old Towne district (Old Towne Local District or Old Towne, established in 1981 and described in the current City Historic Preservation Element). Each of these three districts has different boundaries and histories, or historic context statements. The following updated historic context statement for Old Towne and selected areas outside of Old Towne combines these histories, in addition to other histories compiled by the City and the Orange Public Library, as well as original historic research performed by Chattel Architecture, Planning & Preservation, Inc. (Chattel Architecture) and its archaeological sub-consultant, PAR Environmental Services, Inc. (PAR). Chattel Architecture conducted research at the Orange Public Library, the Orange County Archives, the UCLA Air Photo Archives, the Fairchild Aerial Photo Collection at Whittier College, and the Los Angeles Public Library. Additional general historical information comes from Phil Brigandi’s Orange: The City ‘Round the Plaza, and information on the Cypress Street Barrio comes from the Shades of Orange event held in Orange on June 4, 2005 and interviews with members of the Orange Barrio Historical Society.

Additional research performed by Chattel Architecture includes the following places and times:

- Old Towne in general from approximately 1930 (around the time that the previous historic contexts end) to approximately 1970 (through the period of construction of the current city civic center)
- Packing houses constructed along the railroad tracks in Old Towne in the late 19th and early 20th centuries
- Cypress Street Barrio, an area in and around the northwest quadrant of Old Towne, dating to the 1890s (separate context statement provided in Appendix A)
- El Modena, located approximately three miles east of Old Towne, dating to the late 1880s (separate context statement provided in Appendix B)
- Eichler suburban tract homes in the Fairhaven, Fairmeadow, and Fairhills tracts north and east of Old Towne, constructed from the late 1950s to mid-1960s (separate context statement provided in Appendix C)

In addition to the research conducted by Chattel Architecture, PAR collected focused information on past land use in order to prepare a report documenting prehistoric and historic archaeological sensitivity projections in Orange. This report, “Research Design and Sensitivity Assessment for the City of Orange, Orange County, California,” is a separate document. PAR used a combination of materials collected by Chattel Architecture, information on historical sites gathered at the South Central Coastal Information Center at California State University, Fullerton, and City records. PAR’s focused research at the City included an examination of plat books and subdivision records, perusal of sanitation records to ascertain when the city began sewer and garbage disposal services to residents, and street improvement records. PAR also examined historic maps on file at the City of San Jose Public Library (Sanborn Fire Insurance Maps), and at the California State Library (Government Publications and California History
This new information compiled by Chattel Architecture and PAR has been merged with previous histories in order to create a consistent reference on the history and archaeology of Orange, for use in informing an update of the current Historic Preservation Element – now known as Cultural Resources Element. Citations have only been included for information from original research.

The following major themes in Orange history have been identified (themes related to prehistoric and historic archaeology are discussed separately in the PAR report): Colonization, Early Settlement, Industry, Immigration and Ethnic Diversity, Interwar Development, and Postwar Development. Within these themes, places of particular interest include Old Towne, El Modena, Cypress Street Barrio, and three Eichler tracts; physical developments of particular interest include the railroad, packing houses, private homes, and civic buildings; and social developments of particular interest include labor issues and segregation. Areas of prehistoric archaeological interest include occupation and settlement sites, while historic archaeology is represented in urban and rural locales that were occupied before circa 1911, when the first sewer system was installed in the City and garbage disposal began, blocks or outlying areas associated with particular poorly-documented cultural heritage groups (such as Chinese or Mexican-Americans), or unique industry or commercial-related enterprises (rail yards). Detailed information about prehistoric and historic archaeological history and resources can be found in the accompanying PAR report.

Sections are organized by general context areas and time period, with specific themes covered under each context area. Generally, each section is followed by descriptions of extant architectural and archaeological evidence related to each context.

**Colonization (circa 1800 – 1870)**

The first landholder in the Orange area was Juan Pablo Grijalva, a retired Spanish soldier. His land extended from the Santa Ana River and the foothills above Villa Park to the ocean at Newport Beach. Grijalva built an adobe ranch house on what is now Hoyt Hill. Grijalva was given permission by the Spanish government in 1801 to occupy Arroyo de Santiago, near what became known as Olive. Grijalva and his son-in-law, Jose Antonio Yorba, began a cattle ranch and irrigation ditches carrying water from the Santa Ana River that were reportedly in place by around 1810. These early ditches created the basis for future irrigation canal systems. After Grijalva’s death, Yorba and his nephew, Juan Pablo Peralta, eventually received title to the Santiago de Santa Ana land grant of 1810, a total of 78,941 acres. The rancho’s headquarters site was occupied by Yorba. His sons, Tomas and Teodocio, moved to the site in the 1820s and inherited the land after Yorba’s death in 1824. They apparently lived there through the 1840s and up to the 1860s, when they were finally forced to leave this specific site due to flooding.1

After California became a state in 1848 as part of the Treaty of Guadalupe Hidalgo, one member of the extended Rancho family – Leonardo Cota – borrowed money from Abel Stearns, the largest landowner in Southern California, putting up his share of the rancho as collateral. When Cota defaulted in 1866, Stearns filed a lawsuit in Los Angeles Superior Court to demand

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a partition of the land, so that Stearns could claim Cota’s section. Consequently, the rancho was divided into 1,000 units parceled out to the heirs and to the claimants in the lawsuit.

Very little above-ground evidence remains from this early period of colonization of the Orange area, although any areas identified as related to the colonization period may yield archaeological evidence from this time. A total of 33 adobes are thought to have been present on three ranchos within the City. Today the northwest corner of the intersection of Lincoln Avenue and Orange-Olive Road in Olive is known as the site of the Rancho Santiago de Santa Ana headquarters. Past excavations in this area revealed a site characterized by the remains of two adobes, including wall remnants, tile floors and associated artifacts. A proximate plaque marks the spot at the corner of Hewes and Santiago Canyon Road of the Grijalva Adobe Site. This site included at least one adobe and some associated outbuildings. Francisco Rodríguez’s property, generally bound by present day Main Street, Walnut Street, the Atchison Topeka Railroad and Collins Avenue, also contained adobes and is associated with this early period.

Early Settlement (circa 1870 – 1920)

Old Towne

When the Rancho Santiago de Santa Ana was subdivided in the late 1860s, a Los Angeles lawyer, Alfred B. Chapman, represented several parties in the partition suit. He took about four thousand acres as payment for his fees. From this acreage, farm lots, ranging in size from ten to forty acres, were first surveyed in the fall of 1870 and divided in 1871, under the supervision of lawyer William T. Glassell. Eight lots in the center of newly subdivided blocks of land were set aside for use as a public square, now known as Plaza Square, or simply “the Plaza.” This square was bounded by Walnut Street (now named Maple Avenue) to the north, Grape Street (now called Grand Street) to the east, Almond Street to the south, and Lemon Street to the west. The two main streets, which intersected at the public square, were named Chapman Avenue (running east-west) and Glassell Street (north-south).

Like most Southern California communities, Orange was strongly affected by the Great Boom of the 1880s, when new settlers flocked to the state. The cross-country expansion of the railroad system and its inexpensive fares made the balmy climate in southern California even more attractive and accessible to Americans nationwide. New settlers arrived in Orange via the Santa Fe Railroad (later called the Atchison, Topeka & Santa Fe), which entered the city about four blocks west of the Plaza (currently the site of Depot Park/Veteran’s Park) in August 1887. According to one source,

…touched off by the railroad rate war, the boom of the 80s was built largely on speculation. Landowners subdivided their ranches to sell individual lots, which were often bought by speculators. In and around Orange, dozens of new subdivisions and four new townsites were laid out in 1886-1887. Promotional literature was sent out across the country extolling the virtues of Orange and its environs. Orange did its best to appear attractive, progressive, and promising to prospective buyers."

Transportation between neighboring communities was provided by two horse-drawn streetcar systems: the Orange, McPherson & Modena and the Santa Ana, Orange & Tustin lines.

By the late 1870s and early 1880s, the population of Orange was large enough to support the construction of civic buildings and gathering places such as churches, schools, and public parks. As the population grew, new parcels were added by subdividing tracts surrounding the original town site. These additions and town streets were commonly named after the owner or resident hometowns, such as Palmyra and Batavia, New York. The town of Orange was incorporated on April 6, 1888, as a sixth class city within Los Angeles County (the following year, Orange County separated from Los Angeles County). At the time of incorporation, Orange was about three square miles, with 600 people who predominantly lived on small family ranches surrounding the town. Although most residents lived on working farms, some homes, generally for the town doctors, lawyers, and merchants, were built on the small lots surrounding the Plaza.

Major construction in Orange lay dormant in the aftermath of the great boom for over ten years. With the new century came growth in the town’s citrus industry and an increase in economic prosperity. The Plaza soon became the commercial and social hub of Orange and the principal banks, newspapers, stores and public institutions of Orange were built on its edges along Chapman and Glassell Avenues. Radiating out from the Plaza and commercial center, residential development increased to house the growing population.

Many commercial, residential, civic, and religious buildings from Orange’s early settlement years remain today, in addition to the extant Plaza Square, developed in the 1880s. Early brick commercial buildings in the Plaza area include the C.M. Woodruff store (1885), D.C. Pixley store (1886), and Wells Fargo (originally Bank of Orange) building (1886). Early homes were built in the Queen Anne style, characterized by a vertical emphasis with simple, jigsawn ornamentation, particularly around the porch, windows and entry. Closer to World War I, residential styles evolved to include Classical Revival and Arts & Crafts homes. Extant religious buildings include the First Baptist Church (1893), St. John’s Lutheran Church (1914), and Trinity Episcopal Church (1908). Later buildings in the Plaza Square area include Watson’s Drug Store (1900), the former First National Bank (1928), and the W.O. Hart Post Office (1926).

Orange’s early settlers, commercial enterprises and public facilities had no modern-day waste disposal facilities. Typically, outdoor sanitation facilities (privies or outhouses) were placed within private property at the rear of the properties, close to alleys. Household trash (discarded bottles and dishes, food remains, and broken items) was often disposed of by spreading across the back or side yards and then covering with dirt (creating horizontal layers of discarded refuse) or by digging pits to hold garbage and then covering with dirt. As outhouses were abandoned they were often filled in with discarded household debris, creating sealed deposits. These nineteenth century refuse deposits often contain information on household demographics, cultural heritage traditions, economic status and other research topics that are not available through written documentation. In Orange, deposits associated with early Hispanic communities, Chinese settlers, German immigrants, religious organizations and other heritage or belief groups have the potential to provide glimpses of the daily lives of Orange’s early settlers.

El Modena

Paralleling the early settlement of Old Towne Orange was the establishment of another town located approximately three miles to the east. The area would eventually become known as El Modena, an early Quaker establishment that evolved into a Mexican-American barrio. In the 1880s, after extending Chapman Avenue east, developers created streets in the area, including Center Street, just north of and parallel to Chapman Avenue, and the north-south streets of Esplanade and Alameda (later Hewes Street). San Francisco millionaire and philanthropist
David Hewes became one of the primary developers in the area when he bought hundreds of acres of property around 1885, settled into a new home he named Anapauma (“place of rest”), and began a large citrus ranch. Much of the early population of El Modena arrived en masse when a group of Quakers who were members of a congregation called the Society of Friends migrated to the El Modena area in the early 1880s. By 1886, there were 400 people, along with 18 homes. The new town enjoyed a brief building boom in 1887 and 1888. In December 1887, the Friends completed construction of a meeting house, commonly called the Friends Church, at Chapman Avenue and Earlham Street. In January 1888, the Orange, McPherson and Modena railroad (actually a horse-powered streetcar) opened. A number of hotels, schools, stores, and residences were constructed during this period, until the boom collapsed in 1889, and the population dropped.

El Modena survived through the boom and established itself as a fruit growing area. Ranchers planted apricots, walnuts, lemons and several varieties of orange trees. In 1898, David Hewes’ ranch and fruit packing company set agricultural records and by the early 1900s, real estate developers in the area promoted El Modena as the “Pasadena of Orange County,” focusing on its mild climate and rich capacity for farming. Hewes continued to invest his capital in El Modena, creating a public park near the town center. In 1905, Hewes Park, designed by Robert G. Fraser, designer of the famous Busch Gardens in Pasadena, opened to residents of El Modena at the corner of Esplanade Avenue and La Veta Avenue (the park served the community until the 1940s, when it was sold to private interests).

A number of relatively unaltered, small, wood-framed bungalows are scattered throughout the neighborhood, including an eight-building bungalow court on Hewes Street at Montgomery Place. Friends Church, the anchor of the original settlement of El Modena, still exists on Chapman Avenue at Earlham Street, although it has been converted into a restaurant. The footprint of Hewes Park remains at the intersection of La Veta Avenue and Esplanade Street, although the park has since been sold off into private lots. Small expanses of unaltered open space still exist to the south and east of El Modena, although almost all of the former agricultural areas have been developed.

As with Old Towne, there is the potential of a rich historical archaeological record associated with the community of El Modena. The deposits are most likely to occur in the back and side yards of the original parcels. Deposits associated with Quakers can provide artifacts and other

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3 David Hewes (1822-1950) was known primarily for providing the “golden spike” for the ceremony that commemorated the final east-west connection of newly-laid transcontinental railroad tracks, in what was then Utah Territory (“David Hewes Left His Mark” http://www.foothillcommunities.org/history/David-Hews.html).

4 City of Orange Public Library Local History Collection (http://localhistory.cityoforange.org).

5 Early residents included the families of Abel, Cyrus, and William Frazier (1883, from Indiana), W. Burnett, and Louisa Frazier (1884, from Lawrence, Kansas). Other early community members included Lloyd and Mahlon Stubbs, Henry O. Way, Curtis Way, and William P. Brown (Patterson, Mrs. Wright A. “History of Friends Church in El Modena is Interesting Narrative” (Orange Daily News, 28 November 1949).

6 Meadows np.

7 Meadows, np. The horses are said to have ridden a platform on their way downhill from the more elevated El Modena (City of Orange historic context statement, np), much like the “gravity mule car” in Ontario, on Euclid Avenue.

8 The ranch harvested 100 acres of prunes and processed 1,000 barrels of olives (City of Orange historic context statement).

9 City of Orange Library Local History Collection.
organic material useful in interpreting the influence of religious beliefs on material culture, the everyday practice of a religious philosophy, status, the role of women and children in the household, and other topics not always addressed in the written record.

Agriculture and Industry (circa 1880 – 1950)

The original town site of Orange consisted of the current Plaza Historic District area and was surrounded by outlying farms and ranch land under cultivation. Dry farming consisted of grain crops, including wheat, rye, barley, and oats. In 1871, the A. B. Chapman Canal began bringing water from the Santa Ana River to the town site, with ranchers digging lateral ditches to their farms. In 1873, settlers also began to develop wells, tapping into a water table only 18 feet below ground. Irrigation added raisin grapes and corn to the area's agricultural production. Water became a critical element to the ongoing prosperity of the region. In 1873, Chapman and Glassell reorganized the Chapman Canal with the Semi-Tropic Water Company, managed by a local rancher. Under the new management, the canal was extended to Santa Ana. When 1877 proved to be a drought year, local ranchers bought out the company and created the Santa Ana Valley Irrigation Company (SAVI).

As a cooperative water venture, SAVI was vital to the agricultural development of the arid Southern California region. SAVI’s control of water rights and its extensive systems of canals was essential to the development of the agriculture industry in Orange and surrounding communities. Beginning in the 1880s, the transcontinental railroad system granted growers in Orange County access to markets across the nation. The introduction of reliable irrigation and transportation systems was accompanied by a surge in agricultural production and productivity in Orange County. This is particularly true in Orange where from 1880 to 1950 citrus and other agricultural industries were the predominant factors influencing the economic, political and cultural development of the city.

Citrus did not become the area’s predominant agricultural product until the early 1890s, after an earlier grape crop failed, and other fruits and nuts were harvested in the 1880s. Other early industries in Orange included rope and wire manufacturing, a cotton mill, and a lumber company. But by 1893, citrus had become so dominant that the Orange County Fruit Exchange (now known as Sunkist) was organized and incorporated. The headquarters for this agricultural cooperative was constructed at the northeast corner of Glassell Street and Almond Avenue. The location of the Atchison, Topeka & Santa Fe rail line three blocks from the center of the Orange business district provided opportunities for the development of industrial facilities for the receipt, packing and shipping of locally raised agricultural products. This arrangement led to the construction of several fruit packing houses in the late 19th century. These facilities were quickly inundated, shipping approximately 350 train-carloads of oranges yearly, in addition to lemons, walnuts, dried fruit, potatoes, peanuts, grapes, and cabbage.

The packing houses in Orange were so busy during the 1920s that several packed more fruit than any other facilities in California. With the growth of the citrus industry, there was a demand for more workers in the area. In addition to the farm managers, there was a need for field workers, irrigators, packing house workers, and truckers. In turn, more workers in the area brought a need for more stores, shops, and goods. This trend brought about a rise in the merchant class, which further increased the demand for housing.

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The speed of citrus production waned during the Great Depression, and from 1933 and 1935 unemployment in Orange County reached 15 percent. By the 1930s the pickers began to organize; the largest agricultural union was the Confederation of Mexican Farm Workers' and Laborers' Union or CUCOM (El Confederacion de Uniones de Campesinos y Obreros Mexicanos) created in 1933. Shortly before the 1936 Valencia orange picking season in an effort to rally support for union demands, Celso Medina, an El Modena resident and chief organizer for CUCOM, held meetings all around Orange County. On June 11, 1936, after the growers refused to meet with union representatives, the largest strike in the history of the citrus industry began, as nearly 3,000 pickers across Orange County walked out during the height of Valencia season. The strike did not end until July 27, 1936, when the Mexican Counsel in Los Angeles helped negotiate a settlement. In the wake of the strike, growers changed their employment practices and started hiring outside picking crews, including Asian immigrants, eventually leading to a system of seasonal employment for Mexican nationals.

During the 1950s, with the “Quick Decline” disease affecting the orange orchards and strong demand for developable real estate, the once-powerful role of the citrus industry began to diminish, making way for the postwar construction boom. The infrastructure created for the citrus industry, however, vastly facilitated Orange’s rapid suburbanization. Packing houses in Orange accommodated the changes brought by postwar subdivision development and the loss of orchards by packaging fruit from around the state, and shipping as far as Asia. By the late 1990s, however, the citrus packing industry had steadily moved out of Orange County. One of the last operating packing houses in Orange County, the Villa Park Orchards Association, will soon close.

Three historic packing house complexes survive within Old Towne. The oldest existing packing house is the former Red Fox Orchards packing house, built in 1909, a Pueblo Revival, wood frame building at 128 South Cypress Street. The Villa Park Orchard’s Association Packing House complex, built in 1919, is located at 350 North Cypress Street. This former Santiago Orange Growers Association (SOGA) packing plant was built to take advantage of the Santa Fe Railway on the west side and the Pacific Electric on the east. The Villa Park Orchards Association’s offices are located one block north of the packing house at 544 North Cypress Street in a building that was formerly the segregated Cypress Street School, built in 1931 to educate the Mexican and Mexican-American children of Cypress Barrio and El Modena. S.A.V.I.’s 1931 headquarters are located at 154 North Glassell Street. Another building of agricultural importance is the Orange County Fruit Exchange, or Sunkist Building, located at 195 South Glassell Street. From the late 1920s through the 40s, the Orange Mutual Citrus Association operated a packing house on West Almond Avenue where it crosses the Atchison, Topeka and Santa Fe tracks. In later years, the Orange Cooperative Citrus Association occupied the building; it currently belongs to St. Vincent de Paul.

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12 Brigandi 100.
13 Brigandi 100-104.
14 The Citrus Tristeza Virus, more commonly referred to in the United States as the “Quick Decline,” was first discovered in California in 1939. The virus is transmitted via grafting, propagation and citrus aphids. This virus has a worldwide distribution and results in reduced crops and loss of trees.
Numerous other industrial buildings remain throughout Orange, concentrated around the railroad tracks running north-south parallel to Cypress Street. In 1927, the Western Cordage Company, a rope manufacturer established in 1923, moved into what had been the Richland Walnut Association Building. In 1928, the California Wire Company (renamed the Anaconda Wire Company in 1930) built a complex of industrial buildings adjacent to the rail line between Palm Avenue and Maple Avenue. The buildings feature industrial steel windows and skylights to light the interior work areas. In 1914 the Orange Contracting and Milling Company built their yard and mill on Lemon Street. The false front industrial building consists of a wood frame sheathed with corrugated sheet metal panels. Another false front industrial building within the district is the structure at 145 North Lemon Street that features pressed metal panels on the wall of the street façade.

Residential construction associated with industry in Orange centered on bungalows, which became popular affordable alternatives to the larger Craftsman homes in Orange as the citrus industry grew, and workers needed housing. Imitating the Craftsman homes in styling and character, these homes were decidedly smaller, usually one story, and could be constructed for a lesser price. Storekeepers, bakers, contractors, packing house operators, teachers, carpenters, and laborers occupied many of the bungalows that remain throughout Old Towne.

Archaeological deposits associated with warehouses, ditches, and workers camps are potentially present at any nineteenth and early-twentieth packing house location within the City. As with residential areas, industrial work sites had outhouses, waste disposal areas and residential areas established for workers. Oftentimes, large organizations employed on-site blacksmiths to maintain freight wagons, shoe stock, and fix machinery and tools. Analysis of functional use areas can aid in reconstructions of nineteenth-century technology, industrial design and layout, and technological changes, innovations or modifications made at individual company sites. Household debris discarded at workers’ camps allow for a comparison of the economical and social status of foremen, managers, owners, and laborers (as interpreted through the material culture), division of labor camps based on cultural heritage, comparisons of conditions at camps owned by different companies, and other research topics relevant to enriching the known history and interpretation of Orange’s important agricultural and industrial development.

Immigration and Ethnic Diversity (circa 1910-1980)

Two international events had a significant impact on El Modena and Orange in the 1910s: the Mexican Revolution and World War I. Beginning around 1910, many Mexican families came to the US, seeking refuge from the chaos sparked by the Mexican Revolution. Due to its vicinity, Southern California was a popular destination for these wartime refugees. When the US entered World War I in 1917, men across the country were drafted into the war effort, and El Modena and Orange were no exceptions. As a result, the fruit harvesting workforce dwindled, providing job opportunities for hundreds of Mexicans who had been migrating to the area. Many Mexicans had started work for ranchers and farmers, and soon they started their own businesses and purchased land. The increased demand for workers and the influx of Mexicans during the Mexican Revolution supported two vibrant communities: the Cypress Street Barrio and El Modena.

16 Evans 57; Meadows np.
Cypress Street Barrio

Mexican citrus workers had settled on Cypress Street beginning in 1893 when a packing house was built on the 300 block of North Cypress to facilitate shipping using the nearby Atchison, Topeka and Santa Fe Railroad. The approximate boundaries of the Cypress Street Barrio are Rose Avenue to the north, Glassell Street to the east, Almond Street to the south and the railroad tracks to the west.

Between 1918 and 1924, Mexican labor became indispensable to the citrus industry throughout California. For growers, having an easily accessible, stable, and housed workforce assured a lessened chance of labor problems.\(^{17}\) Initially, Mexican families in the Cypress Street Barrio lived in older homes that were moved onto the low-lying properties near the railroads. As the area developed, homes ranged from a small tenement area called “La Vecinidad” to Queen Anne, Classical Revival, and Arts and Crafts homes and bungalows. Residents of the Cypress Street Barrio remained a tight-knit group throughout the history of the neighborhood. Many of the new residents arrived from the central plateau of Mexico: the states of Jalisco, Michoacan, and Zacatecas, in particular, and many were related to each other, as their families came north from the same villages, particularly the village of Santa Maria de Enmedio of Jalisco.\(^{18}\) Some families have lived in the Cypress Barrio for more than four generations.\(^{19}\)

Among many Cypress Street Barrio families, husbands picked and hauled, children picked, and women washed, graded, and packed the fruit. As citrus work in Orange was seasonal (six months out of the year), Cypress Barrio residents would migrate to work in other areas in the late fall and winter. To support this population, Cypress Barrio’s small businesses included grocery stores, bakeries, tortillerias, restaurants, bathhouses, automobile shops, barbershops, and pool halls. The Friendly Center, Inc., one of the oldest non-profit family resource centers in Southern California, offered “Americanization” courses, homemaking classes, health clinics, and childcare services to Cypress Barrio residents. In addition, the popular jamaicas, or church street fairs, were held in front of the Friendly Center during the late 1940s. Although much of the Cypress Street Barrio was residential for many years, in 1946 the City of Orange instituted new zoning laws that designated much of the area for light industrial use. Because of this zoning, residents could not qualify for permits to rebuild or remodel their homes.\(^{20}\) This zoning led to further deterioration of the housing stock, and many houses were eventually condemned and torn down.

The Cypress Street Barrio still retains some of its original early 20\(^{th}\)-century character in the form of small bungalows, commercial buildings, and packing houses. The Mission Revival style Friendly Center, Inc. building was built at 424 North Cypress in 1922; the original structure has been remodeled for commercial and residential use. Among the long-standing businesses along North Cypress Street were the Cayatano “Pete” Cruz grocery store (440 North Cypress), Filiberto Paredes/Simon Luna/Emilia Luna’s grocery store (418 North Cypress) and Pete’s Pool Hall (405 North Cypress). Luna’s grocery store at 418 North Cypress operated for over six decades in the community.

\(^{18}\) Orange Unified School District, “Cypress Street Retrospective,” video.
\(^{19}\) Wheeler, Mary Lou, “Survey of Cypress Street and Adjacent Areas.” Unpublished manuscript, California State University at Fullerton, 1973. See also the “Cypress Street Retrospective” video.
According to City sanitation records, sewer lines were installed in the streets and into parcels within the general area of the Cypress Barrio between 1911 and 1914. While the City provided the pipes necessary for individual hook ups into the systems, it was up to the landowner to install flushing toilets and sinks, and some residents continued to use outhouses for many years after the main sewer line was installed. As outhouses were abandoned they were filled with discarded household debris, creating intact deposits that provide glimpses into the daily lives of the inhabitants. These potential deposits are most likely to occur at the rear of individual parcels within private property near alleys. Food refuse and kitchen garbage may have been discarded in back and side yards and could also be present within the barrio. These deposits have the potential to offer an insight into dietary preferences, economic and social status within the barrio, maintenance of traditional cultural heritage, individual and household religious practices, and other topics.

El Modena

Although the Quaker presence in El Modena continued, by the 1920s the town began to take on a distinctly Mexican character, developing its own small Mexican neighborhoods. These sub-communities included El Pirripe, north of Chapman Avenue and named after an area bakery; Hollywood, south of Chapman Avenue; and La Paloma in the hills [south of Palmyra Avenue]. As in the Cypress Street Barrio, many Mexican-American El Modena families worked in packing houses and orchards in the nearby neighborhoods of Villa Park, Placentia, and Orange. Groves and groves of orange, lemon, avocado, and eucalyptus trees surrounded El Modena, making the town feel like a “vacuum,” isolated from the surrounding world. Early housing in the area consisted of small, poorly constructed shacks, often rented for $7-$10 per month, that made for cramped, quickly deteriorating conditions. Later, some of the Mexican-American farmworkers in El Modena moved into small bungalows, modeled after the somewhat larger contractor-built types located in downtown Orange.

Today, some of the small bungalows from this period exist in largely modified forms, typically with clapboard siding, gabled roofs, and small entry porches. The most significant commercial building from this period is “La Morenita,” a market that still exists on the corner of Washington Avenue and Earlham Street. Around 1929, the Moreno family, one of the oldest families in El Modena, constructed the small western false-front building.

Archaeological deposits and their potential importance would be similar to those anticipated within the Cypress barrio.

Segregation

Isolation and segregation from white residents of Orange were unfortunate facets of life for the residents of El Modena and the Cypress Street Barrio, extending to many popular recreational activities: swimming, baseball and softball, and movies. For example, Mexican-American

23 Former El Modena resident videotaped in “Remembrances of El Modena, 50/100th Celebration,” City of Orange.
24 Pepper B1.
children could only use the local public pool (Plunge) on Mondays because it was drained on Monday night; Mexican-Americans were also restricted from playing ball in public parks.

Segregation impacted Mexican-Americans most, however, in terms of schooling. In El Modena, after the Roosevelt Elementary School was constructed in 1923, the local school district began enrolling Anglo students in the new school, reserving the older Lincoln Elementary for Mexican-Americans. In the Cypress Street Barrio, the old Lemon Street School educated both Mexican and Anglo children, but in separate buildings. Mexican and Mexican-American students were instructed in “La Caballeriza” (“The Barn”), a two-room wooden schoolhouse behind the Lemon Street School. When the Lemon Street School was condemned in the late 1920s, the Cypress Street School was built for Mexican and Mexican-American children in 1931, using scrap lumber from the Lemon Street School.

In the 1940s, Mexican-Americans in Orange County rallied in protest of school segregation. In Westminster, a town about 15 miles east of El Modena, Gonzalo Mendez, a successful tenant farmer, along with a group of Mexican-American World War II Veterans, filed a lawsuit in federal court challenging school segregation in four Orange County school districts. The 1945 suit, filed on behalf of 5,000 Mexican-American children in the area with help from the League of United Latin American Citizens (LULAC), sought a court injunction that would order integration of schools in the Westminster, Santa Ana, Garden Grove and El Modena school districts. Federal District Judge Paul McCormick ruled in favor of Mendez, asserting that segregation “foster[s] antagonisms in the children and suggest[s] inferiority among them where none exists.” The decision was quickly appealed, and the case moved to the 9th Circuit Court of Appeals in San Francisco. Recognizing the possibility of the case reaching the Supreme Court and yielding results on a national scale, several minority groups came out in support of Mendez, penning *amicus curiae* or “friend of the court” briefs. Authors of these briefs included Thurgood Marshall for the National Association for the Advancement of Colored People (NAACP), American Jewish Congress, American Civil Liberties Union, National Lawyers Guild, Japanese-American Citizens League, and California Attorney General Robert W. Kenny. The briefs strengthened Mendez’s case, and on April 14, 1947, the court ruled that “school districts could not segregate on the basis of national origin.” In the wake of *Mendez*, California Governor

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26 Gobbel, Marge and JD. Oral interview by Christopher Arriola, 15 August 1991. Stanford Library, Special Collection, Box 3, Folder 2.
27 The term “Anglo” here refers to White, or Caucasian. In some sources “Anglo” may refer to non-Hispanic people. Roosevelt School often included Anglos, in addition to light-skinned Mexican-Americans and Asians.
29 “La Caballeriza” was located where Chapman University’s garage currently stands. (source: “Cypress Street Retrospective”)
30 Villa Parks Orchards Association remodeled Cypress Street School to serve as the association’s office space in 1981.
34 Arriola (La Raza) 185.
35 Brigandi 104.
37 Arriola (*Los Angeles Times*).
Earl Warren – who would go on to write the decision in Brown v. Board of Education in 1954 as Chief Justice of the Supreme Court – pushed the state legislature to repeal laws segregating Asian and Native American schoolchildren.38 The case also affected El Modena’s ethnic makeup. As integration slowly commenced, many disgruntled Anglo families moved away, settling in newly drawn school districts that were often “re”- segregated.39

Very little physical evidence remains from this chapter of Orange’s history. The most prominent example is the formerly segregated Cypress Street School at 544 North Cypress Street, which today serves as office space for the Villa Park Orchards Association. Both the Lincoln and Roosevelt Elementary schools were demolished in the 1960s, and a shopping center now exists at the corner of Chapman Avenue and Hewes Street. The Colonial Theatre, located at 138 South Glassell Street, which was one of the few movie houses in Orange County where attendees of all races could sit side-by-side, still exists in a highly modified form.

Given the relatively late time period of this chapter, it is unlikely that significant archaeological deposits remain. However, some residents within the Cypress Barrio and El Modena did not have indoor plumbing until the 1960s. The use of outhouses over a long period of time often results in the abandonment and construction of new outhouses within a parcel over time. This could have resulted in the filling of old abandoned privies with household trash with the potential to address research topics discussed above under Cypress Barrio.

World War II and Postwar History

Throughout World War II and the postwar period, Mexican-Americans found work in fields previously closed to them, including jobs in construction, manufacturing, and defense work. Cypress Street Barrio resident Santiago Ramirez became Secretary-Treasurer of the International Hod Carriers’, Building and Common Laborers’ Union of America in 1946; nearly 50% of all men in the barrio found jobs in the construction industry.40 In addition, several men from the Cypress Street Barrio enlisted for military service during World War II. Growers in Orange County found themselves with a shortage of labor and supported the widespread use of temporary contract workers: Filipinos, German prisoners-of-war, wartime refugees, Jamaicans and Navajos were hired throughout these periods to fill the void. By 1946, 80% of Orange County’s picking force was comprised of Mexican nationals through the bracero program.41 Two bracero camps were built on North Cypress Street in the 1940s. One was built to house German POWs. Both camps are no longer extant.

With the diminishing role of the Cypress Street Barrio families in the citrus industry, burgeoning wartime and postwar industrialization with increased job opportunities for Mexican Americans, and the rapid suburbanization of Orange and other surrounding cities of Orange County, the Cypress Street Barrio gradually became a blue-collar barrio.

The Friendly Center instituted an innovative plan for affordable housing in the Cypress Street Barrio by replacing housing in “La Vecinidad” with triplex units. Internationally renowned artist

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38 Arriola (Los Angeles Times).
39 Arriola (La Raza) 200-201.
40 Paul Guzman, interview, 4 June 2005, “Shades of Orange”
41 Between 1942 and 1964, 5 million Mexican nationals participated in this program established by a bilateral agreement between the United States and Mexico to address the labor shortage brought on by World War II. The workers were commonly known as braceros because they worked with their brazos, or arms (Gonzalez, Journal of Orange County Studies, 19-27).
Emigdio Vasquez’ mural, “Proletariado de Aztlán” adorns the southern walls of one of the relocated triplex units on North Cypress Street; it was completed in 1980. The Friendly Center also constructed an 8-unit Housing and Urban Development (HUD) apartment building to the east of Cypress Street on Lemon Street in 1972.

By this period the majority of the City was hooked up to the public sewer system and provided with garbage disposal services; hollow-filled features, such as privies, are rarely found. Archaeological deposits associated with this time period are usually considered not significant unless they represent a cultural group with little available written documentation.

Interwar Development (circa 1920 – 1941)

As the citrus economy continued to flourish into the 1920s, the demand for housing grew and residential styles once again changed. In place of the California-oriented Craftsman houses came European-influenced Tudor, Provincial, Mediterranean, and Norman Revival styles. These were the style preferences that World War I soldiers brought home with them. Having seen the country houses while doing battle in Europe, they instructed local contractors to build in the European manner. The Mediterranean Revival style was by far the most popular in Orange, and those that remain exist primarily on the outskirts of the Old Towne boundaries. Ranch and Minimal Traditional style homes were built on infill lots around Orange beginning in the 1930s. The Minimal Traditional style was developed to assuage the difficulties of construction during the Great Depression. Houses built in this style are boxy with flat wall surfaces and little ornamentation or other detailing; they often feature simplified features of Tudor and Colonial Revival styles from earlier decades. Architect Cliff May popularized the Ranch style evocative of early adobe houses built during California’s early Spanish and Mexican periods. Ranch homes became the most predominant type of housing built in the United States between the 1930s and 1960s.

The City of Orange was hardest hit by the Depression between 1931 and 1935 when citrus prices fell. “Between 1933 and 1935 unemployment in Orange County ran as high as 15 percent of the work force, and even at the height of the citrus season it never fell below 9 percent.”

In addition to many extant homes in the Old Towne area, a number of Works Progress Administration (WPA) projects were built in Orange during this period. The State Emergency Relief Agency (SERA) and the Works Progress Administration (WPA) sponsored the construction of several structures, including the Bandshell and Bath House/Plunge in Hart Park (1933-1935), the downtown post office at Chapman Avenue and Lemon Street (1934-35), a new fire station at 153 South Olive Street, a $45,000 stadium at Orange Union High School (1935), and new bridges on both the Santa Ana River and Santiago Creek.

New developments and existing urban areas of the City continued to tie into the City’s ever-expanding sewer system during this time period, eliminating the potential for hollow-filled significant archaeological deposits associated with individual households. Rural areas, however, relied on outhouses or septic systems and were often responsible for disposal of their own household trash. Deposits associated with the farmhouses, small scale orange growers, and agricultural enterprises have the potential to allow interpretation of individual farm and household response to the depression, adaptations in diet and material culture in light of

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42 Brigandi, 105.
reduced economic status, changes in farm technology or equipment in light of the depression, and other relevant topics related to interpreting this era of Orange history.

Postwar Development (circa 1945 – 1975)

World War II had brought prosperity to southern California’s economy and ended the ravages caused by the Great Depression, which devastated fruit prices. Military personnel, facing housing shortages in other areas, moved into the area. After World War II, returning soldiers and a massive influx of new residents to the state changed the face of California forever. Orange, located centrally in the Los Angeles basin, was no exception, its remaining open and agricultural space attracting developers of bedroom communities. This trend has continued in subsequent decades.43

Orange’s explosive suburban residential growth began in 1953 and peaked in 1962 when thousands of acres of land were sold for development. Many WWII servicemen who trained with the 30th Field Artillery Battalion (stationed in Orange) returned to the city to raise their families. New housing tracts also housed aerospace workers and their families. Between 1950 and 1960, the local population swelled from 10,000 to 26,000 as former orchards were torn out and replaced with subdivisions of single family homes.44 By the 1950s, many ranchers readily sold their acreage: orange orchards succumbed to the “Quick Decline” disease and concurrently, the demand for real estate for housing construction soared. Most of the larger tracts (50 – 100 homes) were built by outside developers, though there were a few local developers who worked on a smaller scale. One of the more notable developers working in Orange during this period was Joseph Eichler, who built three tracts to the north and east of Old Towne. These Eichler developments brought distinct elegance, originality, and modern design principles to suburban homes.

Eichler Homes

Between 1949 and 1974, Joseph Eichler built about 11,000 homes in California, including 575 in Southern California and 350 in Orange. Once a successful butter and egg wholesaler in New York, Eichler drew inspiration from his time renting Frank Lloyd Wright’s Bazett House in the Hillsborough neighborhood of San Francisco. Wright’s Usonian building principles – which included integration with the natural landscape, the use of indigenous materials, and an aesthetic to appeal to the “common man” – gave Eichler ideas for his own suburban tract housing. After building two relatively mundane developments in 1949, he founded Eichler Homes, Inc. and dove into the postwar suburbanization and California modern architecture movements. 3,000 miles from William Levitt’s cookie-cutter, “Cape Cod”-style cottages, Eichler hired a series of progressive architecture firms – including Anshen & Allen, Jones & Emmons, and Claude Oakland Associates – to design innovative, modern, and affordable homes for California’s middle-class consumers. For over two decades, Eichler Homes would utilize streamlined production methods, specialized construction materials, an innovative marketing campaign, and one of the first non-discriminatory suburban housing policies in the country to change the shape of California’s suburbs.

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44 Dolan et al. 12.
In October of 1959, Eichler broke ground on the Fairhaven development in southeast Orange. This 133 home, 28-acre, $3.5 million tract came as part of a larger suburban housing boom in the city, and at the time was one of the largest tracts ever built in Orange. Fairhaven homes employed designs by Eichler's stable of architects: Quincy Jones, Frederick Emmons, Claude Oakland, and Anshen & Allen. The homes, which were variations of a few general models, included an entry court or atrium, sliding glass doors, floor-to-ceiling glass walls, and floor plans that separated living and sleeping areas. The Fairhaven brochure featured an "architect's checklist," for those interested in learning more about the added benefits of architect-designed homes in tract housing. The brochure went on to regale consumers with a bright view of life in Orange, and in Eichlers. Fairhaven home prices began at $25,950, and many area residents fell in love at first sight. Over 8,000 people viewed the new homes as part of the February 6, 1960 grand opening. According to one Los Angeles Times columnist, "...for an old Southlander, long-accustomed to cloistered desert architecture, the Eichler home [in Fairhaven] was a strange apparition, opening our stucco-weary eyes to a new kind of glassed-in living...Curiosity propelled us through the front door, which led us right back to open air; the rest was automatic."

Through 1961, Eichler built Fairhills in East Orange, and the property opened in January of 1962 at $26,950 per home. The tract featured very similar homes, many of which were designed by Anshen & Allen. The final tract, Fairmeadow, the largest of the three, opened in north Orange near the end of 1964. The Fairmeadow brochure boasted of the tract's proximity to an elementary and recently completed junior high school, in addition to many amenities similar to Fairhaven.

Generally, members of each of the three developments got along well, as neighbors ate dinner together and followed the lives of nearby families. The Orange Eichlers faced their share of problems common to Northern California Eichlers, however. The non-discrimination clauses in the house deeds led to some degree of racial integration, along with occasional "racist-type activities" such as objectors knocking over minority neighbors' garbage cans and complaining in general. Home maintenance problems were more common. Roofs leaked, radiant heating pipes often broke and had to be repaired, pane glass windows let in too much light and heat, and homeowners were forced to spend extra money on heating and cooling. In the late 1970s, residents began a series of "Eichler Homeowner Seminars," which included panel members from various companies that "performed recent satisfactory services for several Eichler homeowners." More unique to Orange's Eichlers was the lack of community facilities, a trademark of Eichler's earlier Northern California counterparts. Because of cost and acreage constraints, Eichler opted not to include any pools or community centers in Orange, and in 1965, residents appealed for more. A group of Fairhills homeowners went so far as to write to Eichler, lamenting the upcoming summer heat wave and trying to strike some sort of deal on a community pool, but Eichler would not relent. Overall, though, Eichler homeowners in Orange

45 Orange Daily News, October 1, 1959
46 Display Ad, "Why Limit Your Living?" (Los Angeles Times September 25, 1960, I5).
47 LeAnce, Al. "Buys Home With Hole In Roof" (LA Times, Mar 19, 1961, I1).
48 Display Ad, January 21, 1962 "For Families Who Need More Room" (Los Angeles Times, L17).
appreciated their unique product, and many maintained their homes with pride for years to come. Today a vast majority of the homes in all three tracks remain relatively unaltered and intact.

**Chapman University**

Chapman College was founded in 1861 as Hesperian College in Woodland, California by the Disciples of Christ. By 1920, Hesperian College merged with the new Los Angeles-based California Christian College. The major benefactor to California Christian College was Fullerton citrus rancher Charles Clarke Chapman, and in 1934 the college was renamed Chapman College.

After World War II, Chapman College required a larger campus to accommodate the higher student population. When Orange Unified School District proposed building a new high school, Chapman College purchased the old Orange Union High School campus at Glassell and Palm. Chapman College moved to this site in 1954 and became the first four-year, accredited college in Orange County.

Over the years, Chapman has continued to expand its education programs, enrollment, and campus facilities. In 1977, a School of Business and Management (now known as the George L. Argyros School of Business and Economics) was established. The Law School was added in 1995. As a result of its academic development, Chapman College became Chapman University in 1991. Throughout the 1990s, enrollment grew by more than 40 percent and the University has constructed new facilities, including a building for the new College of Film and Media Studies and an athletic complex (under construction).

**Physical Development**

New government buildings were needed with the surge in Orange’s population in the 1950s and 1960s. The Orange Public Library (located at 101 Center Street) was completed in 1961. Welton Becket and Associates designed a new civic center that was built next to the old city hall at the corner of Chapman Avenue and Center (300 East Chapman Avenue); construction was completed in 1963. Innovative in design, the city hall is composed of a series of concrete vaulted arches and floor-to-ceiling glass windows. The council chambers are housed in a structure designed as a 14-sided “circle,” with vertical, pre-cast exposed onyx aggregate panels. Several new fire stations were constructed during the 1960s, including new headquarters on South Grand Street in 1969. A new main post office was constructed on Tustin Avenue in 1971.

Long time mayor and civic booster George Weimer encouraged the concurrent development of residential, commercial and industrial development to provide a reliable job and tax base for the city. New business districts were created during the mid-1950s, diminishing downtown Orange’s importance as the city’s major commercial center. Major shopping centers opened on the corners of Tustin, Chapman, Collins, Glassell Street, North Batavia, East Katella, Meats Avenue, Main and La Veta Avenue, attracting supermarkets, restaurants, hardware stores, banks, and gas stations, among other businesses. Among the businesses to open during this boom time was California’s first Marie Callender’s Restaurant on Tustin Avenue in 1963. Shopping centers built during the 1960s and 70s include Town and Country Village Shopping Center, the Mall of Orange, and The City Shopping Center.

Access to water and transportation corridors are crucial for any type of development, particularly in Southern California. The Orange County Feeder #2 was constructed in 1963 along Tustin
Avenue. This line tapped into the Metropolitan Water District’s (MWD) feeder line, assuring residents a water supply that would meet their demands for decades. Prior to and along with Orange’s rapid suburban growth came the many freeways that dissect or skirt the city: the Santa Ana Freeway (Interstate 5), the Costa Mesa Freeway (State Route 55), the Garden Grove Freeway (State Route 22), the Riverside Freeway (State Route 91), and the Orange Freeway (State Route 57).

In the 1960s and 70s, the ever-growing City of Orange annexed surrounding areas and towns, including portions of El Modena (El Modena’s original town site, north of Chapman Avenue, continues to be an unincorporated part of Orange County). Over the years, El Modena grew with Orange. New stores and restaurants were added to Chapman Avenue, and new homes, including small bungalows and bungalow courts, were constructed over all the neighborhood’s fruit groves. Jordan Elementary School (1962), the Prospect School (1966), and the El Modena Branch Library (1978) were constructed in the southern part of El Modena, covering more open space, although pockets of undeveloped land still exist in the area. Despite numerous additions and alterations to the area’s older homes, the single-family, working-class residential character of El Modena remains.

The majority of construction from the postwar period remains largely intact, including the three Eichler tracts, Chapman University, City Civic Center, and other commercial, residential, and civic buildings.

The explosive growth of Orange and establishment of planned subdivisions is unlikely to have resulted in significant archaeological deposits. By the end of World War II new development construction included installation of sewer, water, and electrical utilities. New homeowners and tenants were provided with garbage collection services and the likelihood of encountering significant archaeological deposits associated with this period is considered low.

1975-Present

During the postwar suburban construction boom, the most desirable land for subdivisions was the flat coastal plains where cities such as Garden Grove, Westminster and Costa Mesa developed. By the late 1960s, however, construction slowed. Further development stalled with the energy crisis of 1973. By the 1980s, however, the foothills to the east of El Modena became prime real estate. Orange Park Acres, which lies between Chapman Avenue and Santiago Canyon Road was first subdivided in 1928, but most of this area was annexed by the City of Orange during the 1990s. Together with the Irvine Company, the City of Orange adopted the East Orange General Plan in 1989, a proposal that encouraged a mix of residential, commercial and recreational uses for the area east of Orange Park Acres towards Irvine Park and Peters Canyon. The Orange campus of Rancho Santiago Community College was constructed in 1985 and became Santiago Canyon College in 1997. The Eastern Transportation Corridor, which connects Orange County to Riverside County, is nearly complete, further facilitating development in East Orange.

The majority of construction from this period remains intact.

The likelihood of encountering significant archaeological deposits associated with this period is considered low.

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52 Brigandi, p. 150
APPENDIX A

Cypress Street Barrio Historic District
Cypress Street Barrio Historic Context Statement

Introduction

Cypress Street Barrio comprises a small, but historically significant neighborhood in Orange. Located near the northwest corner of the Old Town Orange National Register and local register historic districts, the heart of the barrio consists of the 400 block of North Cypress Street between Sycamore and Walnut Avenues.1 The approximate boundaries of the extent of the Cypress Street Barrio are Rose Avenue to the north, Glassell Street to the east, Almond Street to the south and the railroad tracks to the west (Figure 1).

Cypress Street Barrio’s development was closely tied to the citrus industry and its Mexican-American workers, and it was well established in Orange by 1920.2 The barrio’s transformation from a rural picker village to an urban blue-collar barrio parallels urbanization patterns of other citrus colonias (“villages”) in Orange County.3 Segregation permeated nearly every aspect of life in the colonia,4 yet the cultural and community life remained rich, intricate, and stable.

Beginnings: 1890s – 1930s

Citrus did not become the area’s predominant agricultural product until the early 1890s, after an earlier grape crop failed, and other fruits and nuts were harvested in the 1880s. Other early industries in Orange included rope and wire manufacturing, a cotton mill, and a lumber company. But by 1893, citrus had become so dominant that the Orange County Fruit Exchange (now known as Sunkist) was organized and incorporated. The headquarters for this agricultural cooperative was constructed at the northeast corner of Glassell Street and Almond Avenue. The location of the Atchison, Topeka & Santa Fe rail line three blocks from the center of the Orange business district provided opportunities for the development of industrial facilities for the receipt, packing and shipping of locally raised agricultural products. This arrangement led to the construction of several fruit packing houses in the late 19th century. These facilities were quickly inundated, shipping approximately 350 train-carloads of oranges yearly, in addition to lemons, walnuts, dried fruit, potatoes, peanuts, grapes, and cabbage (Figures 2-3).

Many of the packinghouses constructed during this boom in Orange’s citrus industry were located just to the west and south of Cypress Street Barrio.5 With the growth of the citrus

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1 On the 100 block of South Cypress, south of the heart of Cypress Street Barrio, another small community came into being: it is often referred to as “El Otro Barrio” (“The Other Barrio”).
3 Gonzalez, Gilbert G., Labor and Community: Mexican Citrus Worker Villages in a Southern California County, 1900-1950. (Urbana and Chicago: University of Illinois Press, 1994) 15. Gonzalez defines a colonia as a settlement popularly known as a “camp” on the fringes of the town, but very close to the area of employment.
5 The Villa Park Orchard’s Association Packing House complex, built in 1919, is located at 350 North Cypress Street. This former Santiago Orange Growers Association (SOGA) packing plant was built to take advantage of the Santa Fe Railway on the west side and the Pacific Electric on the east. The Villa Park Orchards Association’s offices are located one block north of the packinghouse at 544 North Cypress Street in a building that was formerly
industry, there was a demand for more workers in the area. Mexican citrus workers had settled on Cypress Street beginning in 1893 when a packinghouse was built on the 300 block of North Cypress to facilitate shipping using the nearby Atchison, Topeka and Santa Fe Railroad but during the first two decades of the 20th century, additional citrus workers settled in the neighborhood due to its proximity to work. In addition, some of the packinghouses provided worker housing in the neighborhood.

Between 1918 and 1924, Mexican labor became indispensable to the citrus industry throughout California. Among many Cypress Street Barrio families, husbands picked and hauled, children picked, and women washed, graded, and packed the fruit (Figures 4-5). As citrus work in Orange was seasonal (six months out of the year), Cypress Barrio residents often migrated to work in other areas in the late fall and winter. For growers, having an easily accessible, stable, and housed workforce assured a lesser chance of labor problems or shortages. Initially, Mexican families in the Cypress Street Barrio lived in older homes that were moved onto the low-lying properties near the railroads. As the area developed, homes ranged from a tenement area called “La Vecindad” (Figures 6-7) to Queen Anne, Classical Revival, and Arts and Crafts homes and bungalows (Figure 8). “La Vecindad” (sometimes referred to as “Mr. Lewis’ Court”) was a self-contained neighborhood with several homes and small businesses located on the west side of the 400 block of North Cypress. It was established in the early 1920s, and torn down in the 1970s. The Cypress Street Barrio still retains some of its original early 20th-century character in the form of small bungalows, commercial buildings, and packinghouses (Figure 9).

Residents of the Cypress Street Barrio have remained a tight-knit group throughout the history of the neighborhood. Many of the new residents arrived from the central plateau of Mexico: the states of Jalisco, Michoacan, and Zacatecas, in particular. Many were related to each other, as their families came north from the same villages, particularly the village of Santa María de Enmedio of Jalisco. Some families have lived in the Cypress Street Barrio for more than four generations.

To support the Mexican-American population, Cypress Street Barrio’s small businesses included grocery stores, bakeries, tortillerias, restaurants, bathhouses, automobile shops, barbershops, and pool halls. Many of these businesses were owned and operated by Mexican-American families that lived in the neighborhood as well (Figure 10). Among the long-standing businesses along North Cypress Street were the Cayatano “Pete” Cruz grocery store at 440 North Cypress, (Figure 11), Filiberto Paredes/Simon Luna/Emilia Luna’s grocery store at 418 North Cypress and Pete’s Pool Hall at 405 North Cypress. Emilia Luna’s grocery store has operated for over six decades in the community.

Recognizing that the residents of Cypress Street barrio were amongst the most underserved in Orange, The Friendly Center, Inc., one of the oldest non-profit family resource centers in

the segregated Cypress Street School, built in 1931 to educate the Mexican and Mexican-American children of Cypress Street Barrio and El Modena.


7 Orange Unified School District, “Cypress Street Retrospective,” video.

8 Wheeler, Mary Lou, “Survey of Cypress Street and Adjacent Areas.” Unpublished manuscript, California State University at Fullerton, 1973. See also the “Cypress Street Retrospective” video.
Southern California, formed to provide much needed services within the community. Originally called the Orange Mexican Friendly Center, this Mission Revival style structure was built at 424 North Cypress in 1922 with funds from the Orange Community Men’s Bible Class on land donated by major Cypress Street Barrio land holder James Fielding Lewis. When it opened, the center offered “Americanization” courses, homemaking classes, health clinics, and childcare services to Cypress Street Barrio residents. (Figure 12)

Challenges and Triumphs: 1930s – 1950s

Two events defined the 1930s and 1940s in the Cypress Street Barrio: the Citrus Strike of 1936, and the *Mendez v. Westminster* court case officially ending school segregation in the area in 1946-1947. Fruit picking, the fundamental way of life for many Mexican-Americans in the Cypress Street Barrio, was difficult work, and disagreement often broke out between picking crews and their employers, the fruit growers and packing houses. Pickers took issue with their low wages, the growers’ frequent withholding of payment until after the harvest, and on-the-spot firing, which was not uncommon. By the 1930s the pickers had begun to organize, and shortly before the 1936 Valencia orange picking season, Celso Medina, an El Modena resident, was elected chief organizer for the major pickers union, the *Confederación de Campesinas y Obreros Mexicanos* (Confederation of Mexican Peasants and Workers). Medina held meetings all around Orange County in an effort to rally support for union demands. On June 11, 1936, after the growers refused to meet with union representatives, the “largest strike in the history of the citrus industry” began, as “nearly 3,000 pickers across Orange County walked out during the height of Valencia season.”9 The Cypress Street Barrio neighborhood was so centrally involved in strike that California Highway Patrolmen searched the records of all parked cars on North Cypress Street looking for “imported agitators and aliens” during one of the strikers’ committee meetings, which was reported to have brought over 1,000 workers to the barrio.10

During the strike the growers frantically hired replacement workers, along with armed guards to protect them. When the growers continually refused to meet with the pickers, violence broke out and over 100 strike leaders were arrested. On July 27, 1936, the strike finally ended, when the Mexican Counsel in Los Angeles helped negotiate a settlement that granted slightly higher wages and an end of withholding payment to the pickers. These successes were short-lived, however, because in the wake of the strike, growers changed their employment approach and started hiring outside picking crews, eventually leading to a system of seasonal employment for Mexican nationals rather than the Mexican-American laborers residing in Orange.11 Another impact to Cypress Street Barrio residents was the decline in citrus farming in the area in the late 1940s. However, since the nearby packinghouses were able to import fruit from throughout Southern and Central California, barrio residents were not as immediately affected by the decline in the citrus industry as their compatriots in El Modena. Still, many barrio residents began to seek out new jobs outside the citrus industry.

Throughout World War II and the postwar period, Mexican-Americans found work in fields previously closed to them, including jobs in construction, manufacturing, and defense work.

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9 Brigandi 100.
11 Brigandi 100-104.
Cypress Street Barrio resident Santiago Ramirez became Secretary-Treasurer of the International Hod Carriers’, Building and Common Laborers’ Union of America in 1946. At around this same time, nearly 50% of all men in the barrio had jobs in the construction industry. In addition, several men from the Cypress Street Barrio enlisted for military service during World War II. Due to these changes in the labor force, growers in Orange County found themselves with a shortage of labor and supported the widespread use of temporary contract workers: Filipinos, German prisoners-of-war, wartime refugees, Jamaicans and Navajos were hired throughout these periods to fill the void. By 1946, 80% of Orange County’s picking force was comprised of Mexican nationals through the _bracero_ program. Two _bracero_ camps were built on North Cypress Street in the 1940s; one of these camps housed German POWs during the war.

With the diminishing role of Cypress Street Barrio families in the citrus industry, burgeoning wartime and postwar industrialization with increased job opportunities for Mexican Americans, and the rapid suburbanization of Orange and other surrounding cities of Orange County, the Cypress Street Barrio gradually became a blue-collar _barrio_. Little new housing appears to have been built over this period, however. In an effort to provide affordable housing to barrio residents, The Friendly Center instituted an innovative plan for affordable housing in the Cypress Street Barrio by replacing housing in “La Vecindad” with triplex units. Other new residential construction may have been deterred by a change in the City of Orange’s zoning laws in 1946. At this time, large sections of the Cypress Street Barrio area, which had had a mix of residential, commercial, and industrial uses throughout its history, was rezoned for light industrial. Because of this zoning, residents could not qualify for permits to rebuild or remodel their homes. This zoning led to further deterioration of the housing stock, and many houses were eventually condemned and torn down.

For residents of Cypress Street Barrio, isolation and segregation from white residents of Orange were unfortunate facets of life, extending to many popular recreational activities: swimming, baseball and softball, and movies. For example, Mexican-American children could only use the local public pool (Plunge) on Mondays because it was drained on Monday night; Mexican-Americans were also restricted from playing ball in public parks (Figure 13). Segregation impacted Mexican-Americans most, however, in terms of schooling. In El Modena, after the Roosevelt Elementary School was constructed in 1923, the local school district began enrolling Anglo students in the new school, reserving the older Lincoln Elementary for Mexican-American children.

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13 Between 1942 and 1964, 5 million Mexican nationals participated in this program established by a bilateral agreement between the United States and Mexico to address the labor shortage brought on by World War II. The workers were commonly known as _braceros_ because they worked with their _brazos_, or arms (Gonzalez, _Journal of Orange County Studies_ 19-27).

14 Neither of these camps is extant.


17 The term “Anglo” here refers to White, or Caucasian. In some sources “Anglo” may refer to non-Hispanic people. The students at Roosevelt School were Anglos, in addition to light-skinned Mexican-Americans and Asians.
In the Cypress Street Barrio, the old Lemon Street School educated both Mexican and Anglo children, but in separate buildings. Mexican and Mexican-American students were instructed in “La Caballeriza” (“The Barn”), a two-room wooden schoolhouse behind the Lemon Street School (Figure 14). When the Lemon Street School was condemned in the late 1920s, the Cypress Street School was built for Mexican and Mexican-American children in 1931, using scrap lumber from the Lemon Street School (Figure 15).

In the 1940s, Mexican-Americans in Orange County rallied in protest of school segregation. In Westminster, a town about 15 miles east of El Modena, Gonzalo Mendez, a successful tenant farmer, along with a group of Mexican-American World War II Veterans, filed a lawsuit in federal court challenging school segregation in four Orange County school districts. The 1945 suit, filed on behalf of 5,000 Mexican-American children in the area with help from the League of United Latin American Citizens (LULAC), sought a court injunction that would order integration of schools in the Westminster, Santa Ana, Garden Grove and El Modena school districts. Federal District Judge Paul McCormick ruled in favor of Mendez, asserting that segregation “foster[s] antagonisms in the children and suggest[s] inferiority among them where none exists.” The decision was quickly appealed, and the case moved to the 9th Circuit Court of Appeals in San Francisco. Recognizing the possibility of the case reaching the Supreme Court and yielding results on a national scale, several minority groups came out in support of Mendez, penning amicus curiae or “friend of the court” briefs. Authors of these briefs included Thurgood Marshall for the National Association for the Advancement of Colored People (NAACP), American Jewish Congress, American Civil Liberties Union, National Lawyers Guild, Japanese-American Citizens League, and California Attorney General Robert W. Kenny. The briefs strengthened Mendez’s case, and on April 14, 1947, the court ruled that “school districts could not segregate on the basis of national origin.” In the wake of Mendez, California Governor Earl Warren – who would go on to write the decision in Brown v. Board of Education in 1954 as Chief Justice of the Supreme Court – pushed the state legislature to repeal laws segregating Asian and Native American schoolchildren.

Very little physical evidence remains from this chapter of the Cypress Street barrio’s history. The most prominent example is the formerly segregated Cypress Street School at 544 North

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19 “La Caballeriza” was located where Chapman University’s garage currently stands. (source: “Cypress Street Retrospective”)
20 Villa Parks Orchards Association remodeled Cypress Street School to serve as the association’s office space in 1981.
24 Arriola (La Raza) 185.
25 Brigandi 104.
27 Arriola (Los Angeles Times).
28 Arriola (Los Angeles Times).
Cypress Street, which today serves as office space for the Villa Park Orchards Association (Figure 16).

Throughout this period, The Friendly Center remained an important facet of life in the barrio. During the late 1940s, the popular jamaicas, or church street fairs, were held in front of the Friendly Center. Because the number of Protestants in Cypress Barrio diminished by the late 1940s, the center changed its religious focus and became a community center in the 1950s.

Recent Past: 1960s – Present

Since the late 1940s and 1950s, the residential nature of the Cypress Street Barrio has diminished. Increasingly surrounded by industrial complexes, many former residents of the barrio have taken advantage of higher paying jobs outside of the citrus industry and greater accessibility to housing choices throughout the city. Interestingly, many of the most recent residents of Cypress Street Barrio have come from the same city in Mexico that previous residents hailed from – Santa Maria de Enmedio in Jalisco. Residences remain intermixed with a variety of light industrial, small businesses.

The Friendly Center continues to serve area residents. In 1967, the Friendly Center incorporated as a non-profit organization emphasizing housing and education, with a multicultural and multiracial board. As part of this newly defined mission, The Friendly Center, Inc., together with the City of Orange and property owners, created Orange County’s first rent-supplement project and upgraded affordable housing in the early 1970s after surveying housing needs of Cypress Barrio residents. The study found that most Cypress Barrio residents liked the area where they lived, given its cohesiveness as a community and children’s access to bilingual education in the local schools, but were willing to pay higher rents for “decent places to live.”

The Center was also involved in the construction of an 8-unit Housing and Urban Development (HUD) apartment building to the east of Cypress Street on Lemon Street in 1972. The Center also commissioned internationally-renowned artist Emigdio Vasquez to paint a mural on the south and east walls of their low-income housing units on North Cypress Street. Completed in 1980, the mural, “Proletariado de Aztlan,” which depicts an Aztec Indian, a zoot-suited Pachuco, a miner and railroad engineer, Mexican immigrants, farm workers, and youth from the neighborhood, is a “tribute to the Chicano working class,” said the artist (Figure 17).

In 1985, The Friendly Center, Inc. moved from its original building, which has been rehabilitated for commercial and residential use, to a new operating office at Killifer Park on North Lemon Street.

Conclusion

Although its character has changed from a rural picker village to an urban blue-collar barrio to an increasingly industrial area, the Cypress Street Barrio remains an important Mexican-American, working class neighborhood in the City of Orange. The Friendly Center, Inc. continues to provide much needed education and housing related services to the neighborhood’s residents and a number of historically significant buildings remain extant. These buildings include the original Friendly Center, the former Cypress Street School (now administrative offices for Villa Parks

30 “For art’s sake, for the community, for the working class,” Orange City News, March 14, 1979.
Orchards Association), the former Santiago Orange Growers’ Association packinghouse (now owned by the Villa Parks Orchards Association), Emilia Luna’s grocery store, Emigdio Vasquez’ mural on the walls of 430 North Cypress, and the residents’ small, wood frame bungalows and cottages. (Figures 18-19)
FIGURES
Figure 1: Cypress Street Barrio, aerial photograph, 1947 (Orange County Archives).
Figure 2: Clift Short (left) standing on loading platform of Santiago Orange Growers Association packing house, March 1921. The box car on the railroad track is ready to be loaded with oranges (Orange Public Library, Local History Collection).

Figure 3: Interior of Santiago Orange Growers’ Association packinghouse, ca. 1928 (Orange Public Library, Local History Collection).
Figure 4: Consolidated Orange Growers Association workers, 1938 (Orange Public Library, Local History Collection).

Figure 5: Santiago Orange Growers Association employee group portrait, 1950 (Orange Public Library, Local History Collection).
Figure 6: Bartola Guzman standing in front of “Lewis Court” or “La Vecindad,” 1937 (Collection of Paul Guzman).

Figure 7: Elias Guzman standing in front of chicken coops behind “La Vecindad” and near the railroad tracks, 1938 (Collection of Paul Guzman).
Figure 8: Home of Jose Sanroman, formerly on the 100 block of Cypress Street (Collection of Luis Garcia).

Figure 9: Santiago Orange Growers Sunkist Packing Plant, 1945-46 (Orange Public Library, Local History Collection).
**Figure 10:** Alfred Poblano in front of La Casita Restaurant (no longer extant), 129 North Cypress Street, 1948 (Collection of Leo Castro).

**Figure 11:** 400 block of North Cypress Street showing homes and the Cruz Grocery Store, 1956 (Photographed by William McPherson, Orange Public Library, Local History Collection).
Figure 12: Wedding party at the Friendly Center in Orange, California, 1920 (Orange Public Library, Local History Collection).

Figure 13: The Orange Tomboys, a team within a segregated women’s league on West Walnut near North Cypress Street, 1947 (Collection of Paul Guzman).
Figure 14: Mexican American students in front of “The Barn” – the segregated school house for the Lemon Street School, located at Sycamore and Lemon, 1922 (Collection of Orange Barrio Historical Society).

Figure 15: Cypress Street School, 1935 (Orange Public Library, Local History Collection).
Figure 16: Villa Parks Orchards Association, formerly Cypress Street School, 2005 (Chattel Architecture).

Figure 17: Emigdio Vasquez’ 1980 mural, “Proletariado de Aztlan,” located at 430 North Cypress Street (Collection of the artist, Emigdio Vasquez).
Figure 18: Crate label, Cock of the Walk brand, Santiago Orange Growers Association, 1930 (Orange Public Library, Local History Collection).
Figure 19: Josie Chavez on the train near 129 North Cypress Street, 1942 (Collection of Leo Castro).
APPENDIX B

El Modena Historic Context Statement
El Modena Historic Context Statement

Introduction

El Modena, a small enclave about three miles east of downtown Orange, evolved from a Quaker village into a citrus-farming Mexican-American barrio over the course of its nearly 120-year history (refer to Figures 1-7). In the late 19th century, the community enjoyed a brief boom as the Quaker Friends congregation settled on Chapman Avenue at Esplanade Street, near a stop on the Orange, McPherson and Modena streetcar line. When originally settled, El Modena was clustered around Chapman Avenue, Center, Esplanade, and Alameda Streets with Chapman Avenue functioning as the main commercial artery.

David Hewes, a wealthy landowner, owned a fruit packing company in El Modena, and the capitalist financed much of the area’s early development. Starting in the 1910s, many Mexicans, attracted by the growing citrus industry and fearful of civil unrest in Mexico, moved to the El Modena area, and soon the busy neighborhood, isolated from downtown Orange by acres of citrus groves, took on the character of its new inhabitants. Although the working-class residents of El Modena faced economic and social challenges in the 1920s, 30s, and 40s, including a major citrus workers strike in 1936 and the forced segregation of Mexican-American and Anglo schoolchildren, the close-knit community thrived. In the late 1940s, El Modena’s segregated Lincoln and Roosevelt schools, located at the intersection of Chapman Avenue and Hewes Street, served as people’s Exhibit A in a landmark local segregation lawsuit. The resulting case, Mendez v. Westminster, eventually led to Mexican-Anglo integration of southern California schools, and served as an important precedent to the Supreme Court Brown v. Board of Education of 1954. As the City of Orange expanded east, eventually incorporating major parts of El Modena, many original residents moved away, and some older buildings were demolished, altered, or converted to new uses.

Today, the town has largely been incorporated into the City of Orange, although the northern portion of the original town remains unincorporated. Chapman Avenue, running east-west, continues to act as the main commercial artery with numerous mini-malls and national chain restaurants and stores. The primary north-south streets in the neighborhood include Esplanade, Hewes, Alameda, and Earlham. These streets are largely commercial in the block immediately north and south of Chapman Avenue but as they move away from Chapman their residential character increases. In general, the neighborhood is predominantly residential with small lots and one- or two-story homes with a spattering of multi-unit apartment buildings. Although the residential character of the neighborhood has changed very little over the years, few of the remaining buildings attest to the rich history of El Modena for a new generation of Mexican-Americans.

Beginnings: 1890

The area now known as El Modena was originally located on the Spanish land grant of Rancho Santiago de Santa Ana. Other early development in the area included the town of Orange, first

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1 City of Orange historic resources survey, historic context statement for El Modena, 1982, np.
platted in 1870 by Los Angeles lawyer Alfred B. Chapman, and to the east, McPherson, developed for grape production by the McPherson brothers from New York State in 1872. Later, land developers Oge and Bond “acquired a large area of level land on a mesa or highland between the foothills and a low escarpment that bordered the mesa on the west.” This area would eventually become El Modena. The developers extended the new Chapman Avenue to the east and began selling parcels along its frontage for farming. Soon they created Center Street, just north of and parallel to Chapman Avenue, and the north-south streets of Esplanade and, a quarter-mile east, Alameda (later Hewes Street). San Francisco millionaire and philanthropist David Hewes (Figure 8) bought hundreds of acres of property in the area around 1885, settling into a new home he named Anapauma (“place of rest,” Figure 9), and beginning development of a large citrus ranch.

Meanwhile, the cross-country expansion of the railroad system and its inexpensive fares made balmy southern California even more attractive and accessible to Americans nationwide. Many began calling southern California the “New Italy” or the “Italy of America” because of the region’s mild weather and fertile soil. One migratory group inspired by tales of this fruitful region was a small band of Quakers, who were members of a congregation called the Society of Friends located in Thornton, Indiana. This group, which filled an entire rail car, left Indiana on September 15, 1882 bound for southern California. This group settled around Chapman Avenue at Alameda Street, and was soon joined by other Midwestern settlers from Kansas, Nebraska, and Missouri. By 1886, there were 400 people, many of them Quakers, in the area, along with 18 homes.

On November 11, 1886, the new Society of Friends church incorporated under the name of Earlham Monthly Meeting of Friends, after Earlham College, a Quaker institution founded in 1847 in Richmond, Indiana. The Friends then held a meeting to decide on a name for their new settlement. Three names were considered: Earlham, after Earlham College; Whittier, after the Quaker poet John Greenleaf Whittier; and Modena, after an Italian village known for its

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4 Meadows np.
5 Meadows np.
6 David Hewes (1822-1950) was known primarily for providing the “golden spike” for the ceremony that commemorated the final east-west connection of newly-laid transcontinental railroad tracks, in what was then Utah Territory (David Hewes Left His Mark <http://www.foothillcommunities.org/history/David-Hews.html>).
7 City of Orange Public Library Local History Collection <http://localhistory.cityoforange.org>.
8 Evans, Ruth C. “A Children’s History of the Orange Unified School District Communities,” (Presented to the Faculty of California State University, Fullerton, 1984); and Evans, Ruth C. with Mr. Cole’s 6th period U.S. History class, “‘A’ Is Now OK In El Modena,” El Modena High School, 13 June 1968.
9 Early residents included the families of Abel, Cyrus, and William Frazier (1883, from Indiana), W. Burnett, and Louisa Frazier (1884, from Lawrence, Kansas). Other early community members included Lloyd and Mahlon Stubbs, Henry O. Way, Curtis Way, and William P. Brown. This is information is from: Patterson, Mrs. Wright A. “History of Friends Church in El Modena is Interesting Narrative,” Orange Daily News, 28 November 1949.
11 Meadows np.
12 Patterson np and Seelve.
13 Evans, Cole/class 1-2.
description in a Samuel Rogers poem published in 1830. William P. Brown, one of the original settlers from Indiana, favored this last name, which he had seen in Rogers’ Romantic poem *Italy*, which read in part, “Should you ever come by choice or chance to Modena,…” Brown felt the name appropriate because it echoed the group’s perception of their new home as the “New Italy.” The rest of the Friends were convinced by Browns argument and chose the name, Modena, for the new settlement. In 1887, Brown laid out the first Modena tract, and the name of the town appeared to be settled. However, when the Friends sought official recognition of their new town name, the post office rejected it. Officials claimed it was too similar to the names of other communities in California, Modesto and Madera. The Friends had no choice but to settle on their second preference, Earlham. The Earlham, California post office opened on March 2, 1887, although residents still preferred to call their town Modena. In order to use the preferred name, in early 1888, the Friends had the idea to add the prefix “El” to the town’s original name of “Modena” in order to avoid confusion with other towns. Postal officials relented, and the post office branch name was officially changed to El Modena on January 25, 1888.

The town enjoyed a brief boom in 1887 and 1888. In December 1887, the Friends completed construction of a new meeting house, commonly called Friends Church (Figure 10). The new structure boasted an authentic Italian bell – donated by local land owner David Hewes – which had been “brought around the Horn by ship and hauled overland to [Modena] from the harbor at Newport Beach.” A scant nine days after it was installed, however, a strong Santa Ana wind, possibly aided by the significant weight of the bell, toppled the church tower. The Friends recovered, collecting money and rebuilding the church. In 1888, shortly after the name “El Modena” was officially recognized by the U.S. Postal Service, the Orange, McPherson and Modena railroad opened (Figure 11). The local horse powered, four-wheel streetcar connected the three communities for the fare of five cents. Also in January 1888, near the top of Tom Thumb Hill (southeast of the town center, Figure 12), entrepreneurs began construction on a grand tourist hotel, the El Modena Hotel, also known as the Hotel Blount (Figure 13). Other new additions to bustling Modena in 1888 included a livery stable (on Center Street at Alameda, which doubled as the railroad stop), blacksmith shop (Figure 14), grammar school (on the corner of Chapman Avenue and Alameda Street, on land donated by Hewes, Figure 15), as well as general stores and residences, some elaborately constructed (Figure 16). A newspaper, the *El Modena Record*, began printing across the street from the railroad stop in a rush to keep up with all the activity.

As with many western towns, El Modena’s boom would not last. The expected number of settlers did not materialize, and real estate values in the area dropped. Town lots either went

15 Evans, Cole/class, 4.
17 Seelee np.
18 Seelee np.
19 Meadows np. The horses are said to have ridden a platform on their way downhill from the more elevated El Modena (City of Orange historic context statement, np), much like the “gravity mule car” in Ontario, on Euclid Avenue.
20 Brigandi 37; City of Orange historic context statement, np; City of Orange Library Local History Collection.
21 Meadows np.
22 Meadows np.
unsold, or foreclosed. El Modena “farmers who had sub-divided their property re-possessed their holdings and returned the land to agriculture.”

By November 1888, the *El Modena Record* stopped production after 31 issues, for lack of advertising. Construction of the Hotel Blount was completed, but after struggling financially for a year, the hotel burned to the ground in November 1889. The Orange, McPherson and Modena railroad, the third and final horse-driven railway in Orange County, ended service after a flood in January 1890 destroyed its tracks across Santiago Creek, and the trestle was never rebuilt. The nearby town of McPherson was also suffering a reversal of fortune: a mysterious disease killed almost every grape vine in the community, resulting in total failure of the 1888 crop. Unlike El Modena, McPherson failed to survive this setback and the town of eventually abandoned.

*Changing Character: 1890s – 1930s*

Although El Modena went from boom to bust in a few short years, the town survived, mainly through a gradual change of character and economic focus. Near the turn of the century, El Modena established itself as a fruit growing area. Land that was originally planted in grape vines, was divided into 10 and 20 acre lots where ranchers planted apricots, walnuts, lemons, and several varieties of orange trees. Eucalyptus trees were also common in the area, and soon dusty El Modena was surrounded by acres and acres of vegetation. By 1898, David Hewes’ ranch and fruit packing company set agricultural records in the area, harvesting 100 acres of prunes and processing 1,000 barrels of olives. Hewes continued to invest in El Modena, consistently hiring residents to work at his ranch and packing plant, and creating a public park near the town center.

In 1905, the elegant Hewes Park (Figures 17 – 19), designed by Robert G. Fraser, designer of the famous Busch Gardens in Pasadena, opened to residents of El Modena at the corner of Esplanade Avenue and La Veta Street. The park addition no doubt bolstered El Modena’s reputation as the “Pasadena of Orange County,” as it was described in an early 1900s real estate placard for the town (Figure 20):

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23 Meadows np.
24 Meadows np. David Hewes stored the printing materials on his ranch.
25 Meadows np; Brigandi 37.
26 City of Orange historic context statement.
27 Meadows np.
28 Meadows np.
29 City of Orange historic context statement.
30 Robert Gordon Fraser (c. 1860-1946) was a Scottish born and educated (University of Edinburgh) gardener who came to the United States in the 1880s. Fraser came to California with his wife, Alice in 1886. In his lifetime, Fraser was best known for his design of Adolphus Busch’s celebrated Busch Gardens, surrounding the Midwestern beer tycoon’s elaborate private home (1903, 1001 South Orange Grove Avenue, Pasadena). Fraser is credited with designing the property’s complex landscape, which eventually grew to more than seven acres and included a private river. According to Anheuser-Bush corporate records, the gardens were developed at a cost of more than $3 million, and necessitated between 30 to 50 gardeners to maintain the property. The lush landscaping of Busch Gardens was second only to nearby San Marino’s Huntington Gardens in terms its massive scale and exotic plantings. In 1905, Fraser started work designing Hewes Park. (Telephone interview with Gary Cowles, local historian and noted Robert Fraser expert, by Francesca Smith, 17 November 2004.).
31 City of Orange Library Local History Collection.
By backing the town financially, David Hewes helped El Modena develop and survive beyond its initial boom. Hewes Park served the community until the 1940s (when it was sold to private interests), and the grammar school existed at least until the late 1920s. This school was replaced with the Lincoln Elementary School (Figure 21) which was constructed at the corner of Chapman Avenue and Hewes Street in 1913.

In 1910, issues with the “El Modena” name again surfaced, as a “language purist” demanded that the town’s name be changed to “El Modeno,” so that the name would be grammatically correct. As had been the case when the post office dubbed the town Earlham, area residents continued to refer to the town as “El Modena,” even though the official postal name was changed to “El Modeno” in February 1910.

Two international events had a significant impact on El Modena in the 1910s: the Mexican Revolution and World War I. The Mexican Revolution began in November of 1910, when Francisco Madero, political opponent to Mexican dictator General Porfirio Díaz Mori, organized an armed uprising against the Díaz regime. The ensuing violence would last over a decade, during which time a million Mexicans, or ten percent of the population, were killed. As violence related to the revolution intensified, many Mexican families began coming to the United States, seeking refuge from the chaos in Mexico. World War I also encouraged Mexican immigration to the United States. When the U.S. entered World War I in 1917, men across the country were drafted into the war effort, and the El Modena area was no exception. As a result, the fruit harvesting work force dwindled, providing opportunity for hundreds of Mexicans immigrants. Upon their arrival in the area, many Mexicans worked for ranchers and farmers as farm laborers but soon many purchased land and started their own businesses.

Although the Quaker presence in El Modena continued, by the 1920s the town began to take on a distinctly Mexican character, developing its own small Mexican neighborhoods. These sub-communities included “El Pirripe, north of Chapman Avenue and named after an area bakery;
Hollywood, south of Chapman Avenue; and La Paloma in the hills [south of Palmyra Avenue].”\textsuperscript{38} In 1916, a small chapel was built by Mexican pastors from the Methodist Church (Figure 22).\textsuperscript{39} Around 1924, another small chapel was constructed on Alameda Street, the beginning of La Purisma Mission, later known as the La Purisma Catholic Church.\textsuperscript{40} Around 1929, a small western false-front market was constructed by the Moreno family, one of the oldest families in El Modena. The market, called “La Morenita,” is located at the corner of Washington Avenue and Earlham Street.\textsuperscript{41}

In interviews, members of the Moreno family have recalled what life was like in “old” El Modena, from the 1920s through 1950s.\textsuperscript{42} According to these interviews, many Mexican-American El Modena families worked in packing houses and orchards in the nearby neighborhoods of Villa Park, Placentia, and Orange. While some women worked in the packing houses, flatbed trucks came in the early mornings to pick up male laborers, who picked oranges for four-and-a-half cents per box, with their children – often affectionately called “rantons,” or “little rats” – sometimes picking beside them to make extra money. Groves of orange, lemon, avocado, and eucalyptus trees surrounded El Modena,\textsuperscript{43} making the town feel like a “vacuum,” isolated from the surrounding world.\textsuperscript{44} Early housing in the area consisted of small, poorly constructed shacks, often rented for $7-$10 per month, that made for cramped, quickly deteriorating conditions.\textsuperscript{45} Several of this type of small, wood frame residences appears to remain extant along Montgomery Place. According to a former resident, drinking water was hard to come by, as only one family supplied it from a cast-iron pipe.\textsuperscript{46} Later, some of the Mexican-American farmworkers in El Modena moved into small bungalows, modeled after the somewhat larger contractor-built types located in downtown Orange. These bungalows, some of which exist in modified forms today, typically had clapboard siding, gabled roofs, and small entry porches.\textsuperscript{47}

Another fact of life in El Modena was segregation. After Roosevelt Elementary School (Figure 23) was constructed in 1923, on the lot adjacent to the existing elementary school, the local school district began enrolling Anglo\textsuperscript{48} students in the new school, reserving the older Lincoln Elementary for Mexican-Americans.\textsuperscript{49} Roosevelt was similar in design to Lincoln, but was

\textsuperscript{39} Brigandi 102.
\textsuperscript{40} Tierre, E.L. “El Modena Mexican documented by UCI team” \textit{Orange City News}, 18 August 1982.
\textsuperscript{41} Single unmarked page (87) possibly from architectural guide to Orange by Phil Brigandi.
\textsuperscript{42} Tierre np; Pepper, Ann. “El Modena reunion to recall gentle era,” \textit{The Orange County Register}, 19 September 1995, B1.
\textsuperscript{43} Former El Modena resident videotaped in “Remembrances of El Modena, 50/100th Celebration,” City of Orange.
\textsuperscript{44} Pepper B1.
\textsuperscript{46} Chin np.
\textsuperscript{47} City of Orange historic context statement.
\textsuperscript{48} The term “Anglo” here refers to White, or Caucasian. In some sources “Anglo” may refer to non-Hispanic people. Students at Roosevelt School often included Anglos, in addition to light-skinned Mexican-Americans and Asians.
constructed of brick instead of wood, and included higher ceilings and two bell towers. The new curriculum at Lincoln focused on manual and vocational training, such as needlework and home economics, and included a modified annual class schedule for children who worked in the fields through late September. In the 1930s, concerned Anglos called for classes at Mexican-American schools to focus on personal care, and soon general “Americanization” programs began which taught English, “home management,” and hygiene. Segregation was not limited to schooling: Mexican-American children could only use the local public pool on Mondays because it was drained on Monday night and Mexican-American baseball teams were not allowed to play in the public parks.

**Challenges and Triumphs: 1930s – 1950s**

Two events defined the 1930s and 1940s in El Modena: the Citrus Strike of 1936, and the *Mendez v. Westminster* court case officially ending school segregation in the area in 1946-1947. Fruit picking, the fundamental way of life for many Mexican-Americans in El Modena, was difficult work, and disagreement often broke out between picking crews and their employers, the fruit growers and packing houses. Pickers took issue with their low wages, the growers’ frequent withholding of payment until after the harvest, and on-the-spot firing, which was not uncommon. By the 1930s the pickers had begun to organize, and shortly before the 1936 Valencia orange picking season, Celso Medina, an El Modena resident, was elected chief organizer for the major pickers union, the *Confederación de Campesinas y Obreros Mexicanos* (Confederation of Mexican Peasants and Workers). Medina held meetings all around Orange County in an effort to rally support for union demands. On June 11, 1936, after the growers refused to meet with union representatives, the “largest strike in the history of the citrus industry” began, as “nearly 3,000 pickers across Orange County walked out during the height of Valencia season.” The growers frantically hired replacement workers, along with armed guards to protect them. When the growers continually refused to meet with the pickers, violence broke out and over 100 strike leaders were arrested. On July 27, 1936, the strike finally ended, when the Mexican Counsel in Los Angeles helped negotiate a settlement that granted slightly higher wages and an end of withholding payment to the pickers. These successes were short-lived, however, because in the wake of the strike, growers changed their employment approach and started hiring outside picking crews, eventually leading to a system of seasonal employment for Mexican nationals rather than the Mexican-American laborers residing in Orange. Another impact to farm laborers in El Modena was that by the late 1940s, citrus farming in the area immediately surrounding El Modena diminished. Land that had been agricultural was developed to feed the

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50 “El Modena has new school ready for use,” *Orange Daily News*, 4 April, 1923. Stanford Library, Special Collection, Box 2, Folder 2; Figures 21 and 23; Brigandi 103.
52 Gunther, O.E. Letter to Board of Supervisors, 29 June, 1937. Stanford Library, Special Collection, Arriola, Box 3.
53 Brigandi 102.
54 Gobbel, Marge and JD. Oral interview by Christopher Arriola, 15 August 1991. Stanford Library, Special Collection, Box 3, Folder 2.
55 Brigandi 100.
56 Brigandi 100-104.
post-World War II housing boom and soon many new homes, often small single-family bungalows or bungalow courts (Figures 24 – 25), were constructed in place of the fruit groves.

In the 1940s, Mexican-Americans in Orange County rallied behind another cause, this time in protest of school segregation. Like the Citrus Strike, this fight would at times center around El Modena. As older generations of Mexican-Americans in El Modena began to send their children through local schools, many took issue with the forced segregation. While some lighter-skinned Mexican-American children “passed” for Anglo and attended Anglo schools, most Mexican-American children (some the brothers and sisters of “passing” children) were limited to the more vocational curricula of segregated schools.\(^{57}\) In Westminster, a town about 15 miles east of El Modena, Gonzalo Mendez, a successful tenant farmer, along with a group of Mexican-American World War II Veterans, filed a lawsuit in federal court challenging school segregation in four Orange County school districts (Westminster, Santa Ana, Garden Grove, and El Modena).\(^{58}\) The 1945 suit, filed on behalf of 5,000 Mexican-American children\(^{59}\) with help from the League of United Latin American Citizens (LULAC)\(^{60}\) sought a court injunction that would order integration of schools in the Westminster, Santa Ana, Garden Grove, and El Modena school districts. While Gonzalo Mendez left his farm to work on the case and meet with attorneys, his wife Felicitas ran the farm, allowing workers to take time off to testify, and taking care of their children.\(^{61}\)

Mendez had a strong case. Physical conditions as well as curricula in the segregated schools were clearly separate and unequal. Nowhere was this more apparent than in El Modena, where the segregated Lincoln and Roosevelt schools sat side-by-side, making an easy comparison. A short hundred yards – a few ball fields – separated Mexican-Americans at Lincoln from greater opportunity and higher quality of education and materials at Roosevelt (Figure 26).

The lawsuit maintained that Mexican-American schoolchildren were excluded from “attending, using, enjoying, and receiving the benefits of the education, health, and recreation facilities of certain schools within their respective districts and systems,” while “other schools are maintained, attended, and used exclusively and for persons and children purportedly known as White or Anglo-Saxon children.”\(^{62}\) Federal District Judge Paul McCormick\(^{63}\) ruled in favor of Mendez, asserting that segregation “foster[s] antagonisms in the children and suggest[s] inferiority among them where none exists.”\(^{64}\) The decision was quickly appealed, and the case moved to the 9\(^{th}\) Circuit Court of Appeals in San Francisco. Recognizing the possibility of the case reaching the Supreme Court and yielding results on a national scale, several minority groups


\(^{61}\) Lozano.

\(^{62}\) Cooke 421.

\(^{63}\) Arriola (La Raza) 185.

\(^{64}\) Brigandi 104.
came out in support of Mendez, penning *amicus curiae* or “friend of the court” briefs. Authors of these briefs included Thurgood Marshall for the National Association for the Advancement of Colored People (NAACP), American Jewish Congress, American Civil Liberties Union, National Lawyers Guild, Japanese-American Citizens League, and California Attorney General Robert W. Kenny.\(^{65}\) The briefs strengthened Mendez’s case, and on April 14, 1947, the circuit court ruled that “school districts could not segregate on the basis of national origin.”\(^{66}\)

Just before the decision, an article in *The Nation* declared that “[o]nly a refusal by the school districts to an appeal from an adverse decision by the Ninth Circuit Court or an extremely narrow interpretation of the issues in the Supreme Court can prevent this case from making judicial and social history.”\(^{67}\) However, *Mendez v. Westminster* would never reach the Supreme Court because the school system did not appeal the circuit court’s decision. In addition, the 9\(^{th}\) Circuit upheld the District Court opinion on the grounds that the students’ 14\(^{th}\) Amendment right to equal protection under the law had been violated because of class discrimination, as opposed to racial.\(^{68}\) This eschewing of the race issue may have prevented the case from obtaining wider recognition. The case did have far-reaching effects in and around California, however, setting a national precedent by ending legal segregation of Mexican-Americans in the Southwest.\(^{69}\) And in the wake of *Mendez*, California Governor Earl Warren – who would go on to write the decision in *Brown v. Board of Education* in 1954 as Chief Justice of the Supreme Court – pushed the state legislature to repeal laws segregating Asian and Native American schoolchildren.\(^{70}\) The case also affected El Modena’s ethnic makeup. As integration slowly commenced, many disgruntled Anglo families moved away, settling in newly drawn school districts that were often “re”-segregated.\(^{71}\)

**Recent Past: 1960s – Present**

In the early 1960s, El Modena residents, citing lack of earthquake safety, petitioned to have both the Lincoln and Roosevelt schools demolished. By 1965, both schools were destroyed.\(^{72}\) In 1967, the original Friends congregation of El Modena moved to the corner of Rancho Santiago Boulevard and Bond Avenue, about a mile north of the Friends Church on Chapman Avenue.\(^{73}\) Later, the Moreno family, who continue to own La Morenita market at 4304 Washington Avenue, converted the old Friends church into a Mexican restaurant and bakery called *Moreno’s*.

The question of the town’s name came up again in 1970. The local telephone directory identified the community as El Modena, while the postal branch used El Modeno. The issue was resolved after a dedicated group of students at El Modena High School (opened in 1966, north of


\(^{66}\) Arriola (*Los Angeles Times*).

\(^{67}\) Arriola (*La Raza*) 198.

\(^{68}\) Arriola (*La Raza*) 207.

\(^{69}\) Arriola (*Los Angeles Times*).

\(^{70}\) Arriola (*La Raza*) 200-201.


\(^{72}\) Brigandi 37.
Chapman Avenue near Esplanade) provided the post office with grammatical proof that “El” and “Modena” could indeed go together. Yet again, the post office relented, and restored the town’s official name to “El Modena.”

In 2000, in the tradition of *Mendez*, another group of students from El Modena High School were involved in a 14th Amendment court case. After the Orange Unified School District prevented members of a student group called the Gay-Straight Alliance from meeting on school grounds, the students protested, and a U.S. District Court judge ruled in their favor.

**Conclusion**

In the 1960s and 1970s, the ever-growing City of Orange annexed areas surrounding El Modena, but the original town proper, north of Chapman Avenue, continues to this day as an unincorporated part of Orange County. Over the years, El Modena grew with Orange. New stores and restaurants were added to Chapman Avenue, and new homes, including small bungalows and bungalow courts, were constructed over all the original fruit groves. A number of relatively unaltered, small, wood-framed bungalows are scattered throughout the neighborhood, including an eight-building bungalow court on Hewes Street at Montgomery Place. The footprint of Hewes Park remains at the intersection of La Veta Avenue and Esplanade Street, although the park has since been sold off into private lots. Small expanses of unaltered open space still exist to the south and east of El Modena, although almost all of the former agricultural areas have been developed. Jordan Elementary School (1962), the Prospect School (1966), and the El Modena Branch Library (1978) were constructed in the southern part of El Modena, covering more open space, although significant pockets of undeveloped land still exist in the area. Despite numerous additions and alterations to the area’s older homes, the single-family, working-class residential character of El Modena remains. In addition, although El Modena no longer resembles the Quakers’ balmy new frontier, the dusty barrio of the Mexican Revolution, or the citrus center that spawned an historic court case, the Friends Church and La Morenita market, resting just a block apart on Earlham Street, still recall the rich history of this multifaceted community.

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75 Brigandi 37-38.
FIGURES
Figure 1: Map of El Modena. Colored area is part of the City of Orange; areas in white are unincorporated parts of Orange County.
Figure 2: Aerial view of El Modena, 1938. Note Hewes Park at middle left, Chapman Avenue running east-west at middle-top (Orange County Archives).
Figure 3: Aerial view of El Modena, 1955. Note housing infill over some fruit groves (Orange County Archives).
Figure 4: Aerial view of El Modena, May 13, 1956 (Whittier Fairchild Aerial Photography Collection).
Figure 5: Aerial view of El Modena, 1959 (Orange County Archives).
Figure 6: Aerial view of El Modena, view east, November 17, 1962 (UCLA Air Photo Archives).
Figure 7: Aerial view of El Modena, view north, May 17, 1965 (UCLA Air Photo Archives).
Figure 8: Millionaire philanthropist and land owner David Hewes (City of Orange local history website).

Figure 9: Anapauma, Spanish for “place of rest,” David Hewes’ home in El Modena, circa 1910s (City of Orange local history website).
Figure 10: Friends Church, located at 4328 East Chapman Avenue, view south, date unknown (First American Title Insurance Company Archives).

Figure 11: Orange, McPherson and Modena railroad (horse-driven), circa 1889 (First American Title Insurance Company Archives).
Figure 12: Tom Thumb Hill, El Modena, from the top of the El Modena Grade, date unknown (First American Title Insurance Company Archives).

Figure 13: El Modena Hotel, also known as the Hotel Blount, circa 1888 (burned down in 1889) (First American Title Insurance Company Archives).
Figure 14: William Murray blacksmith shop, sign reads “Wm Murray, Blacksmith and Wagon Maker, Dealer in Buggies, Farm Implements & Wagons,” November 6, 1908 (First American Title Insurance Company Archives).

Figure 15: El Modena Grammar School, 1889 (extant until circa 1930) (City of Orange local history website).
Figure 16: Nathan D. Ellis residence, 1884 (City of Orange local history website).

Figure 17: Hewes Park, date unknown (First American Title Insurance Company Archives).
Figure 18: Hewes Park, date unknown (First American Title Insurance Company Archives).

Figure 19: Aerial photo of Hewes Park, 1938 (Orange County Archives).
Figure 20: El Modena real estate placard, circa early 1900s (First American Title Insurance Company Archives).
Figure 21: Lincoln Elementary School, constructed in 1913, view northwest, 1950 (First American Title Insurance Company Archives).

Figure 22: First United Methodist Church, date unknown (First American Title Insurance Company Archives).
Figure 23: Roosevelt Elementary School, constructed 1923, view northwest, 1950 (First American Title Insurance Company Archives).

Figure 24: Bungalow court on Hewes Street at Philo Avenue, view east, November 17, 1962 (UCLA Air Photo Archives).
Figure 25: Aerial view of El Modena, November 17, 1962. Note Friends Church at middle left, La Morenita market at middle, and bungalow court at top right (UCLA Air Photo Archives).

Figure 26: Aerial view of Lincoln Elementary (left, formerly Mexican) and Roosevelt Elementary (right, formerly Anglo) schools on Chapman Avenue at Hewes Street (left), May 17, 1965 (UCLA Air Photo Archives).
APPENDIX C

Eichler Tracts Historic Context Statement
Eichler Tracts (Fairhaven, Fairhills, Fairmeadow) Historic Context Statement

Introduction

Between 1949 and 1974, Joseph Eichler built about 11,000 homes in California, including 575 in Southern California and 350 in Orange. Once a successful butter-and-egg wholesaler in New York, Eichler drew inspiration for his change in profession from his time renting Frank Lloyd Wright’s Bazett House. Wright’s Usonian building principles – which included integration with the natural landscape, the use of indigenous materials, and an aesthetic to appeal to the “common man” – inspired Eichler to incorporate similar principles into his suburban tract homes. After building two relatively mundane developments in 1949, he founded Eichler Homes, Inc. and dove into the postwar suburbanization and California modern architecture movements. 3,000 miles from William Levitt’s cookie-cutter, “Cape Cod”-style cottages, Eichler hired a series of progressive architecture firms – including Anshen & Allen, Jones & Emmons, and Claude Oakland Associates – to design innovative, modern, and affordable homes for California’s middle-class consumers. For over two decades, Eichler Homes would utilize streamlined production methods, specialized construction materials, an innovative marketing campaign, and one of the first non-discriminatory suburban housing policies in the country to change the shape of America’s suburbs.

Beginnings: 1940s

Joseph L. Eichler was born in 1900 to immigrant parents in Manhattan. His mother was German, and his Austrian-Jewish father owned a small toy store on 57th Street and 2nd Avenue.1 Raised Jewish, Eichler received a business degree from New York University in 1920.2 In 1925, he married Lillian Moncharsh, daughter of Polish-Jewish immigrants who owned a wholesale food company called Nye and Nisson, Inc., the largest independent butter-and-egg wholesaler in the region.3 After he married, Eichler took a managerial position with the family business, and soon moved to a branch office in San Francisco, where he began to raise a family. Son Richard was born in 1927, Edward in 1930.4 In the 1930s, successful and secure in his job, Eichler lived a pleasant life; although not particularly interested in arts and culture, he dressed well, went to parties, and loved Joe DiMaggio. Gradually, however, Eichler became bored and frustrated with his job, despite its financial success.5

In 1942, Eichler’s life changed when he decided to rent the Frank Lloyd Wright-designed Bazett house in Hillsborough, just south of San Francisco.6 From 1943 to 1945, life in the Usonian house constantly inspired Eichler, and soon he and his wife became devotees of contemporary

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2 Adamson and Arbunich 44, Ditto and Stern 41-42.
3 Adamson and Arbunich 45, Ditto and Stern 42.
4 Ditto and Stern 42.
5 Ditto and Stern 45-47.
architecture. Many of Wright’s Usonian building principles had a direct impact on Eichler’s burgeoning architectural philosophy. Wright intended to create Usonian homes for “everyman” and used indigenous materials to design buildings integrated with the natural landscape. Open floor plans allowed for freedom of individualized use and a sense of spaciousness. In addition, Wright’s thoughtful use of building materials, manipulation of natural light, and use of radiant heating (provided by hot water pumped through pipes beneath the floor) introduced Eichler to “an entirely new way of living” and encouraged him toward a dramatic shift in profession, from a food wholesaler to a developer with the goal of providing “contemporary houses for sale to the person of average income.” In 1945, at the age of 45, Eichler sold the family butter-and-egg business. With nothing to do, Eichler took his time considering career options, and played golf for the better part of a year.

While Eichler hit the links, the American homebuilding industry expanded exponentially. The country had been experiencing a housing shortage since the Great Depression, and World War II further compounded the crisis. Millions of war veterans returned to the U.S. and the ensuing baby boom created an extreme demand for homes affordable to middle- and working-class families. The rising postwar economy helped many families build up savings for homeownership, and the federal government adopted a series of policies designed to put them in suburban homes as efficiently as possible. New measures included no-money-down mortgages for veterans provided by the Veterans Administration; the Federal Housing Administration (FHA), established during the Depression, after World War II began financing a third of all suburban homes per year; the Housing Act of 1949 increased FHA funding; and the Federal Highway Act of 1956 developed a transportation framework for suburbanization (Adamson and Arbunich 10-11). In particular, FHA regulations specified a model for housing developments, including detached single-family homes, strict zoning, and racial segregation to ensure “harmonious, attractive neighborhoods.”

In an effort to respond to the demand, the manner of building homes also changed. “Developers” soon dominated the residential market, often building tracts of small, cheap, highly standardized homes with similar floor plans and minimal accouterments. William Levitt’s Levittown in New York epitomized this early postwar suburbanization boom. After building more than 2,000 homes in 1947, Levitt set a record for most homes built in a year for a single development. His nearly identical homes erected on a rigid grid of new streets, and off-limits to would-be non-white homeowners, drew criticism for their uniformity and blandness, but succeeded in making the dream of homeownership a reality for thousands of middle-class families. Across the country, new mass-production techniques, low interest rates, and federal investment in home mortgages made owning a suburban home cheaper than ever. Soon climate-controlled shopping

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7 Ditto and Stern 51.
8 Adamson and Arbunich “Paradise Lost.”
10 Adamson and Arbunich “Paradise Lost.”
11 Ditto and Stern 53.
12 Adamson and Arbunich 11.
malls and fast-food restaurants increased the appeal of life out of cities and in the car. According to historian Gwendolyn Wright, Americans “embraced suburban homes as the manifestation of the nation’s fundamental values of stability, affluence, and individualism.”

Eichler became involved in homebuilding in 1946, when he partnered with developers in the Sunnyvale neighborhood at the southern end of the San Francisco peninsula, building prefabricated homes for buyers with their own lots. By 1947, Eichler bought out the Sunnyvale Building Company, and expanded its practice, building his first suburban subdivision with then-typical features including wood floors on joists, sheet-rock walls, and forced air heat. Eichler’s experience living in the Bazett house still influenced him heavily, however, and around the same time he hired Robert Anshen, a disciple of Wright, to design a home for him in a similar style.

Anshen quickly convinced Eichler of the aesthetic advantages of the California Modernist-style over the prevailing styles of the day. Anshen accomplished this most directly in 1948, when, after seeing one of Eichler’s first subdivisions, he demanded, “How could you build this crap?” In an effort to respond to this question, Eichler agreed to pay Anshen $2,500 to design three plans and demonstrate how better design could be accomplished affordably. Originally an aspiration of European Modernism, the ideal of affordable, high quality housing for the masses became partially integrated into California Modernism beginning in the 1920s. According to historian Paul Adamson, architects Rudolph Schindler, Richard Neutra, and William Wurster developed the California Modern aesthetic in terms of a “California culture that was defined by an unpretentious social structure, outdoor living and the beginnings of a high-tech economy.”

California Modern homes featured expansive at-grade plate glass windows designed to bring California’s enchanting landscape and mild climate inside. Steel framing, tilt-up concrete, or post-and-beam construction allowed for open floor plans and personalized, reprogrammable space. Beginning in 1945, the Case Study House Program, sponsored by Arts & Architecture magazine, encouraged California Modern architects to experiment with new construction techniques, in an effort to promote individualistic modern design for middle-class residences on a massive scale. Many of the new concepts proved too difficult to replicate, however, and although architect Cliff May succeeded in popularizing the Western Ranch style home with some similarities to California Modernism (including private, backyard-oriented single story homes with large windows, patios, and lush landscaping), residential developers did not adopt true modern design until Eichler began doing so in 1949. After only employing a draftsman in his...
early projects, Eichler began to base his residential homes on drawings provided by architects like Anshen and his colleague William Allen.  

*Growth of Eichler Homes: 1950s*

According to a 1962 magazine article on Eichler Homes (as Eichler’s company soon became known),

> Using the words ‘homebuilder’ and ‘architect’ in the same breath is the exception rather than the rule; but then Joseph L. Eichler threw away the rulebook the day he ventured into the homebuilding field.

Indeed, Eichler Homes modeled some of its first designs after the notably modern “AA-1” house prototype designed by Anshen and Allen. The model, which served as the template for five of Eichler’s first subdivisions in the Palo Alto and Redwood Gardens neighborhoods near San Francisco, featured post-and-beam framing, open floor plans, relatively blank front facades with private rear backyards enclosed by a high fence, floor-to-ceiling windows, and radiant heated concrete floors, all within 1,044 square feet at a cost of $9,500. According to Eichler, “if I were in the dress business, I’d hire the best designers to create dresses for sale. I think the same reasoning applies to home building.”

Immediately popular with young professionals, Eichler’s initial developments employed a number of unique techniques – in addition to and often because of being designed by architects – that, albeit refined in future subdivisions, set a precedent for over a decade of successful homebuilding. Specifically, Eichler Homes used high quality building materials, a streamlined construction system, innovative neighborhood design, an advanced marketing campaign, and an open housing policy to create a unique brand of suburban tract homes. As soon as December of 1950, Eichler Homes began winning awards, first for “Subdivision of the Year” in *Architectural Forum*, thanks to a “progressive builder” and “top-flight architects.” The same issue of *Forum* named A. Quincy Jones, a successful California Modernist architect, “Architect of the Year,” prompting Eichler to contact him regarding future collaboration. Jones contacted colleague Frederick E. Emmons about the commission and soon the pair joined Anshen and Allen in designing model homes for Eichler.

Eichler Homes’ design innovations during the 1950s included sliding glass doors, a built-in range and oven (often in a kitchen directly open to a family room), metal cabinets, metal sash

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24 Adamson 8. S. Robert Anshen and William S. Allen founded their San Francisco-based firm in 1940. In 1956, they received national attention for their concrete and glass Chapel of the Holy Cross in Sedona, Arizona (“Enter the Wonderful World of Eichler,” Presented by the Society of Architectural Historians/Southern California Chapter (September 15, 2001)).
25 Hipsman 17.
27 Forum 1950 80.
28 Hipsman 19.
29 Architects who worked for Eichler were often also doing design on the forefront of modern technology. Architect A. Quincy Jones, for example, participated in experimental programs sponsored by the U.S. Gypsum Company and U.S. Steel on using new materials for large-scale home design (Adamson and Arbunich 94).
windows, and multiple bedrooms, family rooms, baths, and patios.\textsuperscript{31} Beginning in 1953, a second bathroom with direct outdoor access proved popular.\textsuperscript{32} In 1956, Anshen sketched, and Jones finalized, designs for an interior courtyard or atrium, completely invisible from the street, which dramatically increased the indoor/outdoor feel of the homes. This unique feature seemed to perfectly compliment California’s infrequently wet weather, and sales soared. Eichler and his architects insisted that the tracts also use high-quality materials to match the designs, including teak, mahogany veneered interior plywood from the Philippines, redwood posts and beams from Oregon, and crushed brick or white or gray stone roofs.\textsuperscript{33} The rich materials and thoughtful design led to a flood of national awards for Eichler Homes throughout the 1950s, including accolades from \textit{Life}, \textit{House and Home}, and \textit{Sunset}. Sales also remained consistently strong, spurred the by positive press and new variations, including T- and L-shaped floor plans and flat and gabled roofs, which increased the variety of home types.\textsuperscript{34} By the mid-1950s Eichler had sold close to 2,000 homes.\textsuperscript{35}

While Eichler spent more money than other developers to pay for architects and their demand for relatively elaborate materials, the design process actually helped save money overall, in part due to a streamlined construction system. According to Joseph Eichler’s son, Ned, who worked for Eichler Homes for over a decade, although “[a]ll of the large-scale, postwar homebuilders streamlined the process of building through labor specialization, product standardization, and vastly improved supply planning and organization,” only Eichler’s unique use of architects allowed for efficient mass production without sacrificing complexity of house designs.\textsuperscript{36} Architects’ drawings simplified materials purchasing, standardized building components, and allowed for greater individuality in home designs through small changes in model plans.\textsuperscript{37} For example, the post-and-beam wood structural system on a slab-on-grade foundation introduced by Anshen in 1949 required fewer construction elements and thus increased construction speed. Concurrently, Eichler developed an elaborate construction system that included 12 separate operations, each with its own crew, similar to a two-week assembly line. A professional timekeeper kept the workers – who included ex-convicts and handicapped men to save money – on schedule.\textsuperscript{38}

Eichler Homes’ developments were equally unique on a larger scale, as neighborhood plans defied conventional grid street patterns common to early postwar suburbs like Levittown. Instead, Eichler and his architects often designed curving streetscapes, sometimes at slight angles, sometimes in complete, concentric circles.\textsuperscript{39} The developments exhibited a balance of public and private design. According to a 1950 \textit{Architectural Forum} article, the “curvilinear street plans [produce] a spacious, informal effect, slow traffic within the development, reduce

\textsuperscript{32} Adamson and Arbunich 65.
\textsuperscript{33} Adamson and Arbunich 105; \textit{Forum} 1950 80.
\textsuperscript{34} Adamson and Arbunich 68, 86, 112.
\textsuperscript{35} Adamson and Arbunich 42.
\textsuperscript{36} Ditto and Stern 65, 67.
\textsuperscript{37} Adamson and Arbunich 104.
\textsuperscript{38} Adamson and Arbunich 105, 109.
\textsuperscript{39} Ditto and Stern, 26-27.
dangerous crossings and improve house orientation.” In some cases, Eichler also buried power lines beneath sidewalks, for visual and safety improvements. In addition to safer streets, many Eichler tracts included public facilities open to all residents, a feature unique to suburban housing in the 1950s. Amenities included clubhouses, swimming pools, community centers, recreation centers, parks, and schools, with space sometimes secured through creative zoning variances. For example, lots sizes were reduced to make room for more public land. Eichler and his architects hoped to achieve a sense of “total community,” and in some cases “formalized neighborhood interconnections” by establishing joint community ownership of the public properties. At the same time, individual home designs and orientation encouraged intensely private living. The relatively blank front facades, interior atriums and backyard enclosed by high walls or fences turned individual families inward. On a more basic level, the modern designs necessitated privacy; according to the 1950 Architectural Forum article on Eichler’s “Subdivision of the Year,”

unlike Long Island Builder Levitt, who forbids fencing on the grounds that it creates a cluttered look and deprives people of the benefit of his landscaping, Eichler holds that well-designed, uniform fences are an asset when big glass walls face each other across rear yards.

Thus, on the larger scale of entire subdivisions, Eichler “employ[ed] traditional notions of community while providing for the modern desires for privacy and individuality.”

Eichler exploited this balance of public and private life lived in modern homes at affordable prices in an extensive advertising campaign geared toward the middle class. According to the 1950 Architectural Forum article, Eichler spent about $50 per house on advertising, with 60% earmarked for newspaper ads, 30% for direct mail, and 10% for billboards, landscaping of model homes, and “cocktail previews” for the press, radio and civic leaders. While model home openings and promotional receptions helped spark word-of-mouth interest in the company, the heart of Eichler Homes’ public image lay in its print advertising. Professional graphic designers and advertisers developed slick and innovative ads to accompany the evocative photography of professional Ernie Braun. Braun’s staged, often low-angle shots captured the new sense of freedom and individuality available to middle-class homeowners in the new, modern, suburban homes with advanced designs. Ad text invited consumers to experience the lighthearted freedom of unconfined space! In Eichler living it comes from capturing the outdoors – shielding it from the street – guarding it from the weather – making it part of your living – yours alone. Then your private out-of-doors is combined with the

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40 Forum 1950 80.
41 Adamson and Arbunich 39.
42 NR Nomination 3, 5, Adamson and Arbunich 187.
43 In the Greenmeadow subdivision in Palo Alto, Eichler planned to impose a usage fee on community facilities until residents formed a neighborhood association, raised funds and convinced him to sell the property to them. From Seyfert, Tim. “Greenmeadow, Palo Alto, Where Eichler’s utopia still lives today” from Palo Alto Online, no date <http://www.paloaltoonline.com/neighborhoods/greenmeadow.shtml>.
44 Forum 1950 80.
45 Adamson and Arbunich 227.
46 Forum 1950 80.
interior as living areas are visualized. And only then are exterior walls shaped – to
enclose your private spaciousness. A new looking home results! New, clean, graceful
exterior lines – the lines of the home of the future designed by the finest architects.48

In general, Eichler’s ads catered to a relatively intellectual clientele, or at least to those
impressed with functional, minimal, well-organized, and technologically superior designs.
Indeed, the unique, glass-dominated homes intimidated more conventional members, or the
majority, of the general public. Eichler’s homes sold well, however, catering to the California
lifestyle that celebrated personal satisfaction, and a varied group of adventurous and creative
young professionals and families purchased them.49

While Eichler Homes’ advertising images put a hip, friendly, wholesome, and uniformly
Caucasian face on this group of potential homeowners, in reality the subdivisions were home to a
racially diverse group, albeit one never overtly advertised to the general public. Although it was
not advertised, the “open housing” policy of Eichler Homes, which permitted members of all
races to purchase property in the tracts, was quietly practiced from the company’s inception.50 In
addition, the policy – which was at odds with most other postwar suburban developers that used
restrictive covenants to prevent minorities from purchasing homes (in line with the FHA stance)
– possibly meant more to Eichler than any of his other innovations. A lifelong liberal and
Democrat, Eichler campaigned for Adlai Stevenson in 1952 and 1956 and met with John F.
Kennedy in 1960.51 A 1963 photograph of two boys – one Asian, the other African-American –
playing together in Eichler’s Lucas Valley subdivision, had a profound impact on Eichler and
crystallized for him the importance of integrated housing.52 “That picture catches within
[me]…,” said Eichler. “It sums up – what I believe in and what I’m working for in life” and is
“the most eloquent expression of the philosophy of my organization.”53

According to a 1964 interview with Ned Eichler, who became president of Eichler Homes in
1964, “Orientals” bought homes in Eichler subdivisions beginning in 1950, and “Negroes” first
purchased homes in 1954.54 Initially, Eichler Homes had no established policy on whether or not
to sell to minorities, but as soon as the first interested buyers approached, the elder Eichler did
not want to be bothered with such “little problems.” Gradually the company adopted the policy
to sell to any financially qualified buyers. For minorities, this often equated to an elite clientele,
including a Stanford scientist and a Harvard Medical School graduate. Overall, integration of the
subdivisions (which never included over 10% minorities) went smoothly, although in a few cases
neighbors protested. In one extreme instance, Eichler had to visit the tract and explain to a score
of angry property owners that the open housing policy would not be changed, and that if property
values decreased as a result of integration that this would in fact hurt Eichler more than the
owners. On rare occasions, the company would offer to buy properties back from owners who

49 Adamson and Arbunich 154, 194.
50 Before founding Eichler Homes, Eichler did work with a company that required Codes, Covenants and
Restrictions (CC&Rs) that prevented minorities from purchasing properties (Adamson and Arbunich 199).
51 Adamson and Arbunich 190.
52 Arbunich, Marty. “Touching Image of Inspiration that Stirred Eichler’s Soul – Tow Boys, Two Races, One
53 Arbunich photo caption.
54 Interview on the American Character: An Interview with Edward P. Eichler, President, Eichler Homes, Inc.
simply refused to live in an integrated neighborhood. On the other hand, however, some homeowners purchased the homes specifically because of its open housing policy, often without being aware of their potential architectural benefits. In general, the company walked a thin line by publicly supporting the policy; although Eichler openly resigned from the National Association of Homebuilders in 1958 after another member commented that blacks were known to decrease property values, the company also turned down numerous awards from civil rights groups, afraid that too much attention would disrupt their quiet pioneering of suburban fair housing.

The company set a precedent for integrated housing before much of the national civil rights legislation in the 1950s, and well before a California court ruled in 1958 that builders could not discriminate against blacks. In Southern California, the company was credited with the integration of tract housing, beginning with the Balboa Highlands subdivision in the San Fernando Valley. According to former Eichler salesman Jonas Harschel, “…here were liberal businessmen bucking American industry’s racist policies, and insisting on selling good design at fair prices because it was the right thing to do!”

Ned Eichler considered his father’s company to be in a powerful position for social change:

Eichler Homes has been in a position to be able to pass its own local fair housing law because we could affect enough of the market…I believe that builders really don’t have any choice. They are in a position that they have denied for too long; that is, when the build a lot of houses or apartments, they create communities.

Eichler Homes consistently embraced what it perceived to be a corporate and social responsibility not to discriminate against anyone who applied for its tract housing; only financial constraints applied.

Expansion and Demise: 1960s, Orange’s Eichlers, and Urban Development

Through the 1950s and into the 1960s, Eichler continued to work at the head of Eichler Homes, overseeing the production of thousands of suburban homes in the Bay Area and expanding the business into Southern California. In 1959, Eichler Homes became the first publicly traded homebuilding company, three years before Levitt and Sons. In October of the same year, Eichler started on the first of what would eventually become 575 homes in Southern California, breaking ground on the Fairhaven tract in southeast Orange (Figures 1-7). Built as part of the

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55 Adamson and Arbunich 190.
57 Adamson and Arbunich 199.
59 Interview on the American Character.
60 Ditto and Stern 62.
city’s suburban housing boom, this 133 home, 28-acre, $3.5 million tract was one of the largest tracts ever built in Orange.  

Upon arriving in Southern California, Eichler, fresh from a Progressive Architecture-sponsored trip to 10 European countries with a group of architects on housing types, insisted that

…we can learn a lesson about the more efficient use of land from the Europeans….We must begin to give more attention to site and community planning, particularly here in California. There will have to be a greater proportion of multiple-story dwellings to single story homes in the future.

Matt Kahn, a Stanford professor of art, led interior design efforts while architects Quincy Jones, Frederick Emmons, Claude Oakland, and Anshen & Allen all contributed plans to the new development, which, according to the Progressive Architecture article, featured a number of multi-story dwellings. Fairhaven homes also included an “entry court” or atrium, a sliding glass door, floor-to-ceiling glass walls, and a “central hall plan,” which separated living and sleeping areas (Figure 8). Eichler homes in the Fairhaven tract started at $25,950.

The Fairhaven advertising brochure featured an “architect’s checklist,” for those interested in learning more about the added benefits of architect-designed homes in tract housing. The brochure went on to regale consumers with a bright view of life in Orange, and in Eichlers:

Basking in the sun-splashed City of Orange, the new community of Fairhaven brings the Wonderful World of Eichler to Southern California for the first time. The climate is warm and wind-free…ideal for year-round indoor/outdoor living. There’s a world of work and play in every direction. You can also do everything from fishing and sailing to climbing mountains and exploring the desert almost as quickly as the mood strikes you. Eichler has designed Fairhaven so that the natural beauty of its tree-studded setting has been undisturbed [many orange trees were preserved]. Fairhaven is a complete community with convenient facilities for shopping, education and recreation. Fashion Square is just 4 miles away. Churches of every denomination are close by. Fairhaven offers you suburban living at its finest. Yes, this is Fairhaven—an established community, carefully preserved natural beauty, one of the world’s finest climates…and America’s most honored family home…EICHLER HOMES. Don’t you agree you’ll live better—happier—in Fairhaven?

Over 8,000 people viewed the new homes as part of the February 6, 1960 grand opening and many area residents fell in love at first sight. According to one Los Angeles Times columnist,

…for an old Southlander, long-accustomed to cloistered desert architecture, the Eichler home [in Fairhaven] was a strange apparition, opening our stucco-weary eyes to a new

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63 Progressive Architecture, 1959.
64 Los Angeles Times, January 24, 1960.
65 Fairhaven advertising brochure.
kind of glassed-in living...Curiosity propelled us through the front door, which led us right back to open air; the rest was automatic.  

Through 1961, Eichler built Fairhills in East Orange, and the property opened in January of 1962 at $26,950 per home (Figures 9-11). The tract featured homes similar to those in Fairhaven, many of which were designed by Anshen & Allen. The final area tract, Fairmeadow, the largest of the three, opened in north Orange near the end of 1964 (Figures 12-15). The Fairmeadow brochure boasted of the tract’s proximity to an elementary and recently completed junior high school, in addition to many amenities similar to Fairhaven.

Generally, members of each of the three developments got along well, as neighbors ate dinner together and followed the lives of nearby families. Like their compatriots in Northern California, the Orange Eichlers faced their share of problems, however. While the non-discrimination clauses in the house deeds led to some degree of racial integration, it also led to occasional “racist-type activities” such as objectors knocking over minority neighbors’ garbage cans and resident complaints. However, far more common were home maintenance problems. Roofs leaked, radiant heating pipes often broke and had to be repaired, plate glass windows let in too much light and heat, and homeowners were forced to spend extra money on heating and cooling. In the late 1970s, residents began a series of “Eichler Homeowner Seminars,” which included panel members from various companies that “performed recent satisfactory services for several Eichler homeowners.”

More unique to Orange’s Eichlers was the lack of community facilities, a trademark of Eichler’s earlier Northern California counterparts. Because of cost and acreage constraints, Eichler opted not to include any pools or community centers in Orange, and in 1965, residents appealed for more. A group of Fairhills homeowners went so far as to write to Eichler, lamenting the upcoming summer heat wave and trying to strike some sort of deal on a community pool, but Eichler would not relent. Overall, though, Eichler homeowners in Orange appreciated their unique product, and many maintained their homes with pride (Figures 16-18).

As Eichler Homes continued to expand in Southern California, building two more developments in Granada Hills (San Fernando Valley) and Thousand Oaks (Ventura County), the company began to run into production problems, leading Eichler to attempt to diversify. First, other builders taking part in the suburban housing explosion were becoming more successful at creating appealing homes at reduced production costs – some were dubbed “Like-lers” – stiffening industry competition. Second, the unique materials used in Eichler homes, from Philippine mahogany to plate glass, became more expensive, and the skilled craftsmen needed to install the materials became harder to find. Third, buyers began to demand increasingly popular air conditioning, which proved difficult to install. Fourth, wealthier consumers wanted greater

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individualization in their homes, and began to prefer more traditional architectural styles to Eichler’s modern aesthetic.\(^{73}\) In an effort to remain profitable, Eichler turned his attention to city centers, specifically San Francisco. He hoped that urban renewal in the form of modern high-rises would be the most useful, lucrative, and challenging use of his time.

While Eichler Homes enjoyed moderate success in the urban sphere, the move would ultimately lead to the company’s demise. Echoing his conclusions on the importance of density after his European tour, Eichler also saw a shift away from suburban work as a matter of economics:

> …we have reached the point where the creation of single family houses at a price that people can afford is becoming increasingly difficult and may soon become impossible. The situation obviously calls for a more intensive use of land and we are more and more turning our attention in that direction.\(^{74}\)

In fact, Eichler predicted urban-suburban migration patterns incorrectly; the suburbanization boom was just beginning, and continues to this day, leaving many inner-cities relatively empty, with little public investment. Starting in 1963, Eichler began construction of high-density housing in San Francisco, including the lower middle-class Laguna Heights complex in the Fillmore district, a predominantly African-American and Asian city redevelopment area;\(^{75}\) Geneva Towers and townhouses in Visitacion Valley; Central Towers in the low-income Tenderloin district; and the upper-class, 32-story Eichler Summit apartment building at the peak of prestigious Russian Hill.\(^{76}\) Typical of much urban renewal across the country, some of Eichler’s “towers in the park” faced community opposition regarding the demolition and displacement often necessary to make room for new infill development. These problems, coupled with cost overruns for the complex projects, overwhelmed the company, and Eichler Homes declared bankruptcy in 1967 and officially dissolved in 1968.\(^{77}\) Eichler used his remaining funds to start a small, moderately successful homebuilding venture, but the 1973 recession hurt the new company, and in 1974, Eichler died.\(^{78}\)

**Conclusion**

In 1963, when a reporter asked Joseph Eichler, “Many builders say ‘give the people what they want,’ but how can people ‘want’ innovations they have never seen or heard of?” Eichler responded:

> …I operate in what I call the ‘American Way.’ I came up with a product for which there was a definite need; I made it as good as I knew how to make it; I avoided waste and kept my eyes open so that I could produce at the lowest possible cost; I passed these low costs on to the consumer; I kept trying to make my product better, trying to make it cost less. My objective was to sell more homes at a lower margin of profit and come out at the end through volume.\(^{79}\)

\(^{73}\) Ditto and Stern 91-92, Adamson and Arbunich 108, Balboa Highlands.

\(^{74}\) *American Builder* 1963.

\(^{75}\) Adamson and Arbunich 206.


\(^{77}\) Ditto and Stern 62.

\(^{78}\) Ditto and Stern 108.

\(^{79}\) *American Builder* 1963.
Eichler accomplished this objective and more. He set a unique precedent for suburban homes, creating modern, architect-designed, integrated, and affordable homes for the middle class. Critics of Eichler, most notably architect and urbanist Daniel Solomon, see the company as little more than another profit-seeking suburban developer, only with a pretty face. According to Solomon, “Eichlers legitimized the worst aspects of suburban sprawl and the complete destruction of the street as public space,” and generally contributed to the abandonment of cities and older neighborhoods. 80 While few builders emulated Eichler’s use of architect-designed modernism and creative building materials, 81 the curving street plan, community facilities, and privacy-oriented homes have indeed become a common formula in today’s countless suburban subdivisions. Eichler historians Paul Adamson and Marty Arbunich take a more positive approach, asserting that “Eichler’s use of centralized community planning and architectural designs attuned to the local environment engendered an intrinsic relationship with their context, both socially and physically.” 82 Although the ultimate legacy of Eichler’s work may be mixed, his progressive vision for suburban housing is an unparalleled story in American homebuilding. Orange’s Eichlers, which remain remarkably unaltered, attest to the high quality of materials and craftsmanship used in Eichler homes, and serve as a reminder of early suburban integration in Southern California.

80 Common Ground (National Park Service, Summer 2003) 35.
81 Arapahoe Acres in Denver, developed by Edward Hawkins, and Hollin Hills in northern Virginia, developed by Robert C. Davenport with designs by Charles Goodman, come the closest (Adamson and Arbunich 224-225).
82 Adamson and Arbunich 227.
FIGURES
Figure 1: Aerial photograph of Fairhaven tract before development, 1959. Note Hewes Park at top right (Orange County Archives).
Figure 2: Fairhaven tract after development at middle right, 1961 (UCLA Air Photo Archives).
Figure 3: Fairhaven tract at middle, 1970 (Orange County Archives).
Figure 4: Map of Los Angeles and Orange County from 1960 Fairhaven tract brochure (Orange Public Library).
Basking in the sun-splashed City of Orange, the new community of Fairhaven brings the Wonderful World of Eichler to Southern California for the first time. The climate is warm and wind-free ... ideal the year-round for indoor/outdoor living. There's a world of work and play in every direction. You can do everything from fishing and sailing to climbing mountains and exploring the desert almost as quickly as the mood strikes you. Eichler has designed Fairhaven so that the natural beauty of its tree-studded setting has been undisturbed. Fairhaven is a complete community with convenient facilities for shopping, education and recreation. Fashion Square is just 4 miles away. Churches of every denomination are close by. Fairhaven offers you suburban living at its finest. Yes, this is Fairhaven—an established community, carefully preserved natural beauty, one of the world's finest climates ... and America's most honored family home ... EICHLER HOMES. Don't you agree you'll live better—happier—in Fairhaven?

Figure 5: Map of Fairhaven tract neighborhood, Fairhaven tract brochure, 1960 (Orange Public Library).

Figure 6: Street in Fairhaven tract, Fairhaven tract brochure, 1960 (Orange Public Library).
Figure 7: Photograph and information card for 884 Oakwood Street, Fairhaven tract, circa 1960 (Christine Di Iorio).
Figure 8: One of approximately 13 floor plans used in development of Orange County (OC) Eichler tracts, designed by Claude Oakland (Eichler Homes of Southern California).
Figure 9: Fairhills tract, 1970 (Orange County Archives).
Figure 10: Fairhills tract, 1977 (Orange County Archives).
Figure 11: Fairhills tract neighborhood map, Fairhills tract brochure, circa 1960 (Orange Public Library).
Figure 12: Fairmeadow tract at middle right, 1962 (UCLA Air Photo Archives).
Figure 13: Fairmeadow tract, 1970 (Orange County Archives).

Figure 14: Fairmeadow tract map, Fairmeadow tract brochure, circa early 1960s (Orange Public Library).
Figure 15: Fairmeadow tract advertisement, January 21, 1962 (Los Angeles Times).
Figure 16: Unidentified photograph from Orange Eichler tract, circa 1960 (First American Title Insurance Company Archives).

Figure 17: Unidentified photograph from Orange Eichler tract, circa 1960 (First American Title Insurance Company Archives).
Figure 18: Unidentified photograph from Orange Eichler tract, circa 1960 (First American Title Insurance Company Archives).