BEYOND SIGNIFICANCE:
INTEGRITY ANALYSIS CONSIDERATIONS FOR MODERN RESIDENTIAL TRACTS OF
THE SAN FERNANDO VALLEY

by

Sarah Locke

A Thesis Presented to the
FACULTY OF THE USC SCHOOL OF ARCHITECTURE
UNIVERSITY OF SOUTHERN CALIFORNIA
In Partial Fulfillment of the
Requirements for the Degree
MASTER OF HERITAGE CONSERVATION

May 2017
# Table of Contents

Acknowledgements iii  
List of Figures v  
List of Tables vii  
Abstract viii  
Introduction 1  
   Introduction Endnotes 8  

Chapter One: Development of the Single-Family House in America 9  
   Chapter One Endnotes 22  

Chapter Two: Development of the San Fernando Valley 25  
   Chapter Two Endnotes 39  

Chapter Three: Gregory Ain Mar Vista Tract 42  
   History 43  
   HPOZ Designation 47  
   Reflections 54  
   Chapter Three Endnotes 60  

Chapter Four: Balboa Highlands 61  
   History 62  
   HPOZ Designation 64  
   Reflections 69  
   Chapter Four Endnotes 77  

Chapter Five: Living-Conditioned Homes 79  
   History 79
Acknowledgements

My pursuit of a graduate degree from the USC School of Architecture has been a long-term, part-time endeavor and I am incredibly grateful for the personal and professional support I have received. I reconnected with Trudi Sandmeier, former Los Angeles Conservancy Director of Education and current Director of Graduate Programs in Heritage Conservation at USC, four years ago following my volunteer efforts as an advocate for Modern resources in Los Angeles. Two weeks after our brief meeting, I was enrolled in classes and I will forever be grateful for her encouragement to pursue this venture. Her perspective as an educator, including chair of my thesis committee, and as a friend has been essential to my success. I have benefited from the expertise of a phenomenal group of faculty while at USC. A special thanks is due to those who have served on my thesis committee: Jay Platt, Senior Urban Designer for the City of Glendale, and Katie Horak, Principal at Architectural Resources Group in Pasadena. Your feedback in development of this research has been invaluable.

In the spring semester of 2016, Katie’s advanced site documentation class focused on the Living-Conditioned subdivision, which advanced scholarship about a significant example of Palmer and Krisel’s work and provided a foundation for the case study included in this thesis. The group effort included Katrina Castañeda, Jonathan Kaplan, Christy Kim, Sean Morales, and Jerome Robinson. We ventured to the San Fernando Valley to conduct integrity analysis of the fifty-four Living-Conditioned properties and spent months compiling information to evaluate the subdivision as a historic resource. As part of my assignment and in further pursuit of Living-Conditioned subdivision research, I was fortunate to have access to the William Krisel papers at the Getty Research Institute and archival copies of Living for Young Homemakers Magazine through USC Libraries. I am also thrilled to have interviewed William Krisel, who was eager to provide information to aid in my research. Thank you, Mr. Krisel, for your assistance.

I greatly appreciate the time and effort provided by residents of the Gregory Ain Mar Vista Tract, Amanda Seward and Hans Adamson, along with Adriene Biondo from Balboa Highlands. Their extensive knowledge and sustained advocacy have been crucial to HPOZ designation and long-term management of their neighborhoods. I also want to extend thanks to
Yuki Arai and David Administer for inviting me into their home in Balboa Highlands to see firsthand the great lengths they have gone to in their rehabilitation. These residents have reminded me that heritage conservation is not only about the built environment, but about the people who interact and dwell in historic buildings everyday. Appreciation for good design and history can help identify and conserve places that enrich our lives and build strong communities.

Last, but certainly not least, I could not have completed this work without my cheerleaders, those whom I so proudly call my family. I am indebted to my husband, Cézanne Farris-Gilbert, whom has also requested to be called “senior editor” and “muse,” for his unconditional love and support as I balance the roles of student, spouse and co-parent to our two young children. My daughter, Cordelia, has been along for the ride from the beginning of this journey and can now identify many of Los Angeles’ Modern landmarks and craft them in Lego. My son, Calder, was born midway through the program, and in large part due to my “senior editor,” we not only survived, but thrived during the transition. The USC sculpture garden outside of Watt Hall will always be a special place to me because of the time we spent there between classes during my son’s infancy. Thank you, family, for giving me the space I need to pursue a professional life. My passion for history and architecture stems from well before I ever met my husband. To my parents, Darrel and Maureen Locke, my grandfather, James Woodrow, and extended family who have shared my interest in history and architecture, thank you for being my earliest teachers and instilling within me that embracing people and places, both past and present, provide potential to shape the future.
## List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1.1</td>
<td>Map of Modern residential tracts used as case studies</td>
<td>6</td>
</tr>
<tr>
<td>Figure 1.1</td>
<td>Cliff May #3 in Riviera Ranch, Los Angeles (1939)</td>
<td>12</td>
</tr>
<tr>
<td>Figure 1.2</td>
<td>A 1930s residential tract in the San Fernando Valley</td>
<td>14</td>
</tr>
<tr>
<td>Figure 1.3</td>
<td>The Fritz Burns “Post-War House”</td>
<td>16</td>
</tr>
<tr>
<td>Figure 1.4</td>
<td>The “Ramona” model, Panorama City</td>
<td>17</td>
</tr>
<tr>
<td>Figure 1.5</td>
<td>An aerial view of Lakewood, California</td>
<td>18</td>
</tr>
<tr>
<td>Figure 1.6</td>
<td>The residential tract of Lakewood Rancho Estates</td>
<td>20</td>
</tr>
<tr>
<td>Figure 2.1</td>
<td>Agricultural activity on Ventura Boulevard (1955)</td>
<td>26</td>
</tr>
<tr>
<td>Figure 2.2</td>
<td>Transportation map of the San Fernando Valley (1923)</td>
<td>27</td>
</tr>
<tr>
<td>Figure 2.3</td>
<td>An early view of Metropolitan Airport (now Van Nuys Airport)</td>
<td>28</td>
</tr>
<tr>
<td>Figure 2.4</td>
<td>General Motors factory near Panorama City (1949)</td>
<td>30</td>
</tr>
<tr>
<td>Figure 2.5</td>
<td>Population density and distribution in the Valley from 1877-1963</td>
<td>32</td>
</tr>
<tr>
<td>Figure 2.6</td>
<td>Meadowlark Park by architect Edward Fickett</td>
<td>34</td>
</tr>
<tr>
<td>Figure 2.7</td>
<td>Corbin Palms House: Los Angeles Historic-Cultural Monument #976</td>
<td>36</td>
</tr>
<tr>
<td>Figure 2.8</td>
<td>Woodside tract by architect Charles Dubois</td>
<td>37</td>
</tr>
<tr>
<td>Figure 3.1</td>
<td>Gregory Ain Mar Vista Tract: Historical photo by Julius Shulman</td>
<td>42</td>
</tr>
<tr>
<td>Figure 3.2</td>
<td>Gregory Ain Mar Vista Tract: Site Plan</td>
<td>44</td>
</tr>
<tr>
<td>Figure 3.3</td>
<td>Gregory Ain Mar Vista Tract: Contemporary view of parkway trees</td>
<td>46</td>
</tr>
<tr>
<td>Figure 3.4</td>
<td>Gregory Ain Mar Vista Tract: Contemporary view of landscape</td>
<td>46</td>
</tr>
<tr>
<td>Figure 3.5</td>
<td>Gregory Ain Mar Vista Tract: Example of mansionization</td>
<td>48</td>
</tr>
<tr>
<td>Figure 3.6</td>
<td>Gregory Ain Mar Vista Tract: Historical photo by Julius Shulman</td>
<td>50</td>
</tr>
<tr>
<td>Figure 3.7</td>
<td>Gregory Ain Mar Vista Tract: Contemporary view of residence</td>
<td>50</td>
</tr>
<tr>
<td>Figure 3.8</td>
<td>Gregory Ain Mar Vista Tract: Altered contributor</td>
<td>52</td>
</tr>
<tr>
<td>Figure 3.9</td>
<td>Gregory Ain Mar Vista Tract: Reconstruction</td>
<td>52</td>
</tr>
<tr>
<td>Figure 3.10</td>
<td>Gregory Ain Mar Vista Tract: Preservation Plan example</td>
<td>54</td>
</tr>
<tr>
<td>Figure 3.11</td>
<td>Gregory Ain Mar Vista Tract: Newly installed fencing</td>
<td>56</td>
</tr>
<tr>
<td>Figure 3.12</td>
<td>Gregory Ain Mar Vista Tract: Concrete wall on Beethoven Street</td>
<td>56</td>
</tr>
<tr>
<td>Figure 4.1</td>
<td>Balboa Highlands: Contemporary view of residence</td>
<td>61</td>
</tr>
<tr>
<td>Figure</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
<td>------</td>
</tr>
<tr>
<td>4.2</td>
<td>Balboa Highlands: Historical photo by Ernest Braun</td>
<td>63</td>
</tr>
<tr>
<td>4.3</td>
<td>Balboa Highlands: Floor plan with atrium (Model 1805)</td>
<td>65</td>
</tr>
<tr>
<td>4.4</td>
<td>Balboa Highlands: Non-contributing residence</td>
<td>68</td>
</tr>
<tr>
<td>4.5</td>
<td>Balboa Highlands: Original cladding</td>
<td>70</td>
</tr>
<tr>
<td>4.6</td>
<td>Balboa Highlands: Non-contributor with non-historic cladding</td>
<td>71</td>
</tr>
<tr>
<td>4.7</td>
<td>Balboa Highlands: Various roofline alterations (Model 1805)</td>
<td>73</td>
</tr>
<tr>
<td>4.8</td>
<td>Balboa Highlands: Atrium view</td>
<td>74</td>
</tr>
<tr>
<td>5.1</td>
<td>Living-Conditioned advertisement for Hotpoint Anniversary</td>
<td>80</td>
</tr>
<tr>
<td>5.2</td>
<td>Living-Conditioned: Rendering by William Krisel</td>
<td>82</td>
</tr>
<tr>
<td>5.3</td>
<td>Living-Conditioned: Model of landscape design by William Krisel</td>
<td>85</td>
</tr>
<tr>
<td>5.4</td>
<td>Living-Conditioned: Floor plan in <em>Living for Young Homemakers</em></td>
<td>85</td>
</tr>
<tr>
<td>5.5</td>
<td>Living-Conditioned: Traditional Ranch house on neighboring parcel</td>
<td>87</td>
</tr>
<tr>
<td>5.6</td>
<td>Living-Conditioned: Proposed district boundary</td>
<td>90</td>
</tr>
<tr>
<td>5.7</td>
<td>Living-Conditioned: Model A residence</td>
<td>91</td>
</tr>
<tr>
<td>5.8</td>
<td>Living-Conditioned: Model A residence (altered)</td>
<td>91</td>
</tr>
<tr>
<td>5.9</td>
<td>Living-Conditioned: Two properties excluded from district</td>
<td>93</td>
</tr>
<tr>
<td>5.10</td>
<td>Living-Conditioned: Example of a converted carport</td>
<td>95</td>
</tr>
<tr>
<td>5.11</td>
<td>Living-Conditioned: Residence with high level of integrity</td>
<td>97</td>
</tr>
<tr>
<td>5.12</td>
<td>Living-Conditioned: Homogenized Modern renovation</td>
<td>97</td>
</tr>
<tr>
<td>5.13</td>
<td>Living-Conditioned: Property changed to altered contributor</td>
<td>99</td>
</tr>
<tr>
<td>6.1</td>
<td>Aerial view of the San Fernando Valley</td>
<td>104</td>
</tr>
<tr>
<td>6.2</td>
<td>Q Block Brochure featuring Living-Conditioned Homes</td>
<td>106</td>
</tr>
<tr>
<td>6.3</td>
<td>A tract house in Marlborough Palms with non-historic cladding</td>
<td>108</td>
</tr>
<tr>
<td>6.4</td>
<td>A tract house in Marlborough Palms with original cladding</td>
<td>108</td>
</tr>
<tr>
<td>6.5</td>
<td>Residence in Cliff May Ranchos (Long Beach) before landscaping</td>
<td>109</td>
</tr>
<tr>
<td>6.6</td>
<td>Residence in Cliff May Ranchos (Long Beach) after landscaping</td>
<td>110</td>
</tr>
</tbody>
</table>
## List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 2.1</td>
<td>Employment Distribution for the San Fernando Valley</td>
<td>29</td>
</tr>
<tr>
<td>Table 3.1</td>
<td>Gregory Ain Mar Vista Tract Character-Defining Features</td>
<td>49</td>
</tr>
<tr>
<td>Table 4.1</td>
<td>Balboa Highlands Character-Defining Features</td>
<td>67</td>
</tr>
<tr>
<td>Table 5.1</td>
<td>Living-Conditioned Character-Defining Features</td>
<td>89</td>
</tr>
</tbody>
</table>
Abstract

Southern California, particularly the Los Angeles area, has a high concentration of residential tracts developed after World War II. Heritage conservation efforts, based on a well-established case for significance of the postwar suburban landscape, will benefit from examination of integrity assessment methodology to aid in implementation of conservation tools, such as the Historic Preservation Overlay Zone (HPOZ). Two postwar residential tracts, each composed of Modern residences, have been designated in the City of Los Angeles. The Gregory Ain Mar Vista Tract (1948) was the first to receive designation in 2003 for its significance in patterns of postwar residential development and its association with architect Gregory Ain and landscape architect Garrett Eckbo. Balboa Highlands (1962-64), a subdivision designed by Claude Oakland with A. Quincy Jones and Frederick Emmons, and developed by Joseph Eichler, became the second postwar residential tract to be designated an HPOZ in 2009. It remains the only postwar residential tract with historic designation in the San Fernando Valley, despite eligibility for dozens more tracts identified by SurveyLA, a comprehensive Historic Resources Survey of the City of Los Angeles. This research uses findings from SurveyLA to emphasize the need for application of conservation tools to the postwar suburban landscape of the San Fernando Valley, and provides analysis of integrity assessment strategies used in three Modern residential tracts. Case studies for the Gregory Ain Mar Vista Tract and Balboa Highlands summarize lessons learned through the designation process and long-term management of Modern tract residences. Exploration of integrity assessment methodology continues in a third case study, Palmer and Krisel’s Living-Conditioned subdivision (1957-58), a Modern residential tract in the San Fernando Valley that has been identified as an eligible HPOZ. The San Fernando Valley is a prime example of a suburban landscape that requires recognition for its significance in demonstrating patterns of postwar residential development and a high concentration of historic residential resources associated with notable architects. Examining integrity assessment methodology will assist this effort, in the San Fernando Valley and beyond, by acknowledging that significance is only part of a successful heritage conservation strategy for the postwar residential tract.
Introduction

To own a house in the United States has long been intertwined with the American dream.\(^1\) Home ownership became a reality for the majority of Americans in the years following World War II. An entire generation that had suffered through multiple world wars and the turmoil of the Great Depression was finally able to comfortably meet the needs of their families, as the twentieth century unfolded and the tract house came to dominate the postwar suburban landscape. The status of conservation efforts for the postwar residential tract vary depending on location, but Southern California has become the subject of increased attention due to the concentration of architectural talent and a booming population in the postwar era that facilitated rapid growth of the built environment. Los Angeles has benefited from decades of advocacy and outreach by local non-profit organizations and institutions to establish significance for postwar resources, but many eligible resources and districts remain unprotected. A recently completed citywide Historic Resources Survey identified properties eligible for designation. This research focuses on findings for eligible postwar residential tracts in the San Fernando Valley region of Los Angeles and the City’s existing Historic Preservation Overlay Zones (HPOZ) for postwar residential subdivisions. Heritage conservation efforts, based on a well-established case for significance of the postwar suburban landscape and the Modern residential tract, will benefit from examination of integrity assessment methodology to aid in implementation of conservation tools, such as the HPOZ.

Historic Context and Evaluation Criteria

The National Park Service Bulletin, \emph{Historic Residential Suburbs: Guidelines for Evaluation and Documentation for the National Register of Historic Places} (2002), and \emph{Tract Housing in California, 1945-73: A Context for National Register Evaluation}, prepared by the California Department of Transportation (2011), were developed to guide conservation of residential suburban development.\(^2\) These documents were used to evaluate postwar residential tracts for the purposes of this research. The three phases of evaluation to determine eligibility for
designation are determination of significance, integrity assessment of historic features, and selection of district boundaries. The primary focus of this research is the assessment of historic integrity and justification of boundary selection, but first an understanding of significance of the postwar residential tract needs to be established.

The initial chapter of this research provides the necessary historical context to understand the development of the single-family house from a national perspective, with emphasis on the period following World War I. Suburban living, which offered refuge from urban life, was almost exclusively for the affluent until the mid-twentieth century. During World War II industrialization and in the postwar years, millions of people flocked to California and suburbanization occurred at a much faster rate. Between 1942 and 1945, California cleared approximately six thousand acres of farmland per year. Soon after that rate intensified to over a hundred thousand acres per year. One orange tree was removed every fifty-five seconds by the mid-1960s. The transformation of the San Fernando Valley area of Los Angeles saw land use for agriculture reduced from eighty-three percent to thirty-nine percent between 1940 and 1965. Chapter two presents the historical context for development of the San Fernando Valley and summarizes the effort for identification of the area’s postwar residential tracts.

A growing body of scholarship in recent years has firmly established a case for significance of the postwar residential tract. Richard Longstreth calls the suburbs an “extraordinary and finite resource,” given residential growth patterns and architectural styles changed by the late 1960s and the scale of the residential development constructed during the postwar period could not be replicated today.

The postwar suburb is a resource that we cannot afford to squander. If we fail to address the issue, it will be tantamount to admitting that much of our residential fabric, no matter how historically significant and no matter how well built, is essentially disposable matter. The comparatively small oases that are historic districts and others predominantly occupied by the affluent will last for generations, renewed by reinvestment at regular intervals, but the great majority of places are destined for a shorter, less productive lives [sic]. What does this perpetual state of impermanence say about our cities and about our society?
Yet, the question of how to promote the conservation of postwar residential tracts has lingered for more than a decade.\textsuperscript{5} Local planning initiatives are the most effective conservation approach.\textsuperscript{9} In 2001, the Getty Research Institute released the Los Angeles Historic Resources Survey Assessment Project, which led to SurveyLA, a citywide Historic Resources Survey conducted between 2006 and 2017 and managed by the Department of City Planning’s Office of Historic Resources.

The study concluded that comprehensive identification of the city's historic and cultural resources would present compelling community, cultural, and economic opportunities. A well-developed survey could play an important role in building civic pride and appreciation of the city's historic and architectural heritage and could significantly contribute to neighborhood conservation efforts and community development.\textsuperscript{10}

SurveyLA is a hybrid of a reconnaissance and intensive-level Historic Resources Survey. The objective of a reconnaissance survey is to collect field data that aids in development of historic context to determine eligibility based on the Criteria for Evaluation. (Appendix A) A period and level of significance is then defined. Areas eligible for designation that warrant intensive-level survey work can then be identified. For the residential suburb, information collected includes transportation and other factors that influenced location, site plan and subdivision design, character and condition of housing, distinctive aspects of landscape design, presence of community facilities, such as schools or stores, and patterns of social history.

An intensive-level survey evaluates the integrity of individual properties and the entirety of the proposed district to make a final recommendation about eligibility for designation. Analysis is based on seven aspects of integrity — location, setting, materials, workmanship, design, feeling, and association. (Appendix B) The presence of character-defining features and absence of non-historic alterations and additions determine whether an individual property, or element, is categorized as a contributor, an altered contributor, or a non-contributor. Reversibility, the potential for a missing character-defining feature to be restored, heavily influences assessment. Generally, a majority of properties must contribute to the district for creation of an HPOZ in the City of Los Angeles. SurveyLA identified districts that appear to be
eligible for HPOZ designation, but more focused intensive-level survey work must be done before proceeding with conservation efforts.

For the purposes of this research, three postwar residential tracts in Los Angeles were selected as case studies to more closely examine assessment methodology and district boundary justification. Case study selection was based on availability of intensive survey data, as well as significance for association with a master architect and/or developer of the postwar era. One case study is a district in the San Fernando Valley identified by SurveyLA. The other two case studies were chosen due to existing HPOZ designation, which provides an opportunity for the analysis of long-term management of integrity in an HPOZ that consists of postwar residences.

HPOZ Fundamentals

The HPOZ ordinance is used to encourage the maintenance of character-defining features and establish design guidelines that help reduce impact to historic integrity. A Preservation Plan is developed using the Secretary of Interior’s Guidelines for Rehabilitation and a five-member HPOZ board for each district is appointed to guide change within the district. The tool has the potential to stabilize neighborhoods, introduces financial incentives and commonly increases property values. The collection of districts designated as an HPOZ throughout Los Angeles highlight the diversity of its built environment and celebrate the city’s architectural and cultural legacy. There are currently thirty areas designated as an HPOZ in the City of Los Angeles, with a half dozen more formally under consideration. Angelino Heights was the first HPOZ to be created and showcases the highest concentration of the best remaining examples of Victorian-era architecture in the city. The majority of the districts established thereafter lie west of downtown Los Angeles and generally consist of early twentieth-century residential neighborhoods. The Gregory Ain Mar Vista Tract is the lone HPOZ in west Los Angeles and it was the first HPOZ composed of Modern residences. The San Fernando Valley, the primary focus of this research, has three existing HPOZs. The first, Stonehurst, is an enclave of ninety-two vernacular residences constructed with native rock by stonemasons in the 1920s. The second, Van Nuys, is centrally located in the Valley and is a district composed of an eclectic mix of residential
architecture demonstrating trends that evolved over the first half of the twentieth century. The remaining HPOZ in the San Fernando Valley is Balboa Highlands, a tract of Joseph Eichler homes located in Granada Hills, near the northern border of the City. It was the first postwar residential subdivision in the San Fernando Valley to receive designation and joins the Gregory Ain Mar Vista Tract as the only other postwar residential subdivision designated.

SurveyLA identified dozens more eligible historic districts in Los Angeles, with a high concentration of postwar residential tracts in the San Fernando Valley. An overview of tracts identified by SurveyLA will be provided to emphasize the vast number of historic resources that need attention in the region. The primary goal of this research is to promote conservation of the postwar landscape of the San Fernando Valley through examination of integrity assessment methodology that supports better long-term management of historic resources.

As previously mentioned, the emphasis on Modern residences in this research is due to existing designation for the Gregory Ain Mar Vista Tract and Balboa Highlands subdivision. It also underscores a secondary goal to highlight the need for distinction between postwar residential tracts. For the purposes of this study, Modern refers to association with the Modern Movement. The Modern Movement was an artistic and architectural period in the twentieth century that “emphasized expression of functional, technical or spatial properties rather than reliance on decoration.”12 The third and final case study presented, the Living-Conditioned subdivision by Palmer and Krisel in the Northridge community of the San Fernando Valley, is a Modern residential tract identified as eligible for designation by SurveyLA. Examination of these three significant Modern residential tracts in contrast to surrounding postwar residential development of the Ranch house, allows for refinement of the general categorization of the tract house. This distinction will aid in strengthening assessment methodology and application of conservation tools to the postwar landscape.

Complexities of scale, quantity of resources, repetitiveness of features and subtle diversity in postwar planning concepts and architectural variants are universal issues in integrity assessment of mid-twentieth century residential tracts. The San Fernando Valley is a prime example of a suburban landscape that demonstrates these issues, and significance of postwar residential tracts in the region is amplified by the cultural influence of mid-twentieth century
suburban living in California and associations with notable architects working in Los Angeles at the time. The San Fernando Valley serves as the focal point of this research for this reason. The overall intent, however, is to contribute to a universal model for integrity assessment strategies in conservation of the postwar suburban landscape. While a solid case for significance has developed in recent years, the next challenge is to examine complex integrity issues that will

Figure I.1: A map of the Los Angeles area shows the three Modern residential tracts presented as case studies in this research. Created by author. 2016.
promote future conservation of postwar residential subdivisions, particularly Modern residential tracts, across the nation.
Introduction Endnotes


5 City of Los Angeles Planning Department, *San Fernando Valley Planning Area: Background For Planning (January 1967)*, 22.

6 Longstreth, 56.

7 Ibid., 57.


9 National Register designation exists for a small selection of Modern residential developments throughout the country. In California, Poppy Peak historic district in Pasadena and two Joseph Eichler subdivisions in Northern California are designated.


Chapter One
Development of the Single-Family House in America

America’s emphasis on the single-family house and garden has a history that extends back for more than a century before postwar suburbs began to take shape.¹ A combination of social, economic and political factors influenced the gradual adaptation of housing outside the urban core, from the borderlands to the picturesque enclaves in the mid-nineteenth century to the streetcar suburbs at the turn of the twentieth century and beyond.² Improved modes of transportation continuously impacted growth patterns, the housing industry was revolutionized through influential legislation and construction methodologies, and technological advancements reimagined lifestyle possibilities as the twentieth century unfolded. Two world wars and the Great Depression were dominant contributors to the overall tone of American politics and culture up to mid-century, but the nation was poised for full enjoyment of the prosperity to come in the years following World War II. The culmination of more than a hundred years of progress, the sitcom suburb, aptly named for its depiction in the wholesome programming broadcast on newly purchased television sets across the nation, began in earnest around 1940.³ This type of development came to dominate the American landscape by 1960 when the majority of Americans had migrated to the suburbs.⁴ At the core of this transformation was the federal legislation, particularly the G.I. Bill that forged a path to homeownership for four million veterans in the decade following World War II.⁵ The majority of Americans were first time buyers, purchasing a newly constructed house. The participation of a robust middle-class in decision-making about their lifestyle choices incentivized builders, innovative manufacturers and skilled merchandisers to unite and market houses, goods and services that showcased possibilities for postwar living. The middle-class gradually gained an increasing amount of market share that shaped the popularity of architectural styles and influenced growth patterns that carried the nation into the latter half of the twentieth century.⁶

The scattered subdivisions and eclectic architectural styles of the streetcar suburbs began to be replaced with the uniformity of residential tracts beginning in the interwar years. Real estate professionals who had traditionally only subdivided the land saw an opportunity for
growth through development of entire neighborhoods and communities — acquisition of the land, and design and construction of the houses, public facilities and commercial centers, and inclusive of sales and financing — which established the idea of merchant and community builders. Herbert Hoover played a substantial role in shaping legislation that provided a foundation for the success of privatized builders and inspired the dramatic growth of the postwar period. As Secretary of Commerce, he created the Division of Building and Housing in 1921 and introduced the Better Homes in America campaign. Nationwide building and zoning codes were implemented and the National Association of Real Estate Boards (NAREB) successfully secured a tax deduction for mortgage interest to incentivize builders. During his presidency, which began in 1929, he saw the partnership between private builders and the federal government as an opportunity for recovery during the Great Depression. He heavily influenced the legislation that would become part of President Franklin D. Roosevelt’s New Deal, which included the creation of the Home Owners Loan Corporation (HOLC) of 1933 and the National Housing Act of 1934, which established the Federal Housing Administration (FHA). The stability created by the federal government’s involvement in private development produced a new market for middle-income, first-time homebuyers that dramatically increased housing starts from 90,000 in 1933 to four times that in 1937. These promising results foreshadowed the success of the merchant builders in the 1940s. The introduction of the Serviceman’s Readjustment Act of 1944 (also known as the G.I. Bill of Rights), guaranteed an interest-free home mortgage for veterans and amplified the effectiveness of earlier federal legislation. As a result, merchant builders revived housing starts, which jumped to 1,183,000 by 1948, up from 114,000 in 1944. By 1950, construction of nearly two million single-family houses in a single year shattered previous records. Compared to 1920 when forty percent of homes were self-built, merchant builders were responsible for two-thirds of the nation’s housing by mid-century.

Legislation may have propelled the effort to house America, but the creation of mass quantities of housing was the true challenge. Initial exploration of rapid residential construction methods began in an attempt to meet the demand for worker housing near manufacturing facilities. The Lanham Act (1940) enticed thousands of private builders nationwide to assist in the effort. Between 1941 and 1943, 7.5 million units of defense housing was completed by
private builders. William Levitt, David Bohannon and Fritz B. Burns emerged as visionary developers who leveraged industrialized building methods. Burns, with business partner Fred Marlow, had already recognized the opportunity for worker housing with the creation of Westside Village, two miles east of Douglas Aircraft in Santa Monica. Completed in 1939, the tract of 788 houses was one of the earliest examples of mass produced housing by a single builder in the United States. At a time when only four percent of builders erected more than twenty-five houses annually, Burns and Marlow rejected the centuries-old practice of a small crew laboring on houses individually and looked toward assembly line methods in auto and ship building for inspiration. All the houses in Westside Village shared identical floor plans, but variation was achieved by rotation of the plan on the parcel, manipulation of setbacks, placement of the garage and application of roofs and porches that distinguished each model. Homeowners were further encouraged to customize their purchase by painting and landscaping the houses themselves. Burns continued development using these construction methods for his first tract in the San Fernando Valley, Toluca Wood (1941), and used the same location strategy with placement near the Vega and Lockheed plants in Burbank. Westside Village and Toluca Wood both utilized research Burns conducted in 1938: “The typical buyer wanted a bright, airy, single-story stucco home with a big garage, a modern kitchen, and a room to raise a family without feeling cramped.” This aptly described the qualities of the Ranch house, but Burns would not fully explore use of the style until after World War II.

The Ranch house began to permeate mainstream American culture in the interwar years. The horizontality and wide eaves of its one-story form, with strong outdoor connections, merged the dwelling with the earth. Its qualities aligned with the vision of Frank Lloyd Wright and his Prairie Style architecture from the turn of the twentieth century, but its lack of formality was even more pronounced. The Ranch house lacked ornament of Period Revival styles, yet it was firmly rooted in historical cues from western culture. The West was the final frontier in America and it was there that architecture found its muse to create an American lexicon for the twentieth century. A prompt by editor of American Architect, Henry Saylor, in 1925 defined its cultural appeal:
The California ranch house…just grew, naturally, inevitably, a logical result of meeting definite needs in the most direct, workmanlike manner possible with materials at hand. It borrows none of the finery of other architectural styles; it sounded no blatant note of self-advertisement; it never; so far as I know, laid claim to even a name, and yet there it stands, a vernacular that is as unmistakably part of the CA foothills as the stone houses of eastern PA betoken that great treasure store of mica schist.  

William Wurster won recognition in 1931-32 from the Better Homes in America campaign for an entry that had “great appeal to the California style of living,” but it was Cliff May, widely considered “father of the Ranch house,” who emerged in the 1930s as the primary figure in promotion of western living. (Figure 1.1) Sunset magazine was highly influential in widespread distribution of his work, in addition to that of Wurster and others who contributed to popularity of the style. By the time of the 1946 publication of Sunset’s Western Ranch Houses, which quoted Saylor, Cliff May had secured his reputation as a nationwide influence on residential architecture and prepared the nation for domination of the Ranch House in the postwar years.

Figure 1.1: Cliff May #3 in Riviera Ranch, Los Angeles. Built in 1939. Maynard L. Parker, photographer. Courtesy of The Huntington Library, San Marino, California.
The Ranch style was not the only architectural movement of interest generated in the West. The Los Angeles area became a hub of Modernism in the early twentieth century through the work of American architects Irving Gill and Frank Lloyd Wright, and with the arrival of Austrian architects Rudolph Schindler and Richard Neutra. This core group, along with their protégés, had varied approaches to Modernism, but all helped advance the Modern Movement on the West coast in the 1920s. Neutra became particularly influential following his inclusion in the 1932 International Style exhibition at the Museum of Modern Art, curated by Philip Johnson, which also included the work of Le Corbusier and Ludwig Mies van der Rohe. The contrast of the handcrafted qualities of Ranch style estates and the industrial aesthetic of the International Style could not have been more different, yet both embraced a version of “form follows function,” a cornerstone of the Modern Movement. The interwar years were a pivotal time for the development of residential architecture, with experimentation by dozens of influential architects of a “second generation” who sought to advance the Modernist agenda. Both the Ranch house and International Style would vie for the approval of the American public when it came to the execution of postwar residential architecture.24

Meanwhile, developers continued to rely on the FHA’s Minimum Property Standards, set in 1936 and revised in 1940, as a profitable model for residential tracts until several years after the conclusion of World War II. (Figure 1.2) The Minimum House had a simple plan that emphasized economy and ranged from 650-900 square feet with two bedrooms, a living room and dining room, kitchen and bathroom. By 1940, the kitchen and dining spaces had merged and the living room was prioritized.25 While these homes were modest, they were designed to meet the immediate basic needs of workers and greatly improved the general quality of life for many from rural areas who relocated to a manufacturing hub. For example, 45% of the nation lacked indoor plumbing in 1940, but the Minimum House reduced this percentage to 16.8% by the end of the war.26 Possibilities for later expansion by the homeowner were considered as builders provided clever solutions such as an extra doorframe inserted in the living room wall that joined the garage. This could be used for later conversion from garage to bedroom.27 Encouragement of improvements by the owner alleviated the responsibilities of the builder, who could quickly move on to the next project while the homeowners finalized the look of their new community.28
By 1941, private builders managed to reach the most housing starts since the building boom of the 1920s. This productive period came to an abrupt halt, however, when the War Production Board restricted construction beginning in April of 1942. America entered the postwar years with a severe housing shortage, with many families living in substandard conditions. An estimated three to five million houses were needed to recover. Units would need to be produced faster than ever before and merchant builders were prepared to meet the demand through industrialized construction of residential tracts. When the construction ban was lifted at the end of the war, there was an immediate recovery effort and expenditures for new residential construction surged from twenty-three million dollars to $670 million by the end of 1945. Soldiers returned to establish new households, with three million marriages occurring within two years of the end of the war. They were eager to fulfill the American dream of home ownership and start a family. The birthrate quadrupled over a thirty-year span, which doubled the nation’s population to over 203 million by 1970. After World War II, for the first time, the suburban ideal espoused in nineteenth-century America became a reality for millions.
The Postwar Ideal

Construction loans through the G.I. Bill and FHA reached ten million between 1946 and 1953.\textsuperscript{35} The opportunity to capitalize on this new market of home buyers was apparent to not only builders, but a wide range of companies that stood to benefit from marketing lifestyle concepts and selling goods and services for the single-family home owner. Consumers had more disposable income than ever before and spending increased by sixty percent in the second half of the 1940s. Furniture and appliances sales skyrocketed by 240%.\textsuperscript{36} Model home shows, which originated in the 1930s, reached new popularity as a tool for showcasing ideas in postwar living. Fully furnished demonstration homes became the norm in tract developments by the late 1940s. In 1952, nearly one thousand organizations existed for housing research. These were both public and private entities intertwined in finding ways to build faster, better and profit more. A constant stream of research was distributed to builders and architects in trade publications and mass consumption was fostered in the shelter magazines that found their way to homes across America.\textsuperscript{37} *House Beautiful*, with editor Elizabeth Gordon at the helm, was instrumental in promotion of an “unpretentious, convivial and yet securely private” type of architecture rooted in fluidity between house and landscape and carefree western living. Fritz B. Burns shared her taste for a moderate platform of “modernization” and Gordon seized an opportunity to showcase his “Postwar House” in the May 1946 issue of *House Beautiful*. Burns’ Housing Research Division was created in 1943 to predict postwar consumer trends and evaluate new materials and construction methods. The venture culminated in the “Post-War House,” a 2,400 square foot exhibition home at the corner of Highland Avenue and Wilshire Boulevard in Los Angeles. (Figure 1.3) It opened to the public in 1946 and welcomed one million visitors by the end of the decade.\textsuperscript{38} The u-shaped plan by architects Walter Wurdeman and Welton Becket redefined living spaces with rooms that emphasized the indoor-outdoor connection through walls of glass that wrapped around a rear patio and yard designed by Garret Eckbo. Complemented by the free flowing interior arrangement, space was created for casual entertaining and recreation essential to social bonding that helped heal the nation in the postwar years.\textsuperscript{39} A subtle shift away from historical architectural styles felt modern yet comfortable while an interior outfitted with every
innovation imaginable at the time dazzled the public. All-electric appliances, a garbage disposal, washable wall finishes, built-in radio and intercom system, automatic climate control, expansive storage walls (a Burns signature component), and a large television reflect only a partial list of its features. While few of these features were accessible to buyers of an average tract home, the Postwar House celebrated the optimism of the period and enticed buyers to seek out their own version of residential bliss. Burns hoped it would be in one of his forthcoming tract house communities with new partner, Henry J. Kaiser.40

Kaiser Community Homes began construction on Panorama City in 1947. Located in the San Fernando Valley, four hundred acres of agricultural land were transformed into a planned community that included schools, churches, shopping centers and recreation facilities. The adjacency of the development to the General Motors Van Nuys Assembly plant continued Burns’ earlier successful location strategies. The two and three-bedroom houses, ranging from 800-1000 square feet, were laid out along gently curved streets that discouraged automobile traffic.41 Burns utilized some of the same methods for visual interest he had in earlier tracts, including altered

Figure 1.3: The Fritz Burns “Post-War House” and traffic, Wilshire and Highland, Los Angeles. 1945. Dick Whittington Studio Collection. Courtesy of The Huntington Library, San Marino, California.
rooflines and varied placement of garages. Welton Becket delivered the designs for the model homes, with the best-selling model being the “Ramona Ranch,” named for the best-selling novel by Helen Hunt Jackson. (Figure 1.4) Burns had long relied on a design vocabulary and marketing materials that capitalized on the appeal of the Ranch house. He had used “ranchos” to describe his 1938 development of Windsor Hills and the sales brochure boasted “little country estates” and featured people on horseback. Despite Burns’ consumer research that indicted wide appeal for the Ranch house, he had not developed a mass produced example until the Ramona Ranch in Panorama City, when Becket adapted Cliff May’s ideas on the “California Ranch House.” First circulated in Architectural Forum in April 1949, publication of the Ramona Ranch followed in Better Homes and Gardens and House Beautiful. It was celebrated as a successful adaptation of the Ranch house within reach of the average American through mass production. Other builders, on both a regional and national level, looked to Panorama City as a leader for both its aesthetic and marketing strategies.

Massive developments such as Levittown in New York (1947-49) and Pennsylvania (1952-53), as well as Lakewood (1950-53) near Long Beach, California soon dwarfed Panorama

City in size. Construction methods pioneered in the previous decade were mastered with new machinery and tool technology combined with advancement in shipping and handling of materials that allowed specialized crews to maximize efficiency. Built in mass quantities, the houses all shared similar design language and layout due to the conservative practices of the FHA that ensured appeal and rapid construction. Levittown modified its Cape Cod aesthetic to a Ranch home variant in 1949, likely due to the popularity of Panorama City. Lakewood relied on similar traditional styling with 17,500 houses woven together with more modern public spaces and commercial centers over four hundred acres. (Figure 1.5) It was a new achievement for execution of a planned community — proof that an entirely new economic hub could be created with such speed.

Alternatives to variations on the Minimum House were championed by architects who had long envisioned idyllic planned communities and feared that speed compromised quality of design. The Case Study House Program developed by John Entenza and published in his Arts...
and Architecture Magazine is now the most famous of these efforts to propose Modern designs for the masses, although it was not as influential at the time of publication as Entenza had hoped. While most of the proposals were realized as exhibition houses, none of the designs were replicated.\textsuperscript{51} Other attempts proved mildly successful at reaching a profitable model for Modern designs such as Bay Area developer Earl “Flat Top” Smith who by 1949 had produced twenty flat-roofed residences that gained some traction with other builders.\textsuperscript{52} Architect Gregory Ain also challenged the traditional model of the single-family residence with his Park Planned Homes in Altadena and the Mar Vista Tract in west Los Angeles. Entenza proposed at the onset of his Case Study Program, “Perhaps we will cling longest to the symbol of “house” as we have known it, or perhaps we will realize that in accommodating ourselves to a new world the most important step in avoiding retrogression into the old, is a willingness to understand and to accept contemporary ideas in the creation of environment that is responsible for shaping the largest part of our living and thinking.”\textsuperscript{53} Most large-scale builders continued to employ more conservative approaches to residential tracts and the FHA rejected Modern design, such as flat roofs, unless there was one contemporary model intended for integration with traditional models in a larger tract.\textsuperscript{54}

The popularity of the Ranch house continued to overshadow attempts to popularize Modern dwellings for the majority, but clear Modern undertones were visible by the 1950s. For example, Cliff May Homes introduced a house for residential tract development that blended qualities of his Traditional Ranch aesthetic, with Modern refinements desired by an increasingly sophisticated market. (Figure 1.6) Praise from House Beautiful, that said it was “a good example of the emerging American Style of architecture” and House & Home equated its quality to a custom house, stating “This is almost the first low-cost house to offer the kind of living almost everybody back East imagines all Californians enjoy.”\textsuperscript{55} The housing shortage had largely been resolved by 1953, with more than five million houses built between 1940 and 1950, and a buyer’s market emerged.\textsuperscript{56} Quick and inexpensive building methods fell out of favor as builders had to compete for buyers who expected higher quality, more space and the latest contemporary trends and innovations.\textsuperscript{57} Builders and architects forged stronger relationships to offer more home for the same amount of money as in the immediate postwar years.\textsuperscript{58} Square footage generally increased. Three bedrooms were standard and a second half or full bath appeared.\textsuperscript{59}
Relationships between architects and developers, such as Palmer and Krisel with Alexander Homes and Jones and Emmons for Eichler Homes, proved good design was attainable without sacrificing builder’s profits. A niche market for the Contemporary Ranch emerged and remained popular for the duration of the 1950s. Additional variants of the Traditional Ranch house included Cinderella Homes (1955-61), a theatrical version of the Ranch house that translated to fast-paced sales for developers. It retained the elongated form and spaciousness of the Ranch house, but traded rustic qualities for fanciful detailing and a trendy pastel color palette that captured a market seeking “relaxed luxury.”

By 1960, seventy percent of American housing was produced by merchant builders who averaged more than one hundred units per year. The market for the single-family house peaked later that decade when land became more expensive and home loans were more challenging to acquire. Builders shifted to apartment dwellings to cater to young adults and condominium construction that showed strong potential due to FHA insured mortgages for this property type.
under the National Housing Act of 1961. With more than three million acres of land transformed by the single-family house by 1970, this dwelling type and the communities it produced had come to define America as a nation that valued privatized development and cultivation of one’s own property. Those who had rallied around the idea of the single-family house, the legislators, real estate professionals, architects, manufacturers, marketing and merchandising specialists had created an industry of extraordinary economic potential. The enormous housing market in California translated to a nationwide influence in the building industry and the next chapter will focus on the postwar development of the San Fernando Valley.
Chapter One Endnotes

1 Dolores Hayden, *Redesigning the American Dream*, (New York: W.W. Norton, 2002), 55. Sitcom suburb was coined by Delores Hayden in the early twenty-first century.

2 David L. Ames and Linda Flint McClelland, *National Register Bulletin: Historic Residential Suburbs*, (National Park Service, 2002), 16. The National Park Service uses the following categories to differentiate suburban development: Railroad and Horsecar Suburbs, 1830 to 1890; Streetcar Suburbs, 1888 to 1928; Early Automobile Suburbs, 1908 to 1945; Post-World War II and Early Freeway Suburbs, 1945-60.


4 Ames and McClelland, 2.


7 Dolores Hayden, *Building Suburbia*, 97-127. “Mail-order and self-built suburbs” was used as a reference for this research. Hoover was Secretary of Commerce from 1921-1928 and President of the United States from 1929-1933.


10 Ibid., 132.

11 Ames and McClelland, 65.


13 Keane, 79.


15 Keane, 75-77.

16 Caltrans, 4;57.

17 Keane, 74;87.

18 Caltrans, 60.

19 Keane, 74.


22 Mason, 15.

23 Hess, 13.

25 Lane, 36.
26 Caltrans, 26.
27 Keane, 85.
28 Ibid., 87.
30 Hayden, 131-132.
31 Keane, 103.
33 Caltrans, 15. These statistics reflect the first two years following the end of the war. The number of marriages peaked in 1957 with 4.3 million marriages; The birthrate increased from 2.2 per woman in 1930s to 3.5 in late 1950s.
34 Hayden, 152.
36 Caltrans, 17.
37 Lane was the primary reference for showcase home research. World’s Fairs were consistently a source of inspiration in shaping the built environment. The World’s Fair of 1939-40 in New York featured model homes in Tomorrow Town that included the “all-electric house” by General Motors Electric Company with cutting-edge technology packaged in a traditional style house. The House of Glass sponsored by the Pittsburgh Plat Glass Company challenged the rule of “no extreme or modernistic design” and showcased an example in International Style.
38 Jennifer A. Watts, ed. Maynard L. Parker: Modern Photography and the American Dream, (New Haven: Yale University Press, 2012). Maynard Parker was the lifestyle photographer for publicity materials for the Postwar House. Historical information on its development was derived from this source.
39 Hess, 12.
40 Lane, 54.
42 Kevin Roderick, The San Fernando Valley: America's Suburb, (Los Angeles: Los Angeles Times Books, 2001), 126. The residential tract of Panorama City was bounded by Van Nuys and Roscoe, Woodman and Osborne.
43 Lane, 72-73.
44 Weingarten and Howard, 8.
45 Lane, 49;53;72-74 and Roderick, 127.
46 Lane, 16.
47 Caltrans, 60.
48 Keane, 109-110.
49 Lane, 16-17.


51 Hess, 52.


54 Keane, 107.

55 Cliff May Homes, “It's fun to live in a magazine cover home designed by Cliff May,” Sales Brochure, 1953.

56 Caltrans, 16.


58 Winship, 40.

59 Ibid., 43.

60 Weingarten and Howard, 18.

61 Lane, 78-79.

62 Winship, 40.

63 Ibid., 49.

64 Caltrans, 52.

65 Lane, 4.

66 Hess, 56.
Chapter Two

San Fernando Valley Development

The San Fernando Valley, from here forward simply referred to as the Valley, has served as a scholarly case study for postwar development for good reason.\(^1\) It morphed from an agricultural region dotted with small town sites to an extensive network of sitcom suburbs almost entirely in the twenty years following World War II.\(^2\) Its tremendous population growth demonstrates the wide cultural appeal of California and its diversity of residential tracts are a microcosm of postwar planning strategies and architectural trends. As the mid-twentieth century approached, many people were enticed by employment opportunities, a mild climate and the casual lifestyle synonymous with Southern California living.\(^3\) Until the Second World War, Los Angeles served as an exemplary model for suburban living, but a tremendous population influx soon challenged plans for sustainable growth.\(^4\) Two and a half million residents would call the Valley home by 1960 and agriculture land use clashed with the pace of suburban development.\(^5\) (Figure 2.1) Diverse perspectives on how to best manage this surge and subsequent housing shortage produced a tapestry of residences, seventy-five percent of which were built after 1945.\(^6\) The popularity of Craftsman and Period Revival residential styles would wane after the war, while the democratization of the Ranch house would result in scores of housing tracts built in the style’s traditional and contemporary variants.

**Transition from agriculture to residential**

The San Fernando Valley maintained much of its rural character throughout the first decades of the twentieth century. The flat, wide expanses of the valley floor that would eventually attract subdividers were primarily dedicated to agriculture for more than a century.\(^7\) Cattle ranching and citrus crops arrived after the establishment of the Misión San Fernando Rey de Espana (1797).\(^8\) Agriculture dominated land use throughout transition of power from Spain, to Mexico, and finally, the United States in 1848.\(^9\) When California became a state in 1850, only a horse path connected the San Fernando Valley to Los Angeles through the Cahuenga Pass.\(^10\)
Southern Pacific Railroad service began in 1874 and fueled growth of the first town site, San Fernando (1876), near the mission ruins. A severe drought suppressed any further growth until the next decade when a series of isolated “boom towns” developed with population growth induced by newly minted railroad routes that finally joined California with the rest of the nation. Burbank and Glendale, both established in 1887, proved to be successful and Toluca (now North Hollywood) followed a year later. With drought and flood being one of the most oppressive factors in further growth, fears subsided by 1909 once a plan for the Owens Valley aqueduct solidified. Completed in 1913, the monumental project created stability for the region and inspired bold development ventures. Two years after its completion, the City of Los Angeles forced annexation of the first 170-square miles of the San Fernando Valley, and expanded until a total of 212 square miles were acquired. Agricultural use flourished and a variety of crops, including citrus, pecan and walnut groves, dominated the landscape for decades following construction of the aqueduct. The Valley became an indispensable asset to Los Angeles and its new found stability created intense interest in investment opportunities.
Transportation routes helped define patterns of suburbanization in the early twentieth century. Population density was initially concentrated in the southeast (closest to downtown Los Angeles, Burbank and Glendale), and subdivisions expanded west and north based on accessibility. The speculative towns of Van Nuys, Owensmouth (now Canoga Park), and Marian (now Reseda) were part of a larger land acquisition known as Tract 1000 subdivided simultaneously between 1911-12 and required access via streetcar and automobile to ignite sales. Henry Huntington’s Pacific Electric Railway Red Cars helped build this network to fuel real estate speculation and service to the Valley was announced in 1904. The line began operation in 1911 through the Cahuenga Pass to connect North Hollywood via Lankershim Boulevard. An extension to Van Nuys soon followed and branched off to reach San Fernando to the north and Canoga Park to the west. (Figure 2.2) The Red Car routes came to define much of the future growth patterns in the Valley and throughout Los Angeles County. Widespread adoption of the automobile occurred simultaneously to Red Car development in the Valley.

Early motorist thoroughfares, such as Sherman Way (1912) that linked Van Nuys, paralleled streetcar tracks. Eventually independent routes were constructed, as automobile ownership in Los Angeles outpaced the rest of the world by the 1920s, and subdivisions no longer strictly adhered to the streetcar network. North Hollywood has one example of an early suburb identified to have relied on the automobile. The proposed Ben Avenue Historic District (1928), situated one mile from the nearest Red Car stop, features a mix of Period Revival and Minimal Traditional houses.

The population of the Valley, which hovered around 20,000 residents by the 1920s, increased sevenfold by the conclusion of World War II due to a significant investment in California’s industrial potential. Aviation/aerospace and its relationship with the Department of Defense played a significant role in residential development for the worker housing demanded by the presence of major manufacturers and research laboratories. Aviation history in the Valley dates back to 1912, with a number of private airstrips scattered throughout the region. Grand Central Terminal (1923) in Glendale became the primary facility for air traffic, while

![Figure 2.3: A 1929 view of the Metropolitan Airport, which opened in 1928 amid agricultural fields in Van Nuys. Dick Whittington Collection. Downloaded from USC Digital Library. December 2016.](image-url)
Metropolitan Airport, now Van Nuys Airport, and United Field in Burbank were established in 1928 and 1930, respectively. (Figure 2.3) Lockheed took over United Field in 1940, followed by the opening of a facility at Van Nuys Airport (1943). Lockheed proceeded to become the Valley’s largest employer. Their success in Burbank precipitated continued growth of the industry, prompting North American Aviation to open Rocketdyne (the Valley’s second largest employer) in the late 1940s in Canoga Park. The following table demonstrates the sustained availability of employment in the aerospace and defense industries through the Cold War era of the 1960s. (Table 2.1) There were prospects through other major employers, such as Pacific Telephone and Universal Studios, but aerospace and defense represented twenty-five to thirty percent of total employment opportunities. Population in the Burbank area alone increased by twenty-nine thousand people between 1940-46 to support the Vega and Lockheed plants. People

<table>
<thead>
<tr>
<th>Employer</th>
<th>Number of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lockheed</td>
<td>21,000</td>
</tr>
<tr>
<td>Rocketdyne</td>
<td>15,000</td>
</tr>
<tr>
<td>Litton Industries</td>
<td>8,000</td>
</tr>
<tr>
<td>Pacific Telephone*</td>
<td>4,095</td>
</tr>
<tr>
<td>Bendix-Pacific</td>
<td>4,000</td>
</tr>
<tr>
<td>General Motors</td>
<td>3,570</td>
</tr>
<tr>
<td>Atomics International (North American)</td>
<td>3,400</td>
</tr>
<tr>
<td>Universal Studios*</td>
<td>2,800</td>
</tr>
<tr>
<td>L.A. City Department of Water &amp; Power*</td>
<td>1,960</td>
</tr>
<tr>
<td>Sears*</td>
<td>1,700</td>
</tr>
<tr>
<td>Marquardt</td>
<td>1,550</td>
</tr>
<tr>
<td>Bunker-Ramo Corp.</td>
<td>1,450</td>
</tr>
<tr>
<td>Radio Corp of America</td>
<td>1,200</td>
</tr>
<tr>
<td>Whittaker Corp</td>
<td>900</td>
</tr>
</tbody>
</table>

Table 2.1: Data from City of Los Angeles Planning Department, 1967; *Four largest non-industrial employers
were desperate for housing, ideally located near factories dedicated to the war effort. The highly profitable venture by private builders to fulfill this need had produced subdivisions such as Toluca Wood (1941) in Burbank and Fritz Burns continued this successful location strategy after the war when General Motors opened a factory near the Panorama Ranch. This development was previously discussed for its nationwide significance in suburbanization and mass production of the Ranch house, but the importance of this economic hub must be underscored for its regional significance. It remained dependent to a certain degree on Los Angeles for cultural and economic stability, but coupled with the presence of major employers, the planned community achieved a self-sustainable urban alternative and spurred further development of the Valley.

The Valley distinguished itself from other suburban landscapes across the nation through its association with film and television. The industry provided a solid secondary economic base, while the cultural allure made ownership of even a modest Ranch house within a short distance of filming locations and celebrities seem glamorous to migrants. Lured to the region with the
promise of a mild climate for year-round production, filmmakers utilized the Valley from the turn-of-the-twentieth-century.\textsuperscript{31} Carl Leammle’s Universal City, established in 1913 in the Cahuenga Pass, emerged as a sizable employer by mid-century along with CBS Studio Center (founded in 1928 as Mack Sennett’s Studioland) and nearby Warner Brothers Studios and Walt Disney Studios in Burbank.\textsuperscript{32} At the time Studioland was founded, Sennett and producer Al Christie joined real estate developers to subdivide a neighborhood in the pecan groves nearby.\textsuperscript{33} Additional examples of subdivisions that attracted entertainers and other studio personnel include Toluca Lake Park where Bing Crosby, Bob Hope and Frank Sinatra established residences.\textsuperscript{34} Gary Cooper, Clark Gable and Carole Lombard, along with Lucille Ball and Desi Arnaz settled in the Valley, out of convenience as well as enjoyment of the tranquil setting.\textsuperscript{35} The Valley was well-known as a celebrity outpost by the war years, which contributed to an idealistic image of suburban life in the postwar era.\textsuperscript{36} While the suburbs are not exclusively a postwar product, the effects of suburbanization are most dramatic after the war when many flocked to the Valley for its combination of attractive features and housing construction occurred at an unprecedented pace.

**A Postwar Population Explosion**

Of the Valley’s 212 square miles, over eighty percent remained in parcels greater than one-half acre in 1945.\textsuperscript{37} It was the ideal location for postwar expansion — “the perfect blank canvas on which to paint an array of Ranch houses in the post-World War II years.” — as veterans flooded into Southern California by the thousands.\textsuperscript{38} The City of Los Angeles released a plan for responsible growth in the San Fernando Valley that aimed to sustain a population of 900,000 (estimated by the year 2000) and envisioned “small, compact, planned communities which will possess all the amenities of a country town and be self-sustaining in every respect.”\textsuperscript{39} This decentralized model, a concept based on Ebenezer Howard’s garden city movement of the turn of the twentieth century retained much of the Valley’s agricultural use. Charles B. Bennett, the Director Planning, had stressed “agriculture, which is so important to the economy of not only the Valley, but the metropolitan area of Los Angeles as well, should be encouraged to
further develop and should be adequately protected against the indiscriminate town lot subdividing of good agricultural acreage." Bennett planned for healthy growth of existing commercial centers and residential districts, surrounded by greenbelts. He emphasized the need for an improved parkway system, increased public services and creation of more jobs to alleviate suburban dwellings of a lengthy daily commute. Development pressures would almost immediately compromise Bennett’s idyllic vision. The demand for housing was intense and merchant builders descended upon the wide open spaces of the Valley to continuously construct tracts of single-family houses for the next two decades. Bennett’s sustainable population estimate of 900,000 was eclipsed by 1964 and the ranches and orchards had almost entirely vanished.

Viability of the newly minted suburbs that spread northwest across the Valley was dependent upon continued growth of a transportation network. (Figure 2.5) The freeway system was seen as the future of the automobile and Los Angeles fully embraced experimentation in urban design solutions for motorists. The Collier-Burns Highway Act of 1947 laid the groundwork for such a system, but realization of the freeways that crisscrossed the metropolis would take more than two decades to realize. The first accomplishment in improving access to

![Figure 2.5: Subdivisions rapidly spread northwest as the population increased and accessibility improved. Los Angeles Department of City Planning (1967).]
the Valley came with the completion of the Hollywood Freeway (U.S. Route 101) segment from Highland to Vineland in 1949. The Ventura Freeway (Also U.S. Route 101) followed in 1960 and the San Diego Freeway (Interstate 405) opened in 1962. These monumental projects addressed the traffic congestion that plagued the northern portion of the city, but proved to only offer temporary relief. As more residents settled on the northern boundaries of the city and became dependent on the freeways for transport, automobile ownership in the Valley trended higher than almost anywhere in Los Angeles County, with forty-six percent of residents owning two or more cars. Architecture adapted to this city designed for the automobile, and “the front door is where you park your car” in the suburbs. Lot sizes became larger, conducive to elongated plans that utilized the additional width, and the one-story scale of the Ranch house came to dominate the Valley.

SurveyLA defined three types of postwar single-family residential developments, including a wide variety of Ranch house styles, throughout the Valley. The first type, the residential neighborhood allowed for more gradual development and where houses share a design vocabulary, but are typically custom creations. The second type, housing tracts, were constructed in a short span in a repetitive fashion that relies on a few identical models. The development is often the work of a single developer and architect and packaged for sale with a unified marketing concept. In the third type, the planned community (such as Panorama City), housing tracts are integrated into the design of a more ambitious overall plan that includes public and commercial space and is implemented by a single builder or development team. The commonality between these three types of development is the use of some sub-type of the Ranch house. Ranch houses are typically one-story in scale with a low-pitched, gabled, or hipped roof with wide eaves. They are often asymmetrical and have a horizontal emphasis, sometimes with additions or wings that suggest a rambling plan. The free-flowing spaces of the interior have a strong connection with the outdoors, sometimes even emphasizing outdoor rooms. Materials are often rustic, such as board-and-batten cladding, or have a general sense of informality. The reasonably conservative style of the Ranch house correlated to FHA loan acquisition and healthy profit margins found in refining an identical house plan to create a product that retained appeal when used in a repetitive fashion. The precedent set by the democratized version of the Ranch
house designed by Wurdeman and Becket for Panorama City promoted better relationships between builders and architects in the postwar era. As these relationships matured, the Ranch house was refined through exploration of functionality and applied motifs (or lack thereof). Variants of the Traditional Ranch house include American Colonial, Cape Cod, Cinderella, Hacienda, and Minimal Ranch. A second subcategory, the Contemporary Ranch, includes more Modern stylings, sometimes with influences of Oriental and Hollywood Regency design. SurveyLA describes the differentiation between the two categories:

The Contemporary Ranch style reflects architects and builders’ attempt to reconcile the basic form of the Ranch house and the abstract geometries and contemporary details of Modernism. This style was popular in the postwar era and was also applied to both custom and mass-produced houses. As to assume a more Modern aesthetic, Contemporary Ranches are generally devoid of the historicist references and rusticated details that are found on Traditional Ranches. (Figure 2.6)

Figure 2.6: A tract house in Meadowlark Park (Reseda) by architect Edward Fickett demonstrates how architects in the early 1950s began to blend Modern details with the Ranch house form. Maynard L. Parker, photographer. Courtesy of The Huntington Library, San Marino, California. California.
Contemporary Ranches are more common after 1950, once housing demand was largely fulfilled. Buyer’s preferences evolved, as the market became more competitive, and the services of an architect became more advantageous to the builder. Of the seventy-nine potential historic districts identified in the San Fernando Valley, several builder and architect relationships produced work that deserves further exploration. Most notably for development of the Contemporary Ranch in the Valley were architects Palmer and Krisel, Edward Fickett, Charles Dubois, Smith and Williams, Jones and Emmons, and Claude Oakland who found outlets for creativity with certain developers such as Alexander Construction Company and Eichler Homes.56

Thousands of tracts houses designed by Palmer and Krisel were erected in the Valley by 1960. The architects were dedicated to delivering Modernism to the masses and recognized the effort required in the elimination of barriers between builders and architects in order to produce a profitable model. Their first venture in the Valley was Corbin Palms, a Modern residential tract by Alexander Construction Company, which began construction in 1953. (Figure 2.7) Alexander had previously built the Traditional and Minimal Ranch homes of Encino Woods (1947), but was persuaded to partner with Palmer and Krisel and the result proved to be enormously successful. After the enthusiastic reception at Corbin Palms, developers embraced house designs that wove Modernism together with the casual western approach to living embodied in the Ranch form. In the Valley, just under a thousand houses by Palmer and Krisel have been identified by SurveyLA as being eligible for designation: Northridge West for Cal-Frank Homes (1955-56); Marlborough Palms for Porter Land and Water Company (1957-58); and two tracts for developer Sanford D. Adler, Storybook Village (1956) and Living-Conditioned Homes (1957-58). A later example of residential work by Palmer, residences along Escalon Drive in Encino, also is eligible for designation.57

The sixty-five Palmer and Krisel-designed houses of Marlborough Palms (1957-58) by the Porter Land and Water Company represent a portion of a larger tract of Traditional Ranch houses.58 Marlborough Palms is notable for its association with a nationwide promotional campaign for the promotion of electricity as the primary source of residential power. Live Better
Electrically, launched in 1956, added a Medallion Home component that rewarded total electric living with a gold medallion. Three hundred electrical utility companies and 180 electrical manufacturers united to ensure that newly built homes featured electric washers and dryers, garbage disposals, dishwashers, and all-electric heating. One million homes were built using the auspices of the program and Marlborough Palms was often used in promotion of the campaign.59

Developer Julian Weinstock, who partnered with Palmer and Krisel for Northridge College Estates (1957-60), is most notable for his Traditional Ranch subdivisions. His involvement in the Valley began as the architect and builder for Hillview Park Estates (1947-55) for Associated Development Company in 1946. The tract includes some Contemporary Ranch houses, but the majority of the 111 houses were built in Traditional Ranch styles: Minimal; American Colonial; Hacienda. Weinstock also designed and built Minimal and Cinderella Ranches in Walnut Haven (1951-54) and sixty-one Traditional Ranch houses in Louise Park Estates (1956-57).60 For Northridge College Estates, he turned to Palmer and Krisel to create
nine models that offered “the best of today with a flair for tomorrow” and the partnership ultimately produced 188 houses.⁶¹ Weinstock’s choice of Palmer and Krisel reflects a growing understanding of the importance of architectural talent and the marketability of good design in the latter part of the 1950s. In 1957, Weinstock commissioned Charles Dubois to create a showcase house, called the Northridger, to further diversify his offerings.⁶² Dubois was also the designer behind Woodside (1959) and Kingswood (1963-65) in Woodland Hills. Between the two tracts, more than two hundred Contemporary Ranch houses were built by Don-Ja-Ran Construction Company that brought the unique Tiki and Chalet-inspired Ranch house variant to the Valley.⁶³ (Figure 2.8)

Developed concurrently were the Eichler Homes of Balboa Highlands (1962-64) in Granada Hills. Eichler’s work in Modern residential tracts had matured in Northern California and he brought the successful model to Southern California in the early 1960s, erecting over one hundred residences designed by Claude Oakland, and Jones and Emmons in the San Fernando Valley.

![Figure 2.8: A Contemporary Ranch house in Woodside, a postwar residential tract designed by Charles Dubois. Photo courtesy of Architectural Resources Group. Accessed January 2017.](https://www.laconservancy.org/locations/woodside)
Valley.\textsuperscript{64} Balboa Highlands, a Historic Preservation Overlay Zone (HPOZ) in the City of Los Angeles, will be one of the three case studies presented in the subsequent chapters.

The three case studies to follow aim to develop a better understanding of significance and treatment of Modern residential tracts. As the first postwar residential subdivision to become a Historic Preservation Overlay Zone (HPOZ) in Los Angeles, the Gregory Ain Mar Vista Tract, provides a foundation for evaluating the application of the HPOZ tool in a Modern residential tract. While located on the westside of the city, and not in the San Fernando Valley, it is a useful precedent that illustrates the challenges associated with making integrity assessments and regulating residential tracts over the period of over ten years since the HPOZ was created. The Balboa Highlands and Living-Conditioned Homes subdivisions will serve as the remaining case studies. While the primary focus of this research is integrity analysis of Modern residential tracts, and their environment, an overview of SurveyLA results for the San Fernando Valley is provided in Appendix C.\textsuperscript{65}
Kevin Starr, *Golden Dreams: California in an Age of Abundance 1950-1963*, (New York: Oxford University Press, 2009), 1. The geographic boundaries of the San Fernando Valley extend from Santa Monica Mountains to the south to the Simi Hills to the west, the Santa Susana and San Gabriel Mountains to the north and Verdugo Mountains to the east.


City of Los Angeles Planning Department, *San Fernando Valley Planning Area: Background For Planning* (1967), 21.


Lane, 48.

City of Los Angeles Planning Department, *San Fernando Valley Planning Area: Background For Planning* (1967), 13.

De Wit and Alexander, 13.

Ibid., 15.

Discover Los Angeles, “Historical Timeline,” Accessed November 7, 2016, http://www.discoverlosangeles.com/blog/historical-timeline-los-angeles. Spanish control was relinquished to Mexico in 1821, only to be ceded to the United States in 1848 and California achieved statehood two years later. The white population of Los Angeles surpassed that of Spanish and Native American descent for the first time in 1870.

Roderick, 32.

Ibid., 37.

City of Los Angeles Planning Department, *Planning for the San Fernando Valley* (1945). Railroads: 1881 Southern Pacific Railroad connected Los Angeles to eastern United States, followed by a second line on Santa Fe Railroad in 1885. San Fernando was founded in 1876.

Roderick, 44.

Starr, 4.

De Wit and Alexander, 16.

Starr, 4.

Ames and McClelland, 16.

De Wit and Alexander, 16.

Ibid., 36.


De Wit and Alexander, 18.

Ames and McClelland, 16.

De Wit and Alexander, 36.
Planning for the San Fernando Valley (1945), 7.

Roderick, 133.


Planning for the San Fernando Valley (1945). Also see, Roderick, 134-35.

Background for Planning (1967), 16.

Gregory Hise, Magnetic Los Angeles: Planning the Twentieth-Century Metropolis, (Baltimore: Johns Hopkins University Press, 1997), 194. Burns completed Toluca Wood (1941) followed by Panorama City (1947) in the San Fernando Valley. For more, see the section on Development of the suburban house.

Lane, 47.

Roderick, 86; City of Los Angeles, Office of Historic Resources, SurveyLA, “Sherman Oaks,” 137.

SurveyLA identified five American Colonial Revival residences, built in the late 1930s, in the proposed Agnes Avenue Historic District.

SurveyLA, “Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass,” 174. Toluca Lake Park no longer retains the integrity necessary for a historic district, but the implementation of alternate planning tools may be beneficial.

Roderick, 92.

Ibid., 169.

Planning for the San Fernando Valley (1945), 3.


Planning for the San Fernando Valley (1945), 7.

Ibid., 7.

Roderick, 124-125


De Wit and Alexander, 36; 38.

Background for Planning (1967), 21.

Roderick, 136.

Background for Planning (1967), 43.

Hess, 60.

Categories and sub-types as outlined in SurveyLA.

Hess, 17.

Ibid., 40.


Ibid., 17.

Ibid., 16.

Identified by SurveyLA. Escalon Drive residences were built in 1966, after Palmer and Krisel’s partnership dissolved.

These tracts were all identified by SurveyLA and retain sufficient integrity to warrant application of conservation tools. See appendix A for an overview of all San Fernando Valley postwar housing included in the survey.


SurveyLA, “Northridge,” 137.


Residential tracts evaluated by Survey LA that did not retain sufficient integrity for further analysis were excluded from Appendix A.
Chapter Three
Gregory Ain Mar Vista Tract

The Gregory Ain Mar Vista Tract has the distinction of being the first subdivision of postwar resources to have been designated a Historic Preservation Overlay Zone (HPOZ) in the City of Los Angeles. (Figure 3.1) The collection of fifty-two single-family houses, built in 1948, is a significant example of the work of master architect Gregory Ain along with celebrated landscape architect Garrett Eckbo. The integration of the houses with their landscape was essential to the overall design, but ultimately a single residence cannot be isolated for its significance. The tract in its entirety demonstrates a progressive postwar community planning concept that offered an alternative to more conservative residential developments of the era. The designation of the tract as a historic district in 2003 demonstrated the need for implementation of preservation tools, such as districting, to better represent the diversity of postwar resources. The

twenty-first century has posed many challenges: defining significance for Modern resources, overcoming barriers in public perception of Modernism, and adjusting conservation strategies to address the cultural landscape created by rapid suburbanization. The Mar Vista Tract set a precedent as the first successful attempt in Los Angeles for framing an argument for conservation of Modern residential tracts. The HPOZ was ultimately successful due to intense community outreach and a committed group of homeowners working with the City of Los Angeles, local advocacy organizations, and preservation professionals to establish significance and develop methods for managing change to the individual resources and the neighborhood as a whole. Review of the entire process, from integrity analysis to implementation of a customized preservation plan, aids in understanding approaches for managing change and planning for future Modern districts in Los Angeles and beyond.

History

By the late 1940s, Gregory Ain had attempted several endeavors in cooperative residential communities with communal character that aligned with his socialist political ideology. Ain was a University of Southern California graduate and apprentice of Richard Neutra, where he worked on the Modern urban concept Rush City Reformed (1928). In the same utopian spirit, Ain continued his quest to provide good design to the masses while challenging the racially restrictive covenants often in place in residential tracts. In addition to the Mar Vista Tract, Ain’s unrealized Community Homes for Reseda, and the execution of twenty-eight houses for Park Planned Homes (1948) in Altadena demonstrated this commitment. He believed, “Too many modern architects in their zeal to promulgate new and frequently valid ideas, withdraw from the common architecture problems of common people. But it ought to be clear that the more common, that is, the more prevalent, a problem is, just so much more important does the solution of that problem become. A preference for tomorrow’s problem over todays is essentially an evasion of both.”

The Gregory Ain Mar Vista Tract, originally marketed as Modernique Homes, was built in 1948. The houses were designed by Ain during his partnership with Joseph Johnson and Alfred Day. An integral part of the tract was the landscape design by Garrett Eckbo that united
the individual dwellings in a park-like setting. Advanced Development Group, with B.M.
Edelman at the helm, championed Ain’s ideas as the developer of the project and constructed
fifty-two dwellings in 1948 along the adjacent streets of Moore, Meier, and Beethoven in a sixty-
acre subdivision in southwest Los Angeles. (Figure 3.2) The original plan for 102 houses in two
phases was never fully realized. The design faced FHA criticism, which affected funding, and its
location was not particularly desirable. Flat-roofed residences were often rejected due to the
FHA’s conservative practices, but Ain insisted a flat roof was simply more economical. He
calculated his architecture in volume, in addition to square footage, to prove that flat roofs saved
material. The developer for the Mar Vista Tract was able to secure financial support for one
phase, but sales in comparison to surrounding real estate doomed the second phase. Priced at
$11,000, the Mar Vista Tract sold for $1,000 more than anticipated in the original sales strategy.

Figure 3.2: The site plan for the Gregory Ain Mar Vista Tract. Gregory Ain papers,
Architecture and Design Collection. Art, Design & Architecture Museum; University of
California, Santa Barbara.
In contrast, an older residence could be purchased nearby for $5,000, while a new home in Westchester cost as little as $8,650 in 1947.  

Several families who shared Ain’s vision for a Modern utopia were satisfied to pay the premium for good design. They were interspersed with an eclectic mix of others who slowly bought into the community.  

The occupants of the houses enjoyed efficient interiors where sliding walls and retractable partitions transformed space to adapt to varied lifestyles. Ain’s distinctive fenestration patterns included a mix of ribbon windows with half-to-full height windows to achieve indoor/outdoor integration without compromising the needs of the occupants’ privacy. The houses, which shared the same floor plan, were mirrored and rotated on the small lots, with multiple garage configurations to further address privacy, provide aesthetic variation and maximize use of outdoor space to create a more expansive feel for the 1,050 square feet of interior space. The repetitive plan also relied on Eckbo’s thoughtful landscape for visual diversity. Each dwelling had a customized plant plan, including a mix of fruit trees to inspire a neighborhood exchange, but remained united as green spaces were woven together to create the feeling of a community park. To emphasize this concept, each street was defined by a different species of parkway tree (Figure 3.3).  

From the primary facade, houses appeared to be nestled in a communal setting and in the original vision rear yards would have also been shared space.  

(Figure 3.4) Soon after construction, fencing was erected to appease residents who maintained a more traditional approach to suburban living.  

The Mar Vista Tract demonstrated that rapid expansion of the suburban landscape in Los Angeles did not mean that quality of life need be compromised. When the HPOZ was created in 2003, there were still some original homeowners — a testament to the satisfaction many felt for the houses despite their compact design. Much of Los Angeles would go on to be built out with more Traditional Ranch houses in sprawling subdivisions that reached to the northern border of the San Fernando Valley, while the Mar Vista Tract HPOZ remains a tangible link to alternative ideas in postwar housing and community planning.
Figure 3.3: Each street in the Mar Vista Tract received a different variety of tree that has flourished. Photo by author. December 2016.

Figure 3.4: This section of Meier Street retains a strong sense of the design intent with original plantings and a continuous lawn. Photo by author. December 2016.
The Designation Process

The initiative to designate the Gregory Ain Mar Vista Tract HPOZ was spurred by several factors including mounting development pressures and the presence of a high level of architectural integrity. Most importantly, an organized community effort was crucial in making the initiative successful. Postwar era resources began to reach fifty years of age at the turn of the new century and a growing appreciation of Modernism reactivated certain pockets of tract housing associated with the Modern Movement. While Gregory Ain’s architectural contributions may have slipped into obscurity for some time, an awareness and appreciation for the Mar Vista Tract remained fairly constant. Among the initial owners in the tract were Max and Rita Lawerence, founders of Architectural Pottery, and film director Joseph Strick. Rachel Rosenbach and her husband had moved into the neighborhood in 1948 at the recommendation of their friend John Entenza, publisher of *Arts and Architecture Magazine*. Rachel remained in her house for more than fifty years and offered her support throughout the HPOZ process. The neighborhood continued to draw residents who knew of Ain and/or Eckbo’s work or simply recognized the quality of life provided through the elevated design. A core group of residents acted as stewards and mobilized when insensitive alterations, such as a garage remodel or second story addition, threatened the community. The appreciation of the quality of life the homes provide reduced turnover in the neighborhood, which may have contributed to a relative lack of alterations and sensitive remodels over the years. Few were eager to see change, but as it seemed more and more inevitable, residents looked to preservation tools to help manage that change.

Throughout Los Angeles, the phenomenon of “mansionization” had led to the demolition of single-family postwar residences in favor of much larger houses on comparable sized parcels. Real estate prices had risen sharply, especially in the twenty-first century and development pressures were especially intense in communities such as Mar Vista due to their proximity to the coast. A residence recently under construction just outside the southern border of the tract demonstrates the threat continues to be an issue for the character of adjoining neighborhoods. (Figure 3.5) The City exhibited a slow response in addressing the impact of mansionization in older neighborhoods. There was also potential for additions to increase square footage of the...
modestly sized Ain dwellings that would erode integrity. The concerns activated a group of residents to contact the Los Angeles Conservancy for assistance and a formal survey of the tract was initiated.\textsuperscript{11}

\textit{Integrity Analysis}

The resource survey conducted by Myra L. Frank and Associates in 2002 assessed the integrity of the subdivision based on the character-defining features in Table 3.1. Character-defining features express the physical structure’s social or aesthetic value associated with the period of significance defined for the survey area. The flat-roof, fenestration pattern, material selection and lack of ornamentation are integral components that convey the association with the Modern Movement. A single-story, based on a four-foot building module (although not identified...
as a character-defining feature), defines the form, while setbacks, orientation of each dwelling in the communal setting, and relationship with landscape elements also shape the character of the tract. Repetitive architectural elements, such as illuminated address plate, v-shaped roof support and garage trellis, provide aesthetic continuity. Figure 3.6 and Figure 3.7 provide a historical versus contemporary view that demonstrates that the tract overall has retained a high level of integrity. Based upon presence of these features, each residence is classified as contributor, altered contributor, or non-contributor. Ninety-four percent, or forty-nine of the fifty-two properties were considered contributors in the district analysis. Twelve residences were

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscape features such as parkway trees, shared lawns, and fruit trees, shrubs or other plantings that contribute to the integrity of the tract</td>
<td></td>
</tr>
<tr>
<td>Single-story scale</td>
<td></td>
</tr>
<tr>
<td>Setbacks</td>
<td></td>
</tr>
<tr>
<td>Flat roofs</td>
<td></td>
</tr>
<tr>
<td>Zig-zag concrete walkway to primary entrance</td>
<td></td>
</tr>
<tr>
<td>Stucco cladding</td>
<td></td>
</tr>
<tr>
<td>Fenestration pattern</td>
<td></td>
</tr>
<tr>
<td>Wood awning window and trim</td>
<td></td>
</tr>
<tr>
<td>Wood framed clerestory windows and trim</td>
<td></td>
</tr>
<tr>
<td>Exterior solid-core slab door for primary entrance</td>
<td></td>
</tr>
<tr>
<td>Secondary door styles and placement (glass-door to rear patio)</td>
<td></td>
</tr>
<tr>
<td>Illuminated street number in “aluminum” pot metal frame</td>
<td></td>
</tr>
<tr>
<td>Horizontal wood siding that extends to wood fencing</td>
<td></td>
</tr>
<tr>
<td>Bedroom privacy walls</td>
<td></td>
</tr>
<tr>
<td>V-shaped support for walkway canopy</td>
<td></td>
</tr>
<tr>
<td>Horizontally-scored garage door</td>
<td></td>
</tr>
<tr>
<td>Recessed garage configuration with trellis for climbing plant</td>
<td></td>
</tr>
</tbody>
</table>

Figure 3.7: Similar view of houses in the Mar Vista Tract. Note the conversion of the garage to interior space. Photo by author. December 2016.
contributors, thirty-seven were altered contributors, and three were non-contributors. The integrity threshold is based upon reversibility, the ease with which a character-defining feature can be restored, and the ability for a property to express the seven qualities defined in the criteria for evaluation. (Appendix A) For example, an altered contributor may exhibit non-original windows, but still retains sufficient integrity if the fenestration pattern remains intact. Additions to the rear of the property that are not visible from the street are often permissible, but subjectivity about additions to the primary facade accounts for some measure of inconsistency. Twenty-four properties had additions (not including pergolas or other exterior design features) that changed the footprint of the plan. Additionally, fourteen garage conversions increased interior square footage, but were not considered additions. There are also two examples in the tract where the pitch of the roof modified or a “pop-up” was added, which is generally not considered an easily reversible change. Thirty-seven altered contributors, despite conversions and additions (even to the primary facade), met the threshold for integrity due to the sensitive nature of the modifications. Expansions often honored the original four-foot module on which the homes were originally constructed and design features were sympathetic to the Modern style. Only one house had been altered beyond recognition and three others did not meet the integrity threshold.\textsuperscript{12} The decision was adjusted to only three non-contributors after further evaluation of the property at 3515 Moore Street. (Figure 3.8) At the time of the survey, the residence featured inappropriate cladding, window replacement (although the fenestration pattern remained intact) and garden features such as concrete block and a fountain that detracted from its character. Residents participating in the HPOZ process insisted these were reversible features and the house was ultimately included as an altered contributor.\textsuperscript{13} The property was sold in 2011 and despite its inclusion as an altered contributor, the residence was razed and replaced with entirely new construction that mimics Ain’s design.\textsuperscript{14} (Figure 3.9) This issue highlights the need for discussion surrounding integrity of original materials. Replica materials are advised to replace features that deteriorate beyond repair or require restoration, but in this case, the simplicity of the Modern form and lack of ornamentation allowed for reproduction of the entire dwelling. It is only upon close examination, the fenestration pattern is inconsistent with any original plans for
Figure 3.8: The residence at 3515 Moore Street was originally surveyed as a non-contributor, but residents argued that alterations were reversible and it was ultimately included as an altered contributor. Photo by Myra L. Frank and Associates. 2002. Accessed January 2017. http://zimas.lacity.org/.

Figure 3.9: The residence at 3515 Moore Street was considered an altered contributor, but demolished and replaced with a replica property. Photo by author. December 2016.
the tract. The integrity of the tract as a whole benefits from this replica, but the dwelling itself cannot be considered a contributor.

*Preservation Plan*

The creation of a customized preservation plan presented challenges, given a group of homeowners with differing opinions about architecture and design. An outline of character-defining features and guidelines for application of the Secretary of Interior’s Standards for Rehabilitation are produced by the HPOZ board and the City. While the rehabilitation guidelines were effective in the interim, it took until September 2010 for a draft document of customized criteria to be produced, with subsequent edits in the two months that followed before a final draft was adopted on December 9, 2010.

The primary facade and appearance of the landscape design as viewed from the street was given priority, a standard conservation strategy in a historic district, although extensive discussion considered regulation of a greater range of design features that fully express the Modern concept encompassed by Ain’s interior spatial organization and flexibility. The final draft of the Preservation Plan states that inappropriate alterations include additions that protrude from the single-story form, changes to fenestration patterns and removal of any character-defining features. Per the Secretary of Interior’s Standards, effort should be made to repair features, if possible, before they are replaced. If replacement is necessary, the feature should be replaced in kind. If a feature was altered or removed before the survey work completed for the HPOZ, the plan permits replacement that is sympathetic to the “Early Modernist design aesthetic.” One example given in the preservation plan is for the front door. The first choice should always be restoration before replacement. If replacement is necessary, it should be done in-kind with a replica solid-core door preferred, but other styles may be suitable with approval by the HPOZ board. Landscape features, particularly the greenbelt that unites the front lawns, were heavily discussed in the plan and discourage the installation of fencing except on a case by case basis where fencing, limited to 48-inches in height that maintains transparency, may be appropriate to reduce street noise. Even in this case, homeowners are encouraged to choose
voluminous plantings instead of fencing to retain the intent of the original landscape design. In reference to the landscaping, the word “traditional” was edited in the final draft in favor of “open and verdant,” underscoring the importance of the subtleties in the language used throughout the preservation plan. (Figure 3.10) Hardscape features were also highlighted, in an effort to conserve existing concrete or replicate in color and scoring. Installation of any non-original concrete is considered inappropriate. Additional inclusions in the Preservation Plan must be considered as the HPOZ tackles unforeseen challenges, such as the impact of the recent drought in California. Residents have been experimenting with native grasses that honor Eckbo’s landscape, but are heartier than some of the original specifications.

With creation of any Preservation Plan, there is extensive discussion about appropriate alterations once the HPOZ is in place. Purists may insist that restoration is the only acceptable strategy, while others are more lenient in accepting changes sympathetic to the original that are justified in order to adapt to contemporary lifestyles. For example, the four-foot building module the Mar Vista Tract is built upon could be used to guide sensitive additions. Residents in favor of

Figure 3.10: An example from the Preservation Plan, the caption reads, “Low-water landscapes can be lush and inviting (such as the image at right) and remain consistent with the look of the neighborhood as a whole. The image at left is arid and would be inappropriate for the Mar Vista Tract.” Courtesy of the City of Los Angeles, Office of Historic Resources. Gregory Ain Mar Vista HPOZ Preservation Plan. 2010.
this strategy argue that the architectural integrity would not be compromised while providing some flexibility for those who needed to expand their property. It is worth noting, however, that Gregory Ain had refused to work with homeowners when asked to return for an addition to their properties.

**Reflections**

Effectiveness of the Preservation Plan can only truly be assessed with the passage of time and evaluation of changes that occur. In the Mar Vista Tract, the Preservation Plan has been in place for six years and the HPOZ for more than ten. Review of alterations that have occurred, and whether they align with the conservation strategies, is helpful in guiding the future conservation of postwar residential tracts. With regard to fencing in the front of the property, some homeowners have chosen to maintain or even replace in-kind fencing that is not appropriate for the tract. Removal of fencing in these instances is voluntary. The design guidelines in the preservation plan require new fencing be limited to instances where excessive street noise is addressed (an issue acknowledged along Beethoven Street). Since the preservation plan was enacted, multiple properties have installed fencing or garden walls that compromise the integrity of the tract. The original intent for communal space is threatened by these incremental changes that negatively impact interaction with the landscape. (Figure 3.11 and Figure 3.12) It is not uncommon for controversial alterations to occur in any HPOZ due to inconsistencies in interpretation of the preservation plan or work performed without a permit. With the repetitive nature of tract housing, rapidly developed and often packaged as a unified marketing concept, the interrelationship of properties emphasizes the need for regulation of the setbacks and landscape. The Mar Vista Tract is an exceptional example where deterioration of the landscape plan translates to loss of integrity of Eckbo and Ain’s work — masters in their respective professional fields. Altering the orchestration of space betrays their ethos.

Another example of a feature that originally united the individual properties within the community is the paint schemes designed by Ain using the Plochere color system. Twenty-three of the fifty-two properties remained on the market in 1949 and Ain debuted new color palettes of
Figure 3.11: This property on Beethoven Street made changes after HPOZ status. Fencing compromises the communal setting. Photo by author. December 2016.

Figure 3.12: A garden wall erected on the north end of a property on the corner of Beethoven Street drastically changes a pedestrian’s interaction with the landscape. Photo by author. December 2016.
rich earth tones. Contemporary reinterpretation of the Modern style has often led to selection of white and gray paint by the homeowner, which contradicts these carefully selected schemes developed by Ain. Paint can be incredibly impactful, but has proven to be a challenging aspect of HPOZ integrity. In contrast to prewar suburbs where historical colors are often a matter of speculation, postwar residential tracts commonly has extensive documentation available that may include detailed specifications. Returning to historic color schemes is voluntary, but can be encouraged by fostering a better understanding of design history and Ain’s intent. The HPOZ website created by dedicated residents seeks to reach beyond the formality of the Preservation Plan with a “research center” that includes house and landscape plans, as well as detail on Ain’s color schemes. Accessibility to this information is vital to foster an understanding of significance, communicate the depth of information available, and influence decision-making.

While integrity analysis is the primary focus of this research, the creation and long-term management of the HPOZ hinges on community involvement. Integrity can be at a high level, but if the majority of homeowners are not supportive, an HPOZ proposal will likely not move forward. An examination of the social climate that proved to be essential for the Mar Vista Tract highlights challenges common to the HPOZ process and unique aspects in the designation of Modern residential tracts. Myths about historic preservation must be dispelled, such as property rights and real estate value. Residents with strong views about individual property rights must be educated, if not ultimately persuaded, to support the process. Most homeowners in the Mar Vista Tract were members of the creative class and drawn to the neighborhood by their appreciation of the architecture and/or the overall community character. Therefore, the majority were supportive of the conservation effort, but there was at least one dissenting view on preservation. A resident who had lived in the tract since 1958 implemented drastic changes to her house after the survey work. She defended her actions by asking, “Do I have the right to dictate what your house is going to look like, or what it's going to sell for, or your lifestyle in that house?” Property rights issue are not unique to conservation of postwar residential tracts, but the vulnerability of Modern resources — particularly the dismissive attitudes toward the significance of tract housing — highlights the need for outreach efforts following identification of eligible historic resources.
Another common myth about the HPOZ is that property values are threatened, but in most cases inclusion in a historic district has a positive effect. Quality of design in Modern residential tracts, the product of an era that celebrated quantity, has proven to contribute to long-term value. While the initial investment had financial disadvantages for the developer of the Mar Vista Tract, analysis shows that the value of these properties has risen disproportionately to the other fifty parcels in the subdivision that were developed with Traditional Ranch houses, but were originally intended for Ain’s design. When evaluating the cost per square foot based on sales data from 1990 and later, houses in the Mar Vista Tract HPOZ were 19.8% more valuable. If data is isolated to reflect only sales after the establishment of the HPOZ in 2003, houses in the Mar Vista Tract sell on average for $94.22 per square foot more than the traditional portion of the subdivision. Further examination of quality Modern residential tracts and the associated property value may encourage sensitive rehabilitation efforts and facilitate homeowner support for creation of more historic districts of Modern resources.

The designation of the Gregory Ain Mar Vista Tract acknowledged that Modernism has historic significance beyond designation of individual high-style dwellings. The precedent allows for identification and evaluation of other Modern residential tracts that provide a tangible link to patterns of postwar residential development and the legacy of the Modern Movement. As the Mar Vista Tract approaches seventy years of age and focus is divided as more resources become eligible for designation, it is essential to consider the work that remains to be done to conserve the postwar suburban landscape. Of more than twenty years of postwar residential tracts that currently qualify for assessment, only a fraction of those resources have received intensive evaluation in the City of Los Angeles. The citywide Historic Resources Survey, SurveyLA, identified tracts that appear to retain sufficient integrity, but next steps in the process must be taken. Historic resources will suffer from insensitive alterations and deterioration of materials without guidance on maintenance, sensitive solutions for expansion, and education about the benefits of the HPOZ preservation tool for the most significant tracts.

One other Modern residential tract, a Joseph Eichler development in the San Fernando Valley, was successfully designated an HPOZ in 2009. Balboa Highlands is explored in the following chapter to further understanding about integrity assessment strategy in a postwar
residential district and the long-term planning issues that have surfaced in conservation of Modern tract residences.
Chapter Three Endnotes


3 Ibid., 447-448.


5 Denzer, 150.


7 Hines, 450.

8 Denzer, 147. The tree varieties throughout the tract: Ficus on Beethoven Street, Magnolias on Meier Street, Melaleuca on Moore Street.

9 Hines, 450.


11 Ibid., 75.


13 Amanda Seward, in conversation with the author, December 1, 2016.

14 Hans Adamson, e-mail to the author, December 6, 2016.


16 Amanda Seward, in conversation with the author, December 1, 2016.


18 Amanda Seward, in conversation with the author, December 1, 2016.

19 Thirty-five of forty-one units have been expanded the original floor plan according to the Docomomo study from 2009.

20 Amanda Seward, in conversation with the author, December 1, 2016.


23 De Wit and Alexander, 121.
Chapter Four
Balboa Highlands: The Eichler Homes of the San Fernando Valley

Balboa Highlands is a tract of 108 houses located in Granada Hills, a community at the northern-most area of the San Fernando Valley in the City of Los Angeles. The subdivision was developed between 1962 and 1964 by Joseph Eichler with houses designed by architects A. Quincy Jones and Frederick Emmons, in collaboration with Claude Oakland. (Figure 4.1) The development was less than fifty years of age when it became a Historic Preservation Overlay Zone (HPOZ) in 2010, and only the second postwar residential tract in the City of Los Angeles to be designated. Balboa Highlands is one of only a few examples of Eichler subdivisions in Southern California and considered “one of the hidden postwar jewels of the San Fernando Valley.” The district is significant for its demonstration of suburban development patterns of the Valley, as well as its architectural pedigree. Severe alterations to a number of houses over the
years motivated a group of homeowners who championed the creation of an HPOZ. Despite the changes, the development proved to have a high level of integrity in the Historic Resources Survey. This case study will examine the approach used in the integrity analysis to highlight challenges and opportunities in maintaining the character of a Modern residential tract.

**History**

Joseph Eichler was a merchant builder active between 1947 and 1966. For a short time in 1943, he resided in Frank Lloyd Wright’s Bazett House in Northern California and the experience propelled him on a completely new career path. He sought to deliver Modern design to the masses and engaged quality architectural talent to realize his vision. Relationships with A. Quincy Jones and Frederick Emmons, Anshen and Allen, and Claude Oakland endured for decades to produce thousands of high quality Modern residences for the middle-class. Throughout the 1950s, Eichler Homes were constructed solely in Northern California. Eichler gravitated south in 1960 with a tract designed by Anshen and Allen in 1960 for Orange County. In total, he developed five tracts in Southern California including Balboa Highlands (1962-64). The others are Conejo Valley (1962-67) in Thousand Oaks (Ventura County) and Fairhaven (1960), Fairmeadow (1962), and Fairhills (1963), all south of Los Angeles in the City of Orange (Orange County). A development opportunity in partnership with Jones and Emmons for the Case Study House Program brought Eichler to the San Fernando Valley in 1961. While the famed program intended designs that were easily reproducible and emphasized economy, Jones and Emmons’ Case Study House #24 was the only proposal that prepared plans for a tract of single-family houses. The proposed 260 houses in Northridge remained unbuilt due to resistance to Jones’ progressive ideas and zoning issues.

Attracted to other opportunities in the region, Eichler proceeded to build in Granada Hills, a portion of the San Fernando Valley that was more slowly developed due to accessibility issues that were resolved by the expansion of the freeway network. The development enticed buyers with the rural setting, where citrus still flourished and nearby parks offered outdoor recreation, but emphasized the convenience of the freeway. The simultaneous development of nearby shopping centers and schools completed the suburban ideal. Six different floor plans were offered with three roof types (a-frame, flat and a low-pitch gable) and interior room
arrangement flowed around a central atrium, an integral component to the indoor/outdoor living concept. A variety of facade schemes use simple materials of concrete and wood and did not rely on an applied motif. Clerestory windows admit light to the interior, but otherwise minimal fenestration offered privacy to the occupants. Several anomalies in facade design are the result of customization options offered to homebuyers, but all properties are similar in materials and massing. Visual interest was created through a color palette of earth tones with a bold accent on the primary entrance door. Setbacks maintained placement of the residence toward the front of the rectilinear lots to allow for a generous rear yard, and floor-to-ceiling glass on all secondary facades merge the landscape with the dwelling. (Figure 4.2) Eichler relied on a core group of architecture firms. All models were for this development were designed by two firms that worked for Eichler on a steady basis – Jones and Emmons, and Claude Oakland. Each design reflects the preferences of a middle-class clientele, but expectations are stretched through progressive concepts in spatial arrangement and circulation patterns. Jones sums up the reason that all

residential tracts of the period were not as thoroughly considered in his book, *Builders Homes for Better Living*:

The stock excuse for the reluctance of builders to improve the generally accepted standards is almost always “cost,” and in today’s competitive market this is to some degree true. But if home buyers could really be given the opportunity to visualize the possibilities inherent in good land planning and community development, none but a prejudiced minority would be satisfied with existing conditions.7

Expectations by the mid-1960s included more square footage than the tract residence of the previous decade, and each residence offered four and five bedrooms and two or two-and-a-half bathrooms. The smallest plan, at 2,311 square feet, tripled the size of homes offered in a residential tract in the first decade after World War II.8 Most plans grouped bedrooms in one wing of the house and promoted social interaction. One exception (Plan 1805) isolates the master suite, which includes a “retreat” space, from the smaller bedrooms.9 (Figure 4.3) Most of the plans feature an atrium, a distinctive element of Eichler Homes. Exceptions are Plan 413 that features a flexible interior “gallery” space at the core of the house and Plan 354 with a courtyard sheltered by a garden wall and nestled in the L-shape at the front of the property.10 Each residence featured a two-car garage, or a single garage with a carport, attached to the house and prominently situated on one end of the rectilinear plan. Of the proposed 250 houses in the tract, only 108 were built due to financial commitments of the developer that required sale of the additional land.11

**The Designation Process**

Eichler achieved a profitable method for construction of Modern residential tracts that endured for more than a decade. Guided by the expertise of top tier architectural talent, his business acumen and commitment to superior quality, Eichler produced among the most successful results of any merchant builder in the world. He dared to push boundaries in design and construction, and for racial integration in areas, such as the San Fernando Valley, where it was sorely lacking.12 The community is significant for its social agenda, as well as development
patterns of the region, and its architectural significance and association with Joseph Eichler and prominent architects, Jones and Emmons, and Claude Oakland. Residents of Balboa Highlands recognized the significance of their neighborhood and the need to explore conservation methods for this rare example of Eichler Homes in Southern California.

Widespread appreciation throughout California for Eichler Homes provided a gateway for community outreach efforts. Resident enthusiasm is an influential factor in the nomination process and more than two-thirds of the homeowners in Balboa Highlands offered support for HPOZ designation. A tour hosted by the Los Angeles Conservancy, “How Modern Was My Valley?” was a catalyst for the effort. Residents formed a bond through celebration of their mutual appreciation for the neighborhood and welcomed admiration from tour attendees. The
decade prior to the tour proved to be a pivotal time for the subdivision, and many of those residents who had worked to reverse poorly considered remodels decided to unite:

We know that having a good neighbor is so much more important than what color they paint their house or how they choose to landscape. But there just seems to be a great disparity between the potential that we see in this neighborhood and then what you actually do see when you drive down the street.\textsuperscript{15}

An intensive seven-month study of historic resources was conducted beginning in June 2008 by Architectural Resources Group. It was the first formal survey ever conducted in the subdivision. The Los Angeles Conservancy helped recruit student volunteers enrolled in an architecture course at John F. Kennedy High School in Granada Hills to participate in the process.

\textit{Integrity Analysis}

The period of significance for Balboa Highlands is 1962 to 1964, the dates of subdivision and construction of the 108 residences in the tract. The Historic Resources Survey determined that sixty-nine percent of the resources contributed to the HPOZ. Integrity analysis was based on an evaluation of thirteen character-defining features. (Table 4.1) A contributor retains all or most of the character-defining features, while an altered contributor retains sufficient integrity, despite one or more alterations or missing character-defining features. Appropriate hardscape and landscape materials also contribute to integrity. Twenty-eight houses fell into the altered contributor category due to noticeable changes to the primary facade that may include replacement windows in their original openings or missing features such as original door hardware or house numbers. Thirty-four were significantly altered and did not retain the integrity necessary to be included in the HPOZ. Common alterations include changes to massing in the form of additions, changes to pitch of the original roofline, infilled atriums visible from the street, modified fenestration patterns, or a change to the original plywood cladding. Enclosure of the carport or conversion of garage to interior space also impacted integrity. The severity of the alteration varies depending on approach to the conversion, including replacement doors or
addition of windows. In some cases, when too many character-defining features are altered, a property shifts to the non-contributor category due to the collective impact of changes. For example, the combination of a non-original garage door and inappropriate cladding material account for a majority of the street appearance and the property feels disjointed from the other properties in the tract.16

In defining the boundary for the HPOZ, all 108 properties were included in order to retain control of future alterations and incompatible construction. A discussion occurred surrounding the omission of non-contributing properties on the fringe of the boundary, and while it is common practice in historic prewar residential neighborhoods, the repetitive features that unite the postwar residential tract promote further discussion about exclusion. Postwar subdivisions are generally constructed in a single phase or in several phases over a relatively short period of time, and all properties retain repetitive architectural features unique to the tract. Omitting properties is not as easy an option as it might be in an HPOZ where the land was subdivided but built out gradually by individual owners or over a longer period of time by a builder. In Balboa

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roofline:</td>
<td>either flat, slant or A-frame</td>
</tr>
<tr>
<td>Steel sash windows</td>
<td></td>
</tr>
<tr>
<td>Entrance configuration, at times with transoms and sidelights</td>
<td></td>
</tr>
<tr>
<td>Grooved wood wall cladding</td>
<td></td>
</tr>
<tr>
<td>Concrete block wall cladding</td>
<td></td>
</tr>
<tr>
<td>Atrium</td>
<td></td>
</tr>
<tr>
<td>Sliding two-car or awning-style one-car garage doors</td>
<td></td>
</tr>
<tr>
<td>Carport</td>
<td></td>
</tr>
<tr>
<td>Cantilevered, gabled entry hood</td>
<td></td>
</tr>
<tr>
<td>Historic “Saturn” front door hardware</td>
<td></td>
</tr>
<tr>
<td>Historic house numbers (Helvetica font, white on black background)</td>
<td></td>
</tr>
<tr>
<td>Historic light fixtures (white globe pendants)</td>
<td></td>
</tr>
<tr>
<td>Exposed beams at the roofline</td>
<td></td>
</tr>
</tbody>
</table>

Highlands, exclusion of several houses on the perimeter that were severely altered would have increased the percentage of contributors and proved crucial in the political process for historic designation. Three non-contributing parcels on the southern end of the HPOZ on the west side of Jimena Avenue are a prime example of a boundary that could have been adjusted. While the integrity of the property at 12601 Jimena (Figure 4.4) is insufficient as an altered contributor, it retains massing and characteristics that clearly show that it was part of the original tract. The decision was to include all 108 houses that were built as part of the subdivision, to demonstrate the original intent of the developer and prevent incompatible new construction to be introduced to the tract.

**Preservation Plan**

An HPOZ board has yet to be appointed for Balboa Highlands. While the general social climate is positive, there has been reluctance in formal participation in HPOZ execution. The
maintenance of the tract solely relies on the Preservation Plan as the guiding document with the City at the helm for decision-making. The Preservation Plan for Balboa Highlands was approved in December 2010, months after historic designation of the resources was finalized. The history of the development is outlined, property descriptions are accompanied by detailed explanation of character-defining features, and guidelines for residential rehabilitation align with the Secretary of the Interior’s Standards. Character-defining features visible from the street determine the integrity of the property for the initial assessment, but the Preservation Plan for Balboa Highlands emphasizes the importance of the atrium, an internal space essential to the Modern design. Specificity of materials is concise, with minimal opportunity for interpretation of type, scale or installation methods. For example, the language for cladding of the primary facade states: “Wall coverings on visible facades should be vertical grooved siding with approximately 1 1/4-inch grooves, and concrete blocks that are approximately 8-inch square. Replacement materials should match exactly or substantially.” Guidelines that are precise to the original development are possible due to the detailed archival documentation available for the tract, and the Preservation Plan notes that Eichler selected the original color schemes for the tract and was critical of homeowners who stayed from his vision, although colors palettes are only described in general terms that include “earthtones.” While homeowners are not required to restore any character-defining features not present at the time of the survey, the information for replication is available and manufacturers have emerged to fulfill the needs of homeowners undergoing rehabilitation of Modern dwellings. The following analysis examines how availability of detailed specifications and materials may impact the future of Modern residential tracts.

Reflections

The Balboa Highlands HPOZ suggests that while integrity can fluctuate based on property owners’ interest in architectural style and varying perceptions of significance over time, the restoration of character-defining features can be economically viable and integrity can be restored. When the subdivision was first rediscovered by Modern architectural enthusiasts in the 1990s, the properties had been subjected to decades of poorly considered remodels, but gradually a group of homeowners who appreciated the mid-century Modern aesthetic were attracted to the neighborhood and reversed many of these conditions. While the restoration of character-
defining features can prove to be more expensive, the long-term value of sensitive rehabilitations can be seen in the Gregory Ain Mar Vista Tract. Further evaluation of property values in Modern residential tracts, as more are found to be worthy of historic designation, will likely prove that retention of historic features translates to profit and more sensitive rehabilitations will be encouraged.

Modern residential tracts often utilized economical materials and most are still accessible. Only two materials are appropriate for the cladding on the primary facade of a property in the Balboa Highlands HPOZ – vertically grooved plywood and eight-inch square concrete block. In comparison of an altered contributor at 17119 Lisette Avenue to a non-contributor located at 17131 Lisette Avenue demonstrates the potential for restoration. (Figure 4.5 and Figure 4.6) The non-contributor lists inappropriate cladding (travertine) as one of the alterations that result in insufficient integrity and the altered contributor retains its historic plywood cladding. However, replicated cladding material is available, marketed specifically toward Eichler owners, and the feature would not be cost prohibitive to restore. In fact, market dynamics suggest that homeowners are eager to invest in restoration. The non-contributor exhibits additional

Figure 4.5: The property at 17119 Lisette features the original wood cladding. Photo by author. November 2016.
alterations: a steel security door (now removed), vertical mullions added at clerestory windows, non-historic garage door, and steel gates at side yards. Therefore, integrity is impacted by a combination of alterations. Character-defining features retained on the non-contributor that are missing from the altered contributor are the original fenestration pattern and historic primary entrance door. The original entrance features a custom door with a peak and contoured transom, as well as sidelights. The contributor has infilled sidelights and an altered transom and door. While this feature is less prominent than the inappropriate garage door of the non-contributor, consideration of distribution of features in residential tracts is necessary in determining the impact of alterations. The prominent placement of the attached garage in Modern residential architecture, compared to the detached garages and rear location of prewar suburbs, means that a garage door alteration or enclosure of a carport weighs heavily in the analysis of the property. The proportions of the primary facade, and the simplicity of Modern residences in general, means that even minor alterations, given their placement or prominence, can severely affect integrity in comparison to more traditional housing. This particular comparison in Balboa Highlands suggests that a garage door alteration is more severe than adjustments to the

Figure 4.6: The property at 17131 has replaced the original cladding with travertine. Photo by author. November 2016.
fenestration pattern, however, restoration of the plywood cladding would leave only minor alterations with the exception of the garage door (proportionally a severe alteration) and arguably change the property status to altered contributor. Given how common replacement garage doors are in tract housing and their prominence, this alteration often weighs heavily in integrity analysis for postwar residential tracts. Analysis of repetitive features in Modern residential tracts must ensure consistency of evaluation with consideration for reversibility of alterations, in addition to prominence of the altered feature(s) and its collective impact on the overall integrity of both the property and the subdivision.

Examination of roofline alterations provides another example for defining the threshold for integrity assessment of repetitive features in a Modern residential tract. While other character-defining features may remain intact, a roofline alteration is often noticeable, not easily reversible and generally results in non-contributing status. The gradation of changes to the four properties in Figure 4.7 demonstrates some of the possible outcomes for the same model in Balboa Highlands. Even moderate adjustments to the fascia or pitch of the roof can drastically affect the proportions of the simple facade (top right). Severity and reversibility of the alteration must be considered, as adjustment to a roofline may only be cosmetic, for example, a parapet to hide mechanical components. A roofline alteration is not always structural, and may be economically feasible to restore. The property could arguably be classified as an altered contributor, if other character-defining features remain intact. Alteration of the fenestration pattern versus replacement windows in the original openings demonstrates similar logic. The reversibility of cosmetic changes to rooflines should be carefully considered when determining its contribution to the HPOZ’s integrity.

Reversibility becomes less feasible with changes to massing, including second-stories, front additions, conversion of garages, carports or internal spaces that contribute to overall integrity. While an HPOZ generally only regulates the primary facade, the importance of the atrium in Eichler Homes is emphasized in the Balboa Highlands HPOZ preservation plan — “Enclosures to internal, non-visible atriums should be minimal as the atrium is a significant feature of the house and neighborhood.” Interior features, such as the atrium and floor-to-ceiling glass located on the secondary facades, are integral features to provide a tangible link to the original design concept and the integration of indoor/outdoor space associated with California living. These spaces are highly vulnerable to enclosure to create additional interior
square footage, challenging to regulate, and leading to challenges for surveyors who typically only have access to the primary facade during evaluation. Consideration for internal atriums and wall-to-glass ratio for secondary facades is essential to maintain a strong link to Modernism that was finally offered to the masses, through successful developments such as those by Eichler, after decades of experimentation. (Figure 4.8) The Preservation Plan for Balboa Highlands attempts to exert this influence on conservation of the atrium, although it is an internal space that would not typically regulated by the HPOZ.

The Balboa Highlands Preservation Plan may have set a precent for future conservation approaches for the HPOZ, but the Mills Act continues to be the most effective for conservation of interiors. The Mills Act offers a compelling financial incentive to rehabilitate an HPOZ property by reduction of tax liability by up to eighty percent. Homeowners must adhere to the

Figure 4.7: These four properties are the same model with a varying degree of severity in alteration to the roofline and infill of carport and atrium. Photos by author. November 2016.
Secretary of the Interior’s Standards for Rehabilitation for both interior and exterior. In turn, a tax reduction aids in availability of funds to complete the work. Participation in the program strongly benefits those homeowners who purchased their property as recently as 2005, while a property purchased before 1978 has less incentive due to the structure of the program. For a homeowner in Balboa Highlands who has purchased their home within the last decade, this translates to roughly $6,000 annually, and over the course of the 10-year contract, approximately sixty percent of a rehabilitation project can be covered by the program. In 2015, there were 654 properties in City of Los Angeles with Mills Act contracts. Fifty-nine percent of those properties were residences located in an HPOZ. Only four properties, or 8.2% of contributing properties in the Gregory Ain Mar Vista HPOZ are under a Mills Act contract. The number was even lower in Balboa Highlands for 2015, where only 6.7% (five properties) participate in the program (although this number has rapidly increased to nine properties as of this year). The Mills Act is the most useful tool in homeowner compliance and Modern residential tracts, in particular, would benefit from regulation of the interiors, atriums, and secondary facades. Development of

Figure 4.8: The internal spaces, such as the atrium, and the walls of glass provide a tangible link to the lifestyle offered by the Modern residential tract. Photo by author. January 2017.
the rehabilitation plan, required under the Mills Act contract, details the work to be performed on
the property. This process tends to slow down the rate of change, encourages appreciation for
historic features and even reveals features lost in prior remodels through sensitive removal of
inappropriate finishes or additions.

While inclusion in the National Register of Historic Places and California Register of
Historical Resources are an honor, the HPOZ and Mills Act are the strongest conservation tools
available for the suburban landscape of the San Fernando Valley. To assist in the effort required
in the HPOZ process, new approaches to streamline integrity assessment, reduce bias and
produce a framework to involve the community to tackle evaluation of large-scale postwar
residential tracts. The “Historic Quest Committee,” a group of volunteers that worked on the
National Register designation of two Eichler Homes subdivisions in Northern California – Green
Gables and Greenmeadow in Palo Alto – introduced a methodology that provided the framework
for my research on other tracts. The weighted points-based methodology assigned points based
on the severity of alterations. The more points received, the lower the overall integrity. If a
residence received more than twelve points, the property was considered a non-contributor. The
documentation of the methodology gave the following examples to demonstrate its application:

Example 1: A house had shingles applied to half of the front elevation (not original siding
material) but not including the garage, and the garage door has been converted to a metal
rollup door (original doors were faced with the same siding as the house). This justified a
penalty of 8 points for the siding change and 8 points for the garage door change for a
total of 16, which made it “non-contributing.”

Example 2: A house had a small section of brick applied to the front elevation (4 points),
a small window added on the front (4 points) and a traditional-style carriage lamp by the
front door (2 points) for a total of 10. The house was classified as “contributing.”

Example 3: A house had a six foot high atrium cover added that was clearly visible from
the street (8 points) and the front door had been changed to a traditional style with
applied molding and inset glass (4 points) for a total of 12 points, making it “non-contributing.”

My first exposure to this method was assisting with integrity analysis of the three Eichler tracts in Orange, California. The framework was useful in providing a framework to process a large group of properties where integrity relies on repetition of character-defining features. The approach can help ensure consistent treatment of each model throughout the tract and fair evaluation of the tract as a whole. In the third case study, Living-Conditioned homes, further exploration of a points-based methodology combined with mapping technology aims to isolate various character-defining features to further understand integrity analysis of Modern residential tracts.
Chapter Four Endnotes

1 The boundaries of the Balboa Highlands HPOZ are Lisette Street, Nanette Street, Jimena Avenue and a portion of Darla Avenue. Balboa Highlands is in the Granada Hills-Knollwood Community Plan Area.


4 City of Los Angeles, Office of Historic Resources, Balboa Highlands HPOZ Preservation Plan, 17. Population in Balboa Highlands grew fivefold between 1950-56.

5 Eichler Homes, Balboa Highlands Brochure, 1962.

6 Balboa Highlands HPOZ Preservation Plan, 51.


9 Similar to Krisel’s concept of the “introvert” plan. See Winship, 194.


12 Roderick, 140. With few exceptions minorities were limited to home ownership in San Fernando and Pacoima in the San Fernando Valley.

13 Todd Longwell, "The history toys: historic Los Angeles houses are out there for the buying, but preserving them is a two-edged sword," Hollywood Reporter, February 19, 2010: 24.


17 Adriene Biondo, in conversation with the author, January 10, 2017.


19 Balboa Highlands HPOZ Preservation Plan, 51.


22 Balboa Highlands HPOZ Preservation Plan, 49.


“The highest percentage of contributing properties participating in the Mills Act, Melrose Hill (22.7%). The average is 17% across all HPOZs.


“Historic Quest Committee Methodology” provided by Kelly Sutherlin McCleod Architecture.
Chapter Five

Integrity Analysis of Living-Conditioned Homes

SurveyLA has identified many potential Historic Preservation Overlay Zones for postwar residential tracts throughout the San Fernando Valley. (Appendix C) One of the most distinctive tracts, Living-Conditioned Homes, was designed by Palmer and Krisel in the community of Northridge. This case study is a closer examination of an in-depth integrity assessment of the Living-Conditioned subdivision, conducted in spring of 2016. Issues with analysis of repetitive features, materials integrity, and spatial adaptation are highlighted, while a points-based analysis methodology is explored as an alternative approach to determination of property status.

History

The Case Study House Program by *Arts and Architecture* magazine is the platform most cited for promotion of the postwar single-family house.¹ However, countless other building campaigns from mid-twentieth century shelter publications, some newly established after the war due to soaring demand, circulated in the United States and proved to offer more attainable designs that appealed to a broader audience.² The publishing industry and merchant builders, in cooperation with vendors of building materials and contemporary home fashions, refined merchandising and marketing methods that stretched the public’s vision for better living through design and technology. At the height of these efforts, with the Contemporary Ranch house as the focal point, the magazine *Living for Young Homemakers* launched its successful Living-Conditioned building campaign.

*Living For Young Homemakers* was a women’s monthly publication with a target demographic aligned with magazines such as *House Beautiful, Sunset Magazine*, and *Better Homes and Gardens*. It was geared toward the middle-class suburban household with a focus on informal living.³ Published by Street and Smith beginning in 1947, it was a sister publication of *Mademoiselle* and was originally titled *Mademoiselle’s Living*.⁴ Edith Brazwell Evans joined the *Mademoiselle* team in 1945 and four years later assumed the post of Editor-In Chief for *Living
for Young Homemakers. Evans was a champion of residential architecture and interior design and became an honorary member of the American Institute of Architects for her contributions. While at the helm of Living for Young Homemakers, the National Association of Home Builders created an award for “Distinguished Reporting of Housing Achievements” and Evans was the first to accept the honor in 1953. Despite the publication’s success, it was folded into Better Homes and Gardens after Condé Nast acquired Street and Smith in 1959.

Living for Young Homemakers introduced the concept of Living-Conditioned Homes in 1954. A partnership with Hotpoint the following year allowed the editors to realize four concept houses, built in various regions of the United States, to be given as prizes in celebration of the appliance manufacturer’s 50th anniversary. (Figure 5.1) Locations and architects for the prize homes were Knoxville, Tennessee (Bruce McCarty); San Francisco, California (Don Emmons); Minneapolis, Minnesota (Norman Nagle); New York City (Stanley Reese). Additionally, a model of “a full-size Hotpoint Dream Home” could be seen by visiting one of 125 locations in forty states. Plans could also be purchased for ten dollars to be independently built. Builders

Figure 5.1: An advertisement for the four Living-Conditioned Homes to be awarded in celebration of Hotpoint’s anniversary. LIFE Magazine, May 2, 1955. https://books.google.com/books?id=dIYEAAAAMBAJ&source=gbs_all_issues_r&cad=1.
across the country tapped architectural talent from their region to contribute a house design for promotion in the magazine. Unique material was produced for the publisher, which also advertised for electrical utility services and provided exposure to innovative building products and technology, in addition to home fashion. The campaign embraced a progressive agenda and aesthetic. Editor-in-Chief Evans proclaimed, “A Living-Conditioned home designates a home that in plan and design and preparation has incorporated something more than the services of an architect and a builder. It is a fusion of engineering and artistry, employing the skill of design and construction experts, the art of landscape architect, the craft of the interior decorator.” The program emphasized space, light, sound, color, climate and safety as the cornerstones for a Modern home. The initiative was called a “crusade for an entirely new approach to home-building” and the editor proclaimed, “It was our purpose to prove that — despite rising costs — intelligent and imaginative planning could produce more genuine livability than was currently being offered the prospective homeowner.” Each of the six facets of the program received attention, collectively achieving a total living concept. The components were individually defined as:

**Space** – the relationship of interior and exterior plan elements, room-to-room and room-to-site, for the purpose of exacting total livable space from house and plot

**Climate** – the orientation of site and structure combined with the engineering of building materials and mechanical equipment to control physical comfort

**Light** – the control of natural and artificial illumination for visual comfort

**Sound** – the maintenance of a level of sound through interior planning and the use of materials for acoustical control

**Color** – the co-ordination of interior and exterior decoration planning to make the small home visually and psychologically more pleasing (Figure 5.2)

**Safety** – the elimination of common causes of physical and emotional hazards in normal family living through planning and choice of materials and mechanical equipment
The allocation of space and the relationship between spaces, both interior and exterior, was an integral component of the program. Every function of the family home was carefully evaluated, including circulation patterns, flexibility, privacy, and adaptability. Next, climate and light were evaluated. Technological developments driven by adoption of electricity, in most American residences by the 1950s, produced carefully orchestrated natural and artificial lighting for a balanced experience throughout the day and night. Similarly, climate control was approached as an integration of natural and electric components. Landscape features and prevailing winds were calculated. Electric heating and cooling technology permitted humidity control, while an outdoor “anticipator” ensured consistent temperatures. Vapor barriers, insulation and proper ventilation ensured optimal system results. Filters protected the interior from pollutants and materials considerations, such as insulated glass and window treatments, assisted with a controlled environment. Radiant heat in bathroom floors was promoted for optimal comfort. New technology, such as remote air conditioning compressors, challenged traditional placement of the various components needed for electric heating, cooling and ventilation. The electric living concept encompassed in this technology paralleled programs such as Westinghouse’s Total Electric Homes and the Gold Medallion Home program. However, the program stretched expectations further by championing additional facets that editors felt
contributed to optimal livability. This included acoustical planning, safety considerations, and color curation. With the orchestration of space came the acknowledgement that equipment required for the electric home had an adverse effect on sound. Mechanical components were placed for limited intrusion, while social and quiet areas were well defined for a family to live harmoniously with one another and in close proximity to neighbors. The latest technology in fire and burglar alarm systems, as well as non-flammable, non-combustible materials, ensured the family’s safety. An extensive list of further recommendations by the magazine detailed glass thickness to deter burglars and window size for emergency evacuation. Circuit breaker technology enabled ample security lighting and ensured even illumination in all task areas. Handles on cabinetry were designed not to snag clothes and door swings were calculated to prevent accidents. Many child-friendly features, such as specially designed outlets, as well as hot water that was “thermostatically” controlled to avoid scalding, provided peace of mind to parents. The final component of the programming was the selection of color schemes for the interior that assured continuity and visually maximized space. Occupants gazed upon gardens that related to the interior, while the exterior palette was designed to integrate with the landscape. Even the choice of automobile to be parked in the driveway or carport was to be considered.

Developer Sanford D. Adler leveraged the campaign extensively for promotion of his tract in Northridge and the magazine featured an extensive spread on one of the model homes along Reseda Boulevard. An interior photograph of the living room graced the cover of the January 1958 issue with the headline “A Report on 10 Trendsetting Houses.” The high praise for the tract could be directly attributed to an association with acclaimed Modern architects Palmer and Krisel. The firm completed more than 10,000 tract homes for various builders between 1952 and 1956, drawing the attention of architecture critic Esther McCoy who claimed the pair helped “give distinction to the tract house.” Their success relied on Krisel’s belief that “the good tract house is not assembly line living, it improves both physical shelter and the way of life of the people.” Adler was a seasoned developer who had worked with Palmer and Krisel previously on the San Fernando Valley development of Storybook Village (1956). He likely recognized the pair’s extensive experience and unwavering standards, which aligned perfectly with the Living-Conditioned premise, and made them an ideal choice to participate in the
campaign. The project was described as “a collaboration of many minds: architect, engineer, builder, color coordinator and utility company who joined efforts to create the most house for the money.” The Los Angeles Department of Water and Power was a co-sponsor of the development, while the engineering firm of Voorheis-Trindle Co. provided the street improvements. Four model houses were erected along Reseda Boulevard in anticipation of National Home Week. Albert Parvin designed the interiors, while Krisel contributed the landscape design. (Figure 5.3) Doris Palmer (architect Dan Palmer’s wife) specified custom color schemes to distinguish the various models and collectively unify the tract.

The sales brochure emphasized “the greatest degree of comfort, livability and convenience.” Fifty-four houses were eventually erected, with five floor plans offering a total of twenty various combinations with a selection of façade designs. Each one-story residence was carefully sited to buffer street noise and ensure safety, both considerations emphasized by the publication’s campaign, while lots were gradually graded to eliminate any drastic level changes. The linear arrangement of rooms and limited fenestration on the façade adhered to the program by providing privacy for the occupants. The contemporary nature of the dwellings is accentuated with clerestory windows, which also compensate for natural light lost from the absence of large expanses of glass on the primary facade. Flat roofs alternate with Palmer and Krisel’s signature butterfly roof to provide variation throughout the tract. Overhangs and trellises project from the houses to provide shade and assist climate control. The use of stone, pre-cast masonry panels, and concrete block cladding also provide variety. The architects were adept at manipulating standard building materials to maximize visual interest, as demonstrated in the concrete block cladding, entry partitions and chimney that penetrates the interior of the home with material exposed. While the tract is Modern in appearance, the architects designed some houses to be more progressive than others. Carports are one example, where the more traditional models received a wood garage door. The open carport, in contrast, not only offered a more Modern look, but increased the builder’s profit by reducing materials required. Inside the houses, the arrangement of social and private zones enhanced the total well-being of the occupants by addressing each of the Living-Conditioned criteria. The unity of the program’s ideals with the work of Palmer and Krisel is evident in the architects’ adaptation of the “introvert” and
Figure 5.3: A model for the house shows Krisel’s landscape design. While the integrity of this property is unknown, aerial views show the pool is extant. *Living For Young Homemakers*. January 1958. Courtesy of USC Library Collections.

Figure 5.4: Floor plan for Model A; Note the free-flowing spatial arrangement for social spaces, while the bedrooms benefit from the use of closets as acoustic buffers. *Living For Young Homemakers*. January 1958. Courtesy of USC Library Collections.
“extrovert” floor plans used for previous tracts to meet the Living-Conditioned requirements. Of the various features of each plan, circulation patterns are tailored to the family that values solitude versus one that enjoys entertaining. Strategic placement of private spaces, using closets as acoustic buffers for sound management, provide separation from active zones. (Figure 5.4) Each room has a strong visual and/or physical connection to the outdoors, but all large expanses of glass were designed to be shaded and patios were to be covered. The “countryside” site selected for the development, now completely engulfed in development, featured groves of orange trees nearby to support the idea that climate and air quality were a benefit in suburban living. The brochure claimed the location was “protected by topography and direction of air drifts from smog, fog and dampness.”

Offered from $24,850 with a $2000 down payment, the tract was marketed to a middle-class family no longer satisfied with their minimal postwar house. A trade-in program was specially designed for those seeking to upgrade from an older home or Palmer and Krisel’s plans could also be purchased and Adler would erect a house on a lot anywhere in the Los Angeles area for $21,000 with no down payment. While the Northridge tract was not part of a planned community, the development advertised amenities in Northridge, such as schools, churches, shopping centers and community recreation facilities. Knollwood Country Club and Northridge Park were nearby. The proximity of San Fernando Valley State College (now California State University Northridge) was also an incentive for faculty.

Significance

Shelter publications played an influential role in the demonstration of nationwide building trends and consumer preferences in the maturation of the single-family house in America. Living For Young Homemakers was a nationwide publication that exerted considerable influence on building trends and home fashion. The Living-Conditioned Homes in Northridge are a significant example of residences executed under the auspices of a prominent campaign championed by the magazine to demonstrate rapidly evolving technology, particularly the adaptation to electricity as a primary means of household services. Of the four individual Living-
Conditioned homes awarded through the Hotpoint anniversary promotion in 1955, the Knoxville, Tennessee location has been listed on the National Register of Historic Places. The Living-Conditioned Homes in Northridge were illustrative of the culmination of the building campaign, claiming the publication’s top prize in 1958 and advertisements dubbed the award-winning development “the west’s most honored homes.” The praise for the project delivered in the January issue of that year was accompanied by an introduction that applauded the progress made through the Living-Conditioned initiative in the four years since its inception. Recognition for the tract was also given by the trade publication American Builder, as the design was submitted to the Top Model Home Contest associated with the National Home Building Association’s National Home Week for 1957.

The accolades received by this development are in large part due to the association with acclaimed architects Dan Saxon Palmer and William Krisel. The firm was dedicated to working with builders to break barriers between Modernism and suburban living for middle-class America following World War II. After years of experimentation to discover a viable model for delivering Modernism to the masses, the firm of Palmer and Krisel emerged as a leader. In their interpretation of the Living-Conditioned campaign’s directives, the houses they designed exemplified the best in contemporary living and satiated buyers looking to graduate to a more refined postwar home. Exterior features such as the butterfly roof and repetitive decorative masonry walls demonstrate the architecturally progressive nature of this development in comparison to most of the more traditional tract housing of the era. (Figure 5.5) Palmer and

Figure 5.5: There is an immediate distinction between the Living-Conditioned subdivision and the neighboring parcels that feature Traditional Ranch houses. Courtesy of Google Street View. Accessed April 2016.
Krisel completed thousands of single-family houses in the San Fernando Valley, as the population demanded rapid expansion to the northern-most borders of the City of Los Angeles. Living-Conditioned Homes are among the most distinctive work by the firm in the Los Angeles region and the tract appears to retain the highest level of integrity of their developments in the Valley.

Lastly, Living-Conditioned Homes serve as an effective example of residential development patterns and architectural trends in mid-20th century America. The neighborhood is an asset in understanding an explosive period of growth in local and regional history, as well as the nationwide influence of California’s cultural appeal, affinity with the Ranch house and its architectural variants rooted in Modernism.

**Integrity Analysis**

The fifty-four parcels of the subdivision that contain the Living-Conditioned Homes are situated to the northeast of the intersection of Reseda Boulevard and Devonshire Street, south of San Jose Street and west of Etiwanda Avenue in the San Fernando Valley community of Northridge in the City of Los Angeles. The single-family residences are single-story and each situated on a rectangular lot. The residences are distributed across two tracts subdivided and developed by Sanford D. Alder’s Investment and Building Corporation beginning with Tract #21188 in July 1957, followed five months later by Tract #23812. The area studied has an irregular eastern boundary due to exclusion of specific properties within Tract #23812 that were not part of the Living-Conditioned development, which includes fourteen houses planned for phase two of Living-Conditioned, but never realized. Those parcels and the remainder of Tract #23812 were built out after Living-Conditioned Homes and contained houses designed in more traditional Ranch styles.

In-depth integrity analysis completed in a University of Southern California School of Architecture graduate level course for advanced historic site documentation revealed sixty percent of the properties retain sufficient integrity. Twelve properties were contributors, while nineteen were altered contributors with varying degrees in severity of alterations. Twenty-four
properties were considered non-contributors, with two of those altered beyond recognition and excluded from the district. (Figure 5.6) Further discussion about this boundary justification is discussed in the following section. The integrity analysis was based upon the character-defining features of the primary facade outlined in Table 5.1. The most common alterations to properties are the enclosure of carports, breezeways and patios for interior space. If additional square footage is added sensitively, without altering the carport roofline or pitch of the main roof with a side addition, the property maintains a fairly high level of integrity. Most commonly for this tract, enclosure of the breezeway is not visible from the primary facade because of an original patio wall that links garage and house. Any roofline alterations, including those that serve to shelter additions that protrude from the primary elevation, are often less sensitive and substantial cost is involved in restoration. The second-most challenging issue with regard to reversibility is alteration of the fenestration pattern. The addition of window or replacement doors or windows that alter the size of the openings generally have a significant impact on integrity. If the windows

<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Post-and-beam construction</td>
</tr>
<tr>
<td>• Single-story</td>
</tr>
<tr>
<td>• Site location that allows for generous rear yard</td>
</tr>
<tr>
<td>• Flat or “butterfly” roofs with wide eaves and sun flaps (w/ scored stucco finish)</td>
</tr>
<tr>
<td>• Textured concrete block or stone masonry cladding, garden or entry partitions and chimneys</td>
</tr>
<tr>
<td>• Vertically grooved wood cladding and patio walls connecting garage or carport</td>
</tr>
<tr>
<td>• Front patio enclosures made of wood panels with thin, vertical battens</td>
</tr>
<tr>
<td>• Clerestory windows</td>
</tr>
<tr>
<td>• Jalousie windows with an aluminum sash</td>
</tr>
<tr>
<td>• Floor-to-ceiling fixed glass panels paired with Jalousie windows (aluminum sash)</td>
</tr>
<tr>
<td>• Limited fenestration on the primary facade</td>
</tr>
<tr>
<td>• Solid-core slab door (single or paired) with transom and sidelight(s)</td>
</tr>
<tr>
<td>• Carport or garage with single board-and-batten door</td>
</tr>
</tbody>
</table>
or doors have been replaced, but the original fenestration pattern is intact, it is often categorized as a reversible alteration. Figure 5.7 and Figure 5.8 compare fenestration with the original glass and replacement windows that are set within thicker casings. Properties exhibit frequent removal of jalousie windows and the infill of sidelights surrounding the primary entrance. The addition of garden windows, even if within an unaltered opening, are generally inappropriate and have a more intense visual impact. Non-original garage doors or installation of garage doors in existing carport openings are treated similarly. As long as the opening is not altered, it is considered reversible and the property is categorized as an altered contributor. Lastly, insensitive cladding often negatively affects the appearance of the primary facade, but in most cases, reversal is economically viable. Many houses have had stucco applied where original wood siding once existed. Much of the original masonry features, stone and concrete block, are intact. The cumulative impact of changes, even if considered reversible, can lead to non-contributing status. For example, if a carport is enclosed for interior space, the entrance door is replaced, and a
Figure 5.7: Model A residence featured in the January 1958 issue of *Living For Young Homemakers*. January 1958. Courtesy of University of Southern California Library Collections.

Figure 5.8: Primary facade of Model A located on Devonshire Boulevard. This is an altered contributor due to window replacement. Photo by author. March 2016.
portion of the original cladding material on the primary facade is removed, the property may no longer contribute to the overall feeling of the unified appearance of the tract.

**Reflections**

The conditions outlined in the above integrity analysis is consistent with the approach commonly used for evaluation of historic residential neighborhoods. Specific integrity assessment and conservation issues pertaining to postwar residential tracts deserve further study and there are several useful examples in analysis of the Living-Conditioned tract. First, the district boundary creation for Living-Conditioned Homes examines the distinction between Modern residential tracts from surrounding residential neighborhoods. Secondly, assessment of the Living-Conditioned Homes highlights the importance of differentiating between tract house variants to better understand the results of short-term strategies used to rapidly fulfill the housing shortage versus pockets of residential tracts that offered Modernism to the masses. Thirdly, understanding the motivations behind common alterations aids in assessing the vulnerability of features, in addition to providing valuable information for homeowner outreach. Lastly, exploring a points-based integrity model, introduced in the Balboa Highlands chapter, aims to attenuate subjectivity when assessing repetitive resources that comprise a residential tract.33

Pre-war subdivisions consisted of lots individually developed or constructed by a builder only capable of producing a few units a year. Postwar residential tracts were often developed in a short period of time by a single developer or development team and included dozens, if not hundreds, of single-family dwellings. The repetitive housing within the tract is unified by character-defining features and can be associated with a lifestyle marketing campaign, such as for the Living-Conditioned subdivision. Therefore, an issue arises in determining district boundaries and whether or not to always include all the parcels that were originally developed as part of the tract, even those properties that may be altered beyond recognition and no longer represent the unified concept of the development. In the Living-Conditioned Homes, there were two properties that were unrecognizable (although the permit records indicate that the residences have not been replaced with new construction). Given the placement within the tract,
consideration for whether these properties should be removed from the district in order to improve the percentage of contributors to the potential HPOZ. By removing two of the fifty-four parcels from the equation, sixty percent of the properties are contributors compared to fifty-seven percent with their inclusion. Those three percent points could be crucial to designation as an HPOZ due to the contributor minimum of sixty percent generally used by the City. This type of strategy, while it benefits the case for conservation of this potential district, raises questions about the precedent it sets in creation of future districts of Modern residential housing that was designed and marketed using a holistic approach. As seen with the Balboa Highlands district boundary, exclusion results in loss of control over future development and abandons the developer’s original vision. It is a common strategy assessment of historic residential districts to exclude properties in prewar suburbs and the determination is warranted in the case of Living-Conditioned because the properties have been altered to the point that they can no longer be associated with the tract and insensitive development has already occurred on the parcels. (Figure 5.9)

Differentiation between postwar residential tract house types becomes necessary with the introduction of a prominent architect in order to provide fair integrity analysis. The examples of Modern tract developments are more rare than the Traditional Ranch or Minimum House. The design is often well-considered, with less emphasis on adaptability, and showcases progressive concepts in space planning, technology, and innovative application of materials and finishes. The

Figure 5.9: Two properties from the original tract have been altered beyond recognition. Location of these two properties allow for exclusion from the proposed HPOZ. Photos by Christy Kim. March 2016.
Living-Conditioned Homes are not custom residences, nor are they minimum houses subject to the same adaptation of houses in such places as Levittown or Lakewood. They are a hybrid of high-design and tract house associated with an architect, yet homeowners generally did not seek guidance of a design professional for alterations. Homeowners fulfill their needs with limited consultation from a residential contractor or opt for a “do-it-yourself” approach. Further understanding of the variants of residential tracts and the motivators behind alterations can aid researchers in developing realistic goals to create a consistent approach to integrity analysis of Modern residential tracts. It remains unclear, due to the limited designation of Modern residential districts to date, the severity of change that is acceptable to qualify for application of conservation tools in potential historic districts. The answer lies somewhere between treatment of Modern tracts solely as a cultural landscape versus analysis as an individual Modern residential resource.

Understanding motivators behind alterations can assist in analysis of the repetitive features that contribute to integrity in a Modern residential tract. Defining these motivators helps determine the vulnerability of character-defining features, distribute significance accordingly, and identify opportunities to manage change. Motivators can generally be divided into three categories for residential properties: privacy/security, spatial adaptation, and consumer decision-making. Privacy and security typically result in reversible alterations such as security bars on windows or exterior doors, in addition to erection of fencing to shield the primary facade. This is more frequent along traffic-congested corridors and for properties adjacent to commercial development. While these features can detract from the overall integrity of the neighborhood, the building integrity remains unchanged. Irreversible alterations are more common with spatial adaptation, such as the infill of exterior patio and breezeway spaces or the enclosure of carports and garages. This is a consistent change seen in the Living-Conditioned tract, where the majority of properties have either replaced an existing garage door, added a garage door to a carport or converted the carport/garage to increase square footage. Of the properties that feature carports visible from the street at the time of this study, seventy-eight percent opted to enclose or add a door to the carport. (Figure 5.10) Additionally, patio and breezeway conversions for interior space is common. The residence featured in the January 1958 issue of *Living for Young*
Homemakers, includes a plan view (Model A) that labels the garage as a family room and a dining area is designated in the typical location of the family room in the brochure plan for Model A. (See Figure 5.4) This was perhaps a merchandising design to showcase flexibility of the plan, but Krisel never intended for the carports or garage conversions. Nonetheless, this alteration has been frequent and few homeowners are likely to reverse it. The overall impact on the integrity of the tract must be assessed while recognizing that spatial adaptation is a need that arose in the living requirements of the tract house in the latter half of the twentieth century. The outstanding question remains as to the effect this prevalent, but detrimental, alteration has on the overall integrity of the Modern residential tract. Though it is unlikely that an owner would reverse this, the data from existing historic resource surveys the properties are consistently categorized as contributors.

The impact of consumer decision-making on Modern residential tracts is more complex and requires two subcategories to aid in understanding homeowner motivations. Degradation of materials, including accessibility to vendors and information about materials conservation,
certainly threatens integrity for homeowners wishing to maintain their property and deserves continued study to provide answers for postwar resources. Perceived value, rather than maintenance, poses a more immediate threat to the integrity of Modern tract housing. Character-defining features, such as the primary entrance door, are commonly threatened by the desire to “upgrade” a property. This aesthetic motivator has resulted in forty-three percent of residences in the Living-Conditioned tract having an altered opening to accommodate a replacement for the primary entrance door. An additional fifteen percent have replaced the front door in the original opening, resulting in more than half of the residences having succumbed to this alteration. The majority of inappropriate replacements reflect an attempt to achieve a more traditional aesthetic or may have been the result of limited product availability, but generally indicate a limited understanding about the pedigree of the property. In contrast, misguided reinvestment can also be attributed to a revival of the mid-century Modern aesthetic that has been cultivated over the last two decades by the architecture and design community and perpetuated through popular culture in recent years. *Dwell Magazine* and *Atomic Ranch* are both recent nationwide shelter publications that have contributed to renewed interest in Modernism and the Ranch house, respectively. The style has also been filtered through film and television, most notably the AMC television series *Mad Men*. Availability of Modern furnishings through the retailer Design Within Reach, founded in 1998, successfully revived mid-twentieth century design icons, and countless other manufacturers and retailers followed suit. This reinterpretation has produced a homogenized version of Modernism, where young families or upwardly mobile professionals gravitate toward attainable housing in suburban areas such as the San Fernando Valley and execute inappropriate alterations to conform to trends. They also often have the financial resources available to quickly enact change in comparison to the residents they replace. While the intent that inspired this reinvestment is respectable, without proper guidance these homeowners will quickly erode the integrity of the tract. Figures 5.11 and 5.12 show an example of a recently remodeled property in the Living-Conditioned tract. The collective impact of the alterations conforms to a mid-century Modern aesthetic, but are not honest to the original design concept and threaten the property’s contributor status. Changes include replacement of stone masonry and wood cladding on the primary facade in favor of a white brick veneer. The pitch of
Figure 5.11: In 2012, the residence at 18357 Hiawatha Street would have likely been a contributor to a historic resources survey. A remodel compromised the integrity of the property. Image courtesy of Google Maps Street View. Accessed 2016.

Figure 5.12: Recent alterations to a Model B2 (reversed) residence at 18357 Hiawatha Street include replacement cladding and the addition of a glass entry and carport. Photo by Sean Morales. March 2016.
the roof is maintained, but is extended forward with the addition of a carport. The original front entrance is enclosed by glass privacy panels, and the integrity of the fenestration pattern is no longer visible. These alterations significantly change the character of the primary facade. This remodel likely reflects a combination of motivators, privacy and spatial alteration included, but is mostly driven by consumer decision-making in an attempt to achieve a synthesized version of Modernism aligned with current design trends. These properties often challenge surveyors because the alterations, while obvious with close examination, are highly considered and generally not offensive.

**Points-Based Methodology**

Challenges with the analysis of repetitive features in a large number of resources, such as Modern residential tracts, present an opportunity to explore alternate methodologies that help limit subjectivity. I created a points-based model inspired by the methodology for the creation of historic districts of Eichler’s northern California developments, introduced in the last chapter, to evaluate the Living-Conditioned tract and further explore this analytic method. In this model, each character-defining feature used for evaluation criteria received a numerical value. The value of each feature was weighted based on prominence of the feature on the primary facade and accounted for reversibility of non-historic alterations and additions. If all character-defining features were present, a property received a total of 100 points. Above seventy points, a property was considered a contributor. Properties between forty and seventy points were categorized as an altered contributor. If a property received fewer than forty points, it was considered a non-contributor. The systematic approach to analyzing field data intends to increase consistency in rating the impact of alterations and reduce bias. In this model, seven properties shifted categories from non-contributor to altered contributor. Additionally, two properties that were considered altered contributors, were recategorized as non-contributors. With these status changes, the contributor percentage for the district increased to sixty-nine percent. Property status maps using the points-based model compared to the results manually determined by the group coursework completed in Advanced Site Documentation are included in Appendix D, along with the Excel
spreadsheet that was used for calculations. Each of the properties had diverse reasons for the property status category shift, but an example is given in Figure 5.13 to better understand the change. Although many of the character-defining features of the residence are present, the carport addition on the primary facade negatively affected the research’s opinion of integrity. However, the points-based model found the alteration less severe in comparison to other additions in the tract. While the carport is a significant alteration, further evaluation indicates that enough integrity is present to consider this status change. A points-based model provides a way to identify properties on the cusp of a particular category, which allows for comparison to aid the researcher in a final determination of property status.

The map was created using ArcGIS software, which has proven to be a valuable tool for managing the built environment. In a creation of a historic district, it is often utilized for maps to visualize boundaries and color-code property status. I recognized an opportunity to further explore an objective model, like the points-based methodology outlined above, to provide visualization of the field data to assist in the evaluation process. Benefits include the ability to isolate individual character-defining that produces data sets to aid in evaluation. Severity and frequency of alterations and rarity of particular features can be determined. Visualization of the data shows the location of alterations throughout the tract and provides an overall snapshot of conditions for each character-defining feature. For example, isolating roofline alterations shows

Figure 5.13: This property was considered a non-contributor, but changed to the altered contributor category in the points-based model. Photo by Christy Kim. March 2016.
that forty-one percent of properties have rendered the original profile unrecognizable. Eleven percent have significantly altered the original pitch or extended the roofline to accommodate a front addition.

Closer examination of materials, such as historic masonry, using the points-based methodology and visualization tool, allow for severity of alterations and reversibility to be objectively factored into the evaluation. Points can be weighted to account for rarity of a feature and differentiate between cladding materials that are easier to restore, such as stucco or plywood. Location visualization also allows for the researcher to effectively measure the presence of materials that contribute to the overall integrity of a particular street and/or the tract as a whole.

This methodology is particularly effective because of the repetitive character-defining features of the Modern residential tract and quantity of resources. In working with larger data sets, the approach provides an objective way to process dozens or hundreds of properties. Further exploration of a points-based methodology combined with ArcGIS technology could provide a viable model for integrity analysis of other postwar residential tracts and produce data to aid in long-term management of historic districts.
Chapter Five Endnotes


3 Ibid., 165.


14 Ibid., 66-67; 94-96.


20 “A Message From the Builder,” *Living-Conditioned Homes Sales Brochure*, 1957. Parvin was a well-known interior designer would had worked with Adler previously on the Flamingo Casino in Las Vegas, as well as other hotels on “The Strip.”


22 William Krisel AIA, In conversation with the author, October 3, 2016. Adler visited Palm Springs to view Palmer and Krisel’s butterfly roofs implemented for Alexander Homes (built the same year) before deciding that the style was a good fit for the San Fernando Valley.


31 “A Quick Look at 28 Award-of-Merit Winners,” American Builder, December 1, 1957, 68.

32 Generally, the City of Los Angeles requires a minimum of sixty percent for creation of a Historic Preservation Overlay Zone (HPOZ).

33 The strategy used by the Historic Quest Committee in evaluation of Eichler Homes is outlined in the Balboa Highlands chapter.


36 See Balboa Highlands chapter for more detailed analysis of garage doors and garage and carport conversions.


Conclusion

The postwar suburban landscape of the San Fernando Valley reflects an unprecedented period of growth in America. Significance is evident in its demonstration of patterns of residential development and association with notable architects searching for approaches to effectively house the nation. SurveyLA has made great strides in identification of residential tracts eligible for designation, but more extensive outreach and analysis are needed to activate communities and apply the HPOZ tool. It is essential to move forward with recognition that an established case for significance is only part of a successful conservation strategy. This study explored approaches to intensive-level survey work to assist with HPOZ designation of the postwar residential tract. Integrity issues and district boundary justification were examined, a points-based methodology was introduced, and long-term planning challenges following HPOZ designation were exposed. The strategies suggested in this research aim to contribute to development of a nationwide model for integrity analysis and promote conservation of the postwar residential tract, particularly those composed of Modern residences, in the San Fernando Valley and nationwide.

As the primary area of focus on this study, a summary of past and present demographic data for the San Fernando Valley highlights the potential for conservation tools to guide change for the mature suburban landscape. Development of the master-planned community of Porter Ranch, beginning in 1962, represented the final frontier for large-scale residential construction in the San Fernando Valley. By the end of the 1960s, the San Fernando Valley was saturated with suburban development:

Most of the homes in the Valley are relatively new and attractive. More than half have been built in the past ten years. They tend to be larger and higher in value than the County average. Many have outdoor barbecues and patios. And private swimming pools are far more prevalent than in other sections of the Los Angeles area.

While there has been stability in the half-century that followed, demographic indicators suggest a need for guidance as the housing stock continues to age. In 1967, two-thirds of the population...
owned their house and the median value was higher than the county average. Less than four percent of homes were valued at less than $10,000, while the countywide percentage was more than double, demonstrating that new construction had a positive effect on property value. In 1967, the total population was 850,591 and the majority of residents were members of white, nuclear families. Thirty-six percent of the population was under the age of eighteen and there were few senior residents.

The demographics have changed significantly since the mid-twentieth century. The population has grown to nearly 1.5 million and racial distribution consists of 41.1% white, 42.6% Latino, 8.7% Asian, and 4% black. Nearly half of all residents currently rent their residential property. Catalysts are in place for these demographics and the economic climate to impact the built environment. Development pressures will likely intensify as Los Angeles struggles with housing costs and seeks to attain higher density. Threats such as mansionization will continue to press northward, as more affordable housing alternatives are sought. Property values climb and the desire for more land for less money shifts attention outward. As the potential for a fresh cycle of re-investment begins in postwar suburbs, heritage conservation tools can be used to guide

change in Modern residential tracts of the San Fernando Valley, support a diverse population, and secure the stability of this important region within the City of Los Angeles and Southern California megalopolis.  

The scale of the San Fernando Valley and sheer quantity of resources represent a monumental task in the collection and evaluation of field data regarding alterations of individual property parcels and the cumulative impact to the whole. SurveyLA is a powerful tool that provides the context needed to develop a holistic approach for conservation of the Valley’s suburban landscape. Balboa Highlands should not be the only postwar residential tract designated, and while the Historic-Cultural Monument designation of a single house in Corbin Palms had good intent, the strategy should not be a model for the conservation of residential tracts. “As in any historic district, the whole is greater than the sum of its parts, but here the whole is a landscape, broadly defined, that includes much more than a collection of buildings,” Longstreth writes. The totality of residences within a tract demonstrate their significance, and in most cases, the relationship of educational, religious, recreational, and commercial components should also be considered in an effective conservation model.

**Integrity Assessment Considerations**

The primary goal of this research was to present integrity analysis considerations that guide future HPOZ creation. Each case study presented highlighted issues associated with analysis of repetitive features of the postwar residential tract and the unified design concept. Determining a threshold for integrity for individual resources can present challenges, particularly for the spatial and aesthetic characteristics of the Modern tract. The differentiation of tract house types should inform this tolerance for adaptability. While the Minimum House of the immediate postwar period, and later the Minimal Ranch, is seen as customizable, the Modern residential tract is not as flexible. Assessment of non-historic alterations and additions will improve with a continued effort to understand modularity of construction methods and materials leveraged by architects searching for a profitable model for builders. Material specification, such as sizes of pre-finished panels, may have informed construction, room size and spatial arrangements and
special consideration should be given for the effect these selections have on the primary facade. As seen with the four-foot module of the Gregory Ain Mar Vista Tract, this knowledge can assist with integrity assessment of existing additions and development of guidelines for proposed additions.

Inexpensive materials were often used, such as concrete block, plywood, and board-and-batten paneling, to create visually interesting facades and interior finishes. (Figure 6.2) Honoring the simplicity of the original materials is essential, but there is much to reflect upon about materiality in the Modern tract house. Examples in this research have shown conservation approaches may benefit from evaluation that emphasizes the significance of spatial arrangement over authenticity of materials. The presence of original interior features, such as atriums and secondary facades of floor-to-ceiling glass, are critical to integrity in the Modern tract and alterations are often difficult to reverse. Restoration of inexpensive materials, such as the

plywood cladding in the Balboa Highlands example, are economically viable to restore. More examples of this balance between materials and spatial integrity should be explored in future integrity analysis models.

Tolerance for adaptability of the individual property will always inform the overall integrity of a district, but the importance of the collective presentation of residences in a Modern postwar tract are particularly pronounced. Archival research often reveals detailed specifications by the architect who viewed the development as a whole product and adhered to not just a style, but a rather strict design language that determined spatial relationships and aesthetic. The lack of ornamentation amplifies the importance of subtle details such as proportions and color and finish of materials. These details can play a critical role in integrity assessment and rehabilitation strategies for this reason, as they were a significant part of the total design concept. The limitations of the HPOZ are evident in that only the primary facade can be accessed for evaluation and regulated in the Preservation Plan, yet researchers should be informed of these detailed specifications that defined every aspect of the property.

The emergence of “homogenized Modern,” which muddles these original design concepts, also needs to be addressed in integrity assessment. This reinterpretation of the period, collectively dubbed “mid-century Modern,” celebrates the essence of Modernism with little acknowledgement of the varied philosophies of the period or historical reference for the progression of single-family housing throughout the second half of the twentieth century. For example, horizontal bands of redwood are introduced as cladding or fencing and original materials, such as rock masonry, are often sacrificed in the process. The residences featured in Figure 6.3 and Figure 6.4 in Palmer and Krisel’s Marlborough Palms tract are an example of this impact. Residents also attempt to “restore” features by installing stainless steel exterior lighting or house numbers, or adding powder-coated mailboxes in a variety of colors. Original wood garage doors are replaced with glass versions as owners seek to differentiate their Modern house by rejecting more traditional offerings found at local home improvement stores when adding an electric opener. These types of alterations will inevitably weaken the case for significance of historic residential tracts if investment is not guided and integrity continues to erode through removal of original materials.
Figure 6.3: Homogenized Modern often includes slats of horizontal wood for fencing and cladding. Marlborough Palms by Palmer and Krisel. Photo by author. November 2016.

Figure 6.4: Original materials intact on the same model in Marlborough Palms as Figure 7.3 Photo by author. November 2016.
These types of alterations to historic resources are not exclusive to the San Fernando Valley. In the Modern residential tract of Cliff May Homes Rancho Estates (1953-54) in Long Beach, a recent sale resulted in significant change to the dwelling’s street presence. (Figure 6.5 and Figure 6.6) The same type of wood fencing seen in Marlborough Palms is accompanied by a brightly colored metal and glass gate. A stainless steel exterior light and numbers complete the owner’s desired upgrades, but the alterations show little sensitivity for the ethos of Cliff May’s casual lifestyle concept. The homogenized Modern aesthetic poses a challenge to integrity assessment, as seen with these examples and the renovated example in Living-Conditioned Homes, and the precedent set in initial integrity analysis will also influence long-term planning of the HPOZ. (see Figure 5.12) If houses with a homogenized Modern aesthetic are considered contributors, property owners seeking alterations may argue that continued use of incompatible materials is permissible. This muddled aesthetic will only undermine the unique characteristics

Figure 6.5: A Modern tract house in the Cliff May Ranchos of Long Beach exhibits the majority of character-defining features that contribute to its integrity. Photo by author. March 2015.
of the Modern residential tracts, such as Living-Conditioned tract, unless a consistent approach is implemented for integrity analysis and conservation goals.

**Summary of the Points-Based Methodology**

Further examination of the points-based methodology and ArcGIS data management used for analysis of the Living-Conditioned tract can produce a refined model to manage field data and address challenging integrity issues. As shown in the results of this study, the percentage of contributors improved using the analytical method. This was likely due to the reaction of researcher bias and equitable treatment when evaluating a large number of resources with repetitive features. This methodology could be particularly effective in evaluation of a property that exhibits alterations of a homogenized Modern aesthetic, which are especially vulnerable to subjectivity. As the data is concatenated to reveal conditions in a tract, visual representation of

---

Figure 6.6: The same Modern tract house as above, two years later, features a reinterpretation of the mid-century style with horizontal fencing and a steel and glass gate, representing common alterations in the tract. Photo by author. January 2017.
field data can isolate features for detailed examination. This approach can be useful for not only unbiased integrity assessment, but assist with development of conservation strategies that contribute to the execution of the HPOZ Preservation Plan.

**Long-term planning**

There are indicators that some of the challenges for conservation of residential tracts may begin to subside. Appreciation wains for resources between thirty-five to fifty years of age and postwar resources have suffered as they long existed in that age frame, but respect for the mid-century Modern aesthetic has grown exponentially in recent years and will likely continue. As original owners leave behind properties that need a steward, the likelihood is higher that new owners seeking out a house with a mid-century pedigree will at least have a general understanding of its significance, but guidance for the homeowner will be crucial. The trend of “bigger is better” is finally reversing, following decades of the size of the American house increasing 138 percent since the 1950s. The modest square footage of the mid-twentieth century house, which averaged 1,000 square feet, may experience fewer insensitive additions than in previous decades. There is an opportunity to guide re-investment and spur additional interest in Modern residential tracts, as seen with the recovery efforts in Balboa Highlands, but educational forums such as the Eichler Network and the research center for the Gregory Ain Mar Vista Tract are needed. As with any historic property, residents need resources for restoration methods and access to replacement materials as properties age. Differentiation between postwar residential tract styles is essential and accessibility to original specifications can guide consumer decision-making to minimize the long-term impact to integrity. Opportunities to learn from the application of the HPOZ tool in Los Angeles’ initial attempts at regulation of a Modern residential tract can help guide creation of future postwar residential HPOZs.
Final Recommendations

The case studies presented in this research aimed to strengthen conservation efforts in the San Fernando Valley and contribute to a nationwide model for integrity assessment of the postwar residential tract. This snapshot of conditions in the San Fernando Valley, integrity issue considerations for the postwar residential tract and presentation of a points-based methodology will hopefully ignite further study and conservation efforts. As demonstrated in the Living-Conditioned tract, many of the historic resources in eligible districts and the cultural landscape of postwar suburbia are at a critical point for conservation.

There are aspects of the suburban landscape that were only briefly touched upon or excluded and further research would be beneficial to conservation efforts. Among these issues are the impact of alterations that attempt to address environmental concerns, such as solar panels and drought-tolerant landscape. As seen in the Gregory Ain Mar Vista Tract, proactive solutions for landscape issues will strengthen long-term integrity. The demographic data presented in this conclusion can also help guide change to a landscape that will demand cultural flexibility as diversity increases in suburban America.13

There is no shortage of challenges ahead for conservation of the postwar suburban landscape. Particularly, the finite number of resources that represent Modern residential tracts are at risk. In recent years, a continually growing body of scholarship has contributed to a solid case for significance, while planning and design initiatives are simultaneously identifying opportunities for growth and change in suburbia. The field of heritage conservation must work to reconcile the desire for progress with a strong integrity assessment model and implementation of the HPOZ tool based on SurveyLA results available for the San Fernando Valley to ensure a tangible link to the rich legacy of twentieth-century suburban development.
Conclusion

1 Roderick, 121; Porter Ranch was the final frontier in residential development in the early 1960s. Compared to land value of $53/acre in Van Nuys in 1909, land in Porter Ranch was purchased for $4,819/acre; “Mapping Los Angeles: San Fernando Valley,” Los Angeles Times, Accessed October 14, 2016, http://maps.latimes.com/neighborhoods/region/san-fernando-valley/. Porter Ranch is still the wealthiest area of the San Fernando Valley, while Van Nuys is the least.


3 Ibid.

4 City of Los Angeles, Planning Background for the San Fernando Valley (1967), 13. This data reflects only the City of Los Angeles and excludes the City of Burbank. Median home value was $18,000. $2,200 more than the county average. Twenty-one percent of residences were worth more than $25,000 (compared to 15.4% countywide).

5 Mexican (6%) and 1% black (22% of Pacoima population), 51% Asian in Pacoima in 1960 census. Ibid., 13.

6 Ibid., 11.


8 Longstreth, 57.

9 Ibid., 51.

10 Ibid., 55.

11 Ibid., 55.


Bibliography


City of Los Angeles, Department of City Planning. Planning for the San Fernando Valley. 1945.


Longwell, Todd. "The history toys: historic Los Angeles houses are out there for the buying, but preserving them is a two-edged sword." Hollywood Reporter. 19 Feb. 2010: 24.


Appendix A:

How Residential Suburbs Meet the National Register Criteria For Evaluation


Criterion A

• Neighborhood reflects an important historic trend in the development and growth of a locality or metropolitan area.
• Suburb represents an important event or association, such as the expansion of housing associated with wartime industries during World War II, or the racial integration of suburban neighborhoods in the 1950s.
• Suburb introduced conventions of community planning important in the history of suburbanization, such as zoning, deed restrictions, or subdivision regulations.
• Neighborhood is associated with the heritage of social, economic, racial, or ethnic groups important in the history of a locality or metropolitan area.
• Suburb is associated with a group of individuals, including merchants, industrialists, educators, and community leaders, important in the history and development of a locality or metropolitan area.

Criterion B

• Neighborhood is directly associated with the life and career of an individual who made important contributions to the history of a locality or metropolitan area.

Criterion C

• Collection of residential architecture is an important example of distinctive period of construction, method of construction, or the work of one or more notable architects.
• Suburb reflects principles of design important in the history of community planning and landscape architecture, or is the work of a master landscape architect, site planner, or design firm.
• Subdivision embodies high artistic values through its overall plan or the design of entrance ways, streets, homes, and community spaces.

**Criterion D**

• Neighborhoods likely to yield important information about vernacular house types, yard design, gardening practices, and patterns of domestic life. In certain cases, a single home or a small group of houses in a residential subdivision may be eligible for National Register listing because of outstanding design characteristics (Criterion C) or association with a highly important individual or event (Criterion A or B).
Appendix B:

Seven Aspects of Integrity


Location

Location is the place where the historic property or district was constructed or the place where the historic event occurred.

Design

Design is the combination of elements that create the form, plan, space, structure, and style of a property or district.

Setting

Setting is the physical environment of a historic property or district, constituting topographic features, vegetation, manmade features, and relationships between buildings or open space.

Materials

Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property or district.

Workmanship

Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.

Feeling

Feeling is a property’s or district’s expression of the aesthetic or historical sense of a particular period of time.
Association

Association is the direct link between an important historic event or person and a property or district.
Appendix C:
Eligible Historic Districts in the San Fernando Valley (1945-1970)


<table>
<thead>
<tr>
<th>Name</th>
<th>Area</th>
<th># of Resources</th>
<th>Integrity</th>
<th>Subdivision Date(s)</th>
<th>Construction Date</th>
<th>Neighborhood Type</th>
<th>Architectural Style</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joe Louis Homes Residential Planning District</td>
<td>Arleta-Pacoima</td>
<td>93</td>
<td>n/a</td>
<td>1950</td>
<td>1950</td>
<td>Tract</td>
<td>Minimal Traditional</td>
</tr>
<tr>
<td>Melrose Avenue Residential Historic District</td>
<td>Canoga Park-Winnetka-Woodland Hills-West Hills</td>
<td>11</td>
<td>0.73</td>
<td>1926</td>
<td>1955-56</td>
<td>n/a</td>
<td>Traditional Ranch</td>
</tr>
<tr>
<td>Rumbaugh-Hamblen Residential Historic District Extension</td>
<td>Canoga Park-Winnetka-Woodland Hills-West Hills</td>
<td>37</td>
<td>0.76</td>
<td>1955</td>
<td>1954-57</td>
<td>n/a</td>
<td>Traditional Ranch</td>
</tr>
<tr>
<td>East Woodland Hills Estates Historic District</td>
<td>Canoga Park-Winnetka-Woodland Hills-West Hills</td>
<td>152</td>
<td>0.7</td>
<td>1950</td>
<td>1954-59</td>
<td>Neighborhood</td>
<td>Traditional Ranch</td>
</tr>
<tr>
<td>Calabasas Otterden Residential Historic District</td>
<td>Canoga Park-Winnetka-Woodland Hills-West Hills</td>
<td>32</td>
<td>0.88</td>
<td>1949 and 1955</td>
<td>1949-59</td>
<td>Neighborhood</td>
<td>Traditional Ranch</td>
</tr>
<tr>
<td>Eastwood Estates/Foxhillstone Series Historic District</td>
<td>Canoga Park-Winnetka-Woodland Hills-West Hills</td>
<td>36</td>
<td>0.55</td>
<td>1953-54</td>
<td>1955</td>
<td>Tract</td>
<td>Mid-Century Modern</td>
</tr>
<tr>
<td>Corbin Palms Planning District</td>
<td>Canoga Park-Winnetka-Woodland Hills-West Hills</td>
<td>300</td>
<td>n/a</td>
<td>1953-54</td>
<td>1953-55</td>
<td>Tract</td>
<td>Mid-Century Modern</td>
</tr>
<tr>
<td>Westridge Park Historic District</td>
<td>Canoga Park-Winnetka-Woodland Hills-West Hills</td>
<td>388</td>
<td>0.82</td>
<td>n/a</td>
<td>1957-58</td>
<td>Tract</td>
<td>Traditional and Contemporary</td>
</tr>
<tr>
<td>Woodside Historic District</td>
<td>Encino-Tarzana</td>
<td>164</td>
<td>0.84</td>
<td>n/a</td>
<td>1959</td>
<td>Tract</td>
<td>Contemporary Ranch</td>
</tr>
<tr>
<td>Kingswood Historic District</td>
<td>Encino-Tarzana</td>
<td>66</td>
<td>0.82</td>
<td>1951</td>
<td>1951-55</td>
<td>Tract</td>
<td>Contemporary Ranch</td>
</tr>
<tr>
<td>Devonshire Country Estates Residential Historic District</td>
<td>Chatsworth</td>
<td>157</td>
<td>0.8</td>
<td>1956-57</td>
<td>1956-64</td>
<td>Neighborhood</td>
<td>Traditional and Contemporary</td>
</tr>
<tr>
<td>Devonshire Highlands Residential Historic District</td>
<td>Chatsworth</td>
<td>111</td>
<td>0.81</td>
<td>1955-56</td>
<td>1955-64</td>
<td>Neighborhood</td>
<td>Traditional Ranch</td>
</tr>
<tr>
<td>Northridge West Residential Planning District</td>
<td>Chatsworth</td>
<td>106</td>
<td>n/a</td>
<td>1955</td>
<td>1955-56</td>
<td>Tract</td>
<td>Mid-Century Modern</td>
</tr>
<tr>
<td>Encino Woods Residential Historic District</td>
<td>Encino-Tarzana</td>
<td>109</td>
<td>0.77</td>
<td>1947</td>
<td>1947-52</td>
<td>n/a</td>
<td>Traditional and Minimal Ranch</td>
</tr>
<tr>
<td>Hayworth Drive Residential Historic District</td>
<td>Encino-Tarzana</td>
<td>56</td>
<td>0.64</td>
<td>1952</td>
<td>1953-57</td>
<td>n/a</td>
<td>Traditional Ranch</td>
</tr>
<tr>
<td>Melody Acres Residential Planning District</td>
<td>Encino-Tarzana</td>
<td>313</td>
<td>n/a</td>
<td>1924</td>
<td>n/a</td>
<td>Neighborhood</td>
<td>n/a</td>
</tr>
<tr>
<td>Reseda-Hamilton Residential Historic District</td>
<td>Encino-Tarzana</td>
<td>37</td>
<td>0.76</td>
<td>1955</td>
<td>1954-57</td>
<td>Neighborhood</td>
<td>Traditional Ranch (Cinderella)</td>
</tr>
<tr>
<td>Sherman Oaks Circle Historic District</td>
<td>Encino-Tarzana</td>
<td>130</td>
<td>0.68</td>
<td>1928</td>
<td>1928-60</td>
<td>Neighborhood</td>
<td>Varies</td>
</tr>
<tr>
<td>Valley View Road Residential Historic District</td>
<td>Encino-Tarzana</td>
<td>29</td>
<td>0.86</td>
<td>1955</td>
<td>1955-60</td>
<td>Neighborhood</td>
<td>Traditional and Contemporary Ranch (some split-level)</td>
</tr>
<tr>
<td>Shelley - Winfield Residential Historic District</td>
<td>Encino-Tarzana</td>
<td>18</td>
<td>0.85</td>
<td>1955</td>
<td>1955</td>
<td>Tract</td>
<td>Traditional Ranch</td>
</tr>
<tr>
<td>Encino Village Planning District</td>
<td>Encino-Tarzana</td>
<td>438</td>
<td>n/a</td>
<td>1954</td>
<td>1954</td>
<td>Tract</td>
<td>Traditional Ranch</td>
</tr>
<tr>
<td>Cahuilla Hills Residential Historic District</td>
<td>Encino-Tarzana</td>
<td>32</td>
<td>0.81</td>
<td>1958</td>
<td>1958-62</td>
<td>Tract</td>
<td>Traditional and Contemporary (including Oriental)</td>
</tr>
<tr>
<td>Azalea Drive Residential Historic District</td>
<td>Encino-Tarzana</td>
<td>15</td>
<td>0.73</td>
<td>1962</td>
<td>1962-64</td>
<td>Tract</td>
<td>Contemporary</td>
</tr>
<tr>
<td>Escalon Drive Residential Historic District</td>
<td>Encino-Tarzana</td>
<td>98</td>
<td>0.8</td>
<td>1964</td>
<td>1966</td>
<td>Tract</td>
<td>Mid-Century Modern (2-story and split-level)</td>
</tr>
<tr>
<td>Chaloner Circle Residential Historic District</td>
<td>Encino-Tarzana</td>
<td>28</td>
<td>0.7</td>
<td>1962</td>
<td>1963-72</td>
<td>Tract</td>
<td>Contemporary (Hollywood Regency)</td>
</tr>
<tr>
<td>Granada Orange Estates Residential Planning District</td>
<td>Granada Hills</td>
<td>404</td>
<td>n/a</td>
<td>1950</td>
<td>1954-63</td>
<td>Neighborhood</td>
<td>Varies</td>
</tr>
<tr>
<td>Name</td>
<td>Area</td>
<td># of Resources</td>
<td>Integrity</td>
<td>Subdivision Date (s)</td>
<td>Construction Date (s)</td>
<td>Neighborhood Type</td>
<td>Architectural Style</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>----------------</td>
<td>----------------</td>
<td>-----------</td>
<td>----------------------</td>
<td>----------------------</td>
<td>-------------------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>Marlborough Palms Residential Historic District</td>
<td>Granada Hills</td>
<td>149</td>
<td>0.69</td>
<td>1956-57</td>
<td>1957-58</td>
<td>Tract</td>
<td>Traditional and Contemporary, Cinderella</td>
</tr>
<tr>
<td>Van Nuys Gardens Street Trees</td>
<td>Mission Hills</td>
<td>700</td>
<td>n/a</td>
<td>1949-50</td>
<td>1949-50</td>
<td>Tract</td>
<td>Minimal Traditional</td>
</tr>
<tr>
<td>Panorama City Historic District</td>
<td>Mission Hills</td>
<td>1700</td>
<td>n/a</td>
<td>1947</td>
<td>1947-52</td>
<td>Tract</td>
<td>Minimal Ranch</td>
</tr>
<tr>
<td>Storybook Village Residential Planning District</td>
<td>Mission Hills</td>
<td>143</td>
<td>n/a</td>
<td>1956</td>
<td>1956</td>
<td>Tract</td>
<td>Mid-Century Modern</td>
</tr>
<tr>
<td>Addison Street Early Residences</td>
<td>North Hollywood - Valley Village</td>
<td>3 parcels (multiples buildings)</td>
<td>n/a</td>
<td>1924</td>
<td>1924 or later</td>
<td>Individual Resources</td>
<td>Craftsman, Traditional Ranch (1960s)</td>
</tr>
<tr>
<td>Honey-Cartright Residential Historic District</td>
<td>North Hollywood - Valley Village</td>
<td>57</td>
<td>0.74</td>
<td>1923</td>
<td>1923-45</td>
<td>Neighborhood</td>
<td>Classical Revival; Minimal; Traditional Ranch</td>
</tr>
<tr>
<td>Ben Avenue Residential Historic District</td>
<td>North Hollywood - Valley Village</td>
<td>41</td>
<td>0.8</td>
<td>1928</td>
<td>1928-48</td>
<td>Neighborhood</td>
<td>Revival; Minimal Traditional</td>
</tr>
<tr>
<td>Carpenter-Morella-Simpson Residential Historic District</td>
<td>North Hollywood - Valley Village</td>
<td>96</td>
<td>0.79</td>
<td>1939-42</td>
<td>1940-49</td>
<td>Neighborhood</td>
<td>Minimal Traditional</td>
</tr>
<tr>
<td>King Street Residential Historic District</td>
<td>North Hollywood - Valley Village</td>
<td>20</td>
<td>0.85</td>
<td>1934 and later</td>
<td>1937-51</td>
<td>Neighborhood</td>
<td>American Colonial; Traditional Ranch</td>
</tr>
<tr>
<td>Orsage Residential Historic District</td>
<td>North Hollywood - Valley Village</td>
<td>61</td>
<td>0.84</td>
<td>1934-37</td>
<td>1937-53</td>
<td>Neighborhood</td>
<td>Traditional Ranch, Minimal Traditional</td>
</tr>
<tr>
<td>Goodland Acre Residential Historic District</td>
<td>North Hollywood - Valley Village</td>
<td>62</td>
<td>0.82</td>
<td>1935-36</td>
<td>1935-69</td>
<td>Neighborhood</td>
<td>Traditional, Cinderella, Contemporary</td>
</tr>
<tr>
<td>South Lankershim Gardens Residential Historic District</td>
<td>North Hollywood - Valley Village</td>
<td>204</td>
<td>0.82</td>
<td>1921-22</td>
<td>1921-40 (more than half by 1927)</td>
<td>Tract</td>
<td>Revival; Minimal Traditional</td>
</tr>
<tr>
<td>Marlborough Park Residential Historic District</td>
<td>North Hollywood - Valley Village</td>
<td>63</td>
<td>0.83</td>
<td>1952-53</td>
<td>1952-53</td>
<td>Tract</td>
<td>Traditional Ranch</td>
</tr>
<tr>
<td>Walnutwood Estates Residential Historic District</td>
<td>Northridge</td>
<td>71</td>
<td>0.85</td>
<td>1953</td>
<td>1953-58</td>
<td>Neighborhood</td>
<td>Traditional Ranch</td>
</tr>
<tr>
<td>Chateau Highlands Residential Historic District</td>
<td>Northridge</td>
<td>131</td>
<td>0.92</td>
<td>1956-59</td>
<td>1956-63</td>
<td>Neighborhood</td>
<td>Traditional Ranch</td>
</tr>
<tr>
<td>Northridge Downs Residential Historic District</td>
<td>Northridge</td>
<td>61</td>
<td>0.82</td>
<td>1956</td>
<td>1956-65</td>
<td>Neighborhood</td>
<td>Traditional Ranch</td>
</tr>
<tr>
<td>Blackhawk-Wyoming Residential Historic District</td>
<td>Northridge</td>
<td>52</td>
<td>0.85</td>
<td>1958-62</td>
<td>1958-66</td>
<td>Neighborhood</td>
<td>Minimal Ranch, Traditional Ranch, Contemporary</td>
</tr>
<tr>
<td>Oak Park-Paso Robles Residential Historic District</td>
<td>Northridge</td>
<td>47</td>
<td>0.85</td>
<td>1955</td>
<td>1956-70s and later</td>
<td>Neighborhood</td>
<td>Traditional Ranch</td>
</tr>
<tr>
<td>Blue Ribbon - Tract Housing Residential Historic District</td>
<td>Northridge</td>
<td>16</td>
<td>0.63</td>
<td>1952</td>
<td>1953</td>
<td>Tract</td>
<td>Mid-Century Modern</td>
</tr>
<tr>
<td>Calahan-McLennan Residential Historic District</td>
<td>Northridge</td>
<td>181</td>
<td>0.91</td>
<td>1954-55</td>
<td>1954-56</td>
<td>Tract</td>
<td>Traditional Ranch</td>
</tr>
<tr>
<td>Living-Conditional Homes Residential Historic District</td>
<td>Northridge</td>
<td>53</td>
<td>0.72</td>
<td>1957</td>
<td>1957-58</td>
<td>Tract</td>
<td>Mid-Century Modern</td>
</tr>
<tr>
<td>Northridge College Estates Residential Planning District</td>
<td>Northridge</td>
<td>188</td>
<td></td>
<td>1956</td>
<td>1956-60</td>
<td>Tract</td>
<td>Contemporary Ranch</td>
</tr>
<tr>
<td>Meadowlark Park Residential Planning District</td>
<td>Reseda-W Van Nuys</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>1953-54</td>
<td>Tract</td>
<td>Minimal Ranch and Mid-Century Modern (?)</td>
</tr>
<tr>
<td>Tampa Country Estates Residential Planning District</td>
<td>Reseda-W Van Nuys</td>
<td>n/a</td>
<td>n/a</td>
<td>1955</td>
<td>1955-56</td>
<td>Tract</td>
<td>n/a</td>
</tr>
<tr>
<td>Loomer Park Estates Residential Historic District</td>
<td>Reseda-W Van Nuys</td>
<td>64</td>
<td>0.89</td>
<td>1956</td>
<td>1956-57</td>
<td>Tract</td>
<td>Traditional and Contemporary Ranch</td>
</tr>
<tr>
<td>Agnew Avenue Residential Historic District</td>
<td>Sherman-Oaks/Studios City</td>
<td>5</td>
<td>n/a</td>
<td>1927</td>
<td>1933-38</td>
<td>Neighborhood</td>
<td>American Colonial Revival</td>
</tr>
<tr>
<td>Name</td>
<td>Area</td>
<td># of Resources</td>
<td>Integrity</td>
<td>Subdivision Date</td>
<td>Construction Date</td>
<td>Neighborhood Type</td>
<td>Architectural Style</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-------------------------------------------</td>
<td>----------------</td>
<td>-----------</td>
<td>------------------</td>
<td>---------------------</td>
<td>----------------------------------------</td>
<td>----------------------------------------------</td>
</tr>
<tr>
<td>Toluca Lake Park Residential Planning District</td>
<td>Sherman Oaks-Studio City</td>
<td>220</td>
<td>n/a</td>
<td>1923-28</td>
<td>1920s-40s</td>
<td>Neighborhood</td>
<td>Revival, Minimal Traditional, Ranch, Streamline, Mid-Century Modern</td>
</tr>
<tr>
<td>Valley Spring/Reservoir Residential Historic District</td>
<td>Sherman Oaks-Studio City</td>
<td>53</td>
<td>0.62</td>
<td>1923-25</td>
<td>1919-50</td>
<td>Neighborhood</td>
<td>Revival, Minimal Traditional, Traditional Ranch</td>
</tr>
<tr>
<td>Stansbury Avenue Residential Historic District</td>
<td>Sherman Oaks-Studio City</td>
<td>113</td>
<td>0.58</td>
<td>1937</td>
<td>1935-51</td>
<td>Neighborhood</td>
<td>Revival, Minimal Traditional, Traditional Ranch, Streamline</td>
</tr>
<tr>
<td>Laurel Terrace Residential Historic District</td>
<td>Sherman Oaks-Studio City</td>
<td>328</td>
<td>0.56</td>
<td>1923-24</td>
<td>1923-53</td>
<td>Neighborhood</td>
<td>Minimal Traditional, Traditional Ranch</td>
</tr>
<tr>
<td>Briarcliff Manor Residential Historic District</td>
<td>Sherman Oaks-Studio City</td>
<td>42</td>
<td>0.64</td>
<td>1939-45</td>
<td>1939-62</td>
<td>Neighborhood</td>
<td>Classical revival, Traditional Ranch, Contemporary Ranch, Mid-Century Modern</td>
</tr>
<tr>
<td>Ningle/Viera/Sears Residential Historic District</td>
<td>Sherman Oaks-Studio City</td>
<td>114</td>
<td>0.73</td>
<td>1946-49</td>
<td>1946-54</td>
<td>Tract</td>
<td>Minimal Traditional, Traditional Ranch</td>
</tr>
<tr>
<td>Bridge House Historic District</td>
<td>Sherman Oaks-Studio City</td>
<td>6</td>
<td>n/a</td>
<td>1911</td>
<td>1960</td>
<td>Tract</td>
<td>Mid-century modern</td>
</tr>
<tr>
<td>Tarzana Summit Residential Historic District</td>
<td>Sherman Oaks-Studio City</td>
<td>14</td>
<td>0.64</td>
<td>1959</td>
<td>1961-63</td>
<td>Tract</td>
<td>Mid-Century Modern</td>
</tr>
<tr>
<td>Platform House Historic District</td>
<td>Sherman Oaks-Studio City</td>
<td>17</td>
<td>0.82</td>
<td>1957</td>
<td>1962-66</td>
<td>Tract</td>
<td>Mid-Century Modern</td>
</tr>
<tr>
<td>Runyon Canyon/Westside Road Residential Historic District</td>
<td>Sunland-Tujunga-La Tuna Canyon</td>
<td>16</td>
<td>0.63</td>
<td>1954</td>
<td>1953-57</td>
<td>Neighborhood</td>
<td>Mid-Century Modern</td>
</tr>
<tr>
<td>Crammore Drive/Crammore Place Residential Historic District</td>
<td>Sunland-Tujunga-La Tuna Canyon</td>
<td>56</td>
<td>0.79</td>
<td>1953-57</td>
<td>1953-64</td>
<td>Neighborhood</td>
<td>Traditional Ranch, Cinderella Ranch, Minimal Ranch</td>
</tr>
<tr>
<td>Shermont Avenue Residential Historic District</td>
<td>Sunland-Tujunga-La Tuna Canyon</td>
<td>49</td>
<td>0.82</td>
<td>1957</td>
<td>1957-58</td>
<td>Tract</td>
<td>Traditional Ranch, Minimal Ranch</td>
</tr>
<tr>
<td>Amestris Avenue Residential Historic District</td>
<td>Sunland-Tujunga-La Tuna Canyon</td>
<td>48</td>
<td>0.71</td>
<td>1955</td>
<td>1959</td>
<td>Tract</td>
<td>Cinderella Ranch, Traditional Ranch, Minimal Ranch</td>
</tr>
<tr>
<td>Langdon Avenue Residential Historic District</td>
<td>Van Nuys-N Sherman Oaks</td>
<td>24</td>
<td>0.92</td>
<td>1940-43</td>
<td>1941-51</td>
<td>Neighborhood</td>
<td>Traditional Ranch, Colonial Ranch, Minimal Ranch, Contemporary Ranch</td>
</tr>
<tr>
<td>Founders Avenue-Chesbro Avenue Residential Historic District</td>
<td>Van Nuys-N Sherman Oaks</td>
<td>58</td>
<td>0.97</td>
<td>1947-48</td>
<td>1947-54</td>
<td>Neighborhood</td>
<td>Traditional Ranch, Minimal Ranch, American Colonial Ranch</td>
</tr>
<tr>
<td>Hidden Woods Residential Historic District</td>
<td>Van Nuys-N Sherman Oaks</td>
<td>131</td>
<td>0.88</td>
<td>1951-56; 1964</td>
<td>1951-65</td>
<td>Neighborhood</td>
<td>Traditional Ranch</td>
</tr>
<tr>
<td>Walnut Haven Residential Historic District</td>
<td>Van Nuys-N Sherman Oaks</td>
<td>65</td>
<td>0.97</td>
<td>1951</td>
<td>1953-56 (most between 1951-54 as single development) Neighborhoods with max</td>
<td>Minimal Ranch, Cinderella Ranch</td>
<td></td>
</tr>
<tr>
<td>Colonial Village Residential Planning District</td>
<td>Van Nuys-N Sherman Oaks</td>
<td>n/a</td>
<td>n/a</td>
<td>1940-43</td>
<td>1941-48 and later</td>
<td>Tract</td>
<td>Minimal Traditional and Minimal Ranch</td>
</tr>
<tr>
<td>Longridge Avenue-Antil Avenue Residential Historic District</td>
<td>Van Nuys-N Sherman Oaks</td>
<td>54</td>
<td>0.94</td>
<td>1951</td>
<td>1951</td>
<td>Tract</td>
<td>Traditional Ranch, Minimal Ranch</td>
</tr>
<tr>
<td>Cammack Woods Estates Residential Historic District</td>
<td>Van Nuys-N Sherman Oaks</td>
<td>30</td>
<td>0.87</td>
<td>1947-51</td>
<td>1947-51</td>
<td>Tract</td>
<td>Traditional Ranch, Minimal Ranch, American Colonial Ranch</td>
</tr>
<tr>
<td>Burnet Avenue-Nettowich Avenue Residential Historic District</td>
<td>Van Nuys-N Sherman Oaks</td>
<td>57</td>
<td>0.84</td>
<td>1951-53</td>
<td>1951-55</td>
<td>Tract</td>
<td>Traditional Ranch, Minimal Ranch</td>
</tr>
<tr>
<td>Worthing Avenue-Ephel Avenue Residential Historic District</td>
<td>Van Nuys-N Sherman Oaks</td>
<td>31</td>
<td>0.84</td>
<td>1951-55</td>
<td>1952-55</td>
<td>Tract</td>
<td>Traditional Ranch</td>
</tr>
<tr>
<td>Ephel Avenue-Obagie Street Residential Historic District</td>
<td>Van Nuys-N Sherman Oaks</td>
<td>99</td>
<td>0.85</td>
<td>1950-53</td>
<td>1950-57</td>
<td>Tract</td>
<td>Mostly Traditional Ranch with Minimal Ranch and American Colonial Ranch</td>
</tr>
<tr>
<td>Sunnymede Avenue Residential Historic District</td>
<td>Van Nuys-N Sherman Oaks</td>
<td>32</td>
<td>0.97</td>
<td>1956-57</td>
<td>1947 and 1956-60</td>
<td>Tract</td>
<td>Traditional Ranch</td>
</tr>
<tr>
<td>Lemon Avenue-Saloma Avenue Residential Historic District</td>
<td>Van Nuys-N Sherman Oaks</td>
<td>66</td>
<td>0.92</td>
<td>1952-56</td>
<td>1952-61</td>
<td>Tract</td>
<td>Traditional Ranch, Minimal Ranch</td>
</tr>
<tr>
<td>Hillview Park Estates Residential Historic District</td>
<td>Van Nuys-N Sherman Oaks</td>
<td>111</td>
<td>0.77</td>
<td>1946</td>
<td>1947-55</td>
<td>Tract</td>
<td>Minimal Ranch, American Colonial Ranch, Contemporary Ranch, Spanish Ranch</td>
</tr>
</tbody>
</table>
Appendix D:
Points-Based Integrity Analysis of Living-Conditioned Homes

[Map of living-conditioned homes with color-coded areas for districts, outside district, non-contributor, altered contributor, contributor, and excluded.]
<table>
<thead>
<tr>
<th>NO.</th>
<th>STREET NAME</th>
<th>PL</th>
<th>CD F1</th>
<th>CD F2</th>
<th>CD F3</th>
<th>CD F4</th>
<th>CD F5</th>
<th>CD F6</th>
<th>CD F7</th>
<th>CD F8</th>
<th>CD F9</th>
<th>CD F10</th>
<th>CD F11</th>
<th>CD F12</th>
<th>AL T1</th>
<th>Points OBJ SUB</th>
</tr>
</thead>
<tbody>
<tr>
<td>18334</td>
<td>Blackhawk</td>
<td>B4R</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>20 NC NC</td>
</tr>
<tr>
<td>18335</td>
<td>Blackhawk</td>
<td>E</td>
<td>5</td>
<td>12</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>15</td>
<td>10</td>
<td>0</td>
<td>73 C AC</td>
</tr>
<tr>
<td>18342</td>
<td>Blackhawk</td>
<td>A2R</td>
<td>5</td>
<td>8</td>
<td>3</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>0</td>
<td>53 AC NC</td>
</tr>
<tr>
<td>18343</td>
<td>Blackhawk</td>
<td>A3R</td>
<td>5</td>
<td>0</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>37 NC NC</td>
</tr>
<tr>
<td>18350</td>
<td>Blackhawk</td>
<td>ER</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>150 38 NC AC</td>
</tr>
<tr>
<td>18351</td>
<td>Blackhawk</td>
<td>D4</td>
<td>5</td>
<td>12</td>
<td>0</td>
<td>6</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>46 AC NC</td>
</tr>
<tr>
<td>18359</td>
<td>Blackhawk</td>
<td>C3R</td>
<td>5</td>
<td>12</td>
<td>3</td>
<td>6</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>10</td>
<td>0</td>
<td>69 AC AC</td>
</tr>
<tr>
<td>18400</td>
<td>Blackhawk</td>
<td>B2R</td>
<td>5</td>
<td>12</td>
<td>3</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>15</td>
<td>0</td>
<td>77 C C</td>
</tr>
<tr>
<td>18401</td>
<td>Blackhawk</td>
<td>C2R</td>
<td>5</td>
<td>12</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>15</td>
<td>0</td>
<td>77 C C</td>
</tr>
<tr>
<td>18406</td>
<td>Blackhawk</td>
<td>B4R</td>
<td>5</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>26 NC NC</td>
</tr>
<tr>
<td>18413</td>
<td>Blackhawk</td>
<td>A3R</td>
<td>5</td>
<td>12</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>15</td>
<td>0</td>
<td>79 C C</td>
</tr>
<tr>
<td>18416</td>
<td>Blackhawk</td>
<td>D3R</td>
<td>5</td>
<td>10</td>
<td>6</td>
<td>6</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>3</td>
<td>12</td>
<td>15</td>
<td>0</td>
<td>65 AC AC</td>
</tr>
<tr>
<td>18419</td>
<td>Blackhawk</td>
<td>C4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>19 NC NC</td>
</tr>
<tr>
<td>18424</td>
<td>Blackhawk</td>
<td>C2</td>
<td>5</td>
<td>8</td>
<td>6</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>10</td>
<td>0</td>
<td>63 AC AC</td>
</tr>
<tr>
<td>10400</td>
<td>Canby</td>
<td>E</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>8 NC NC</td>
</tr>
<tr>
<td>10401</td>
<td>Canby</td>
<td>A3R</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0 NC NC</td>
</tr>
<tr>
<td>10408</td>
<td>Canby</td>
<td>D2</td>
<td>5</td>
<td>4</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>24 NC NC</td>
</tr>
<tr>
<td>10409</td>
<td>Canby</td>
<td>D4R</td>
<td>5</td>
<td>12</td>
<td>3</td>
<td>6</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>15</td>
<td>0</td>
<td>70 AC AC</td>
</tr>
<tr>
<td>10417</td>
<td>Canby</td>
<td>C3</td>
<td>5</td>
<td>12</td>
<td>3</td>
<td>6</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>6</td>
<td>0</td>
<td>61 AC AC</td>
</tr>
<tr>
<td>10418</td>
<td>Canby</td>
<td>B2</td>
<td>5</td>
<td>8</td>
<td>3</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>40 AC NC</td>
</tr>
<tr>
<td>10427</td>
<td>Canby</td>
<td>A4R</td>
<td>5</td>
<td>12</td>
<td>3</td>
<td>6</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>15</td>
<td>0</td>
<td>76 C C</td>
</tr>
<tr>
<td>18335</td>
<td>Devonshire</td>
<td>D5R</td>
<td>5</td>
<td>12</td>
<td>6</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>15</td>
<td>15</td>
<td>0</td>
<td>73 C AC</td>
</tr>
<tr>
<td>18347</td>
<td>Devonshire</td>
<td>B1R</td>
<td>5</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>9</td>
<td>6</td>
<td>10</td>
<td>42 AC AC</td>
</tr>
<tr>
<td>18401</td>
<td>Devonshire</td>
<td>C1R</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>6</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>27 NC NC</td>
</tr>
<tr>
<td>18409</td>
<td>Devonshire</td>
<td>D1</td>
<td>5</td>
<td>12</td>
<td>6</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>6</td>
<td>15</td>
<td>15</td>
<td>0</td>
<td>75 C C</td>
</tr>
<tr>
<td>18419</td>
<td>Devonshire</td>
<td>A1</td>
<td>5</td>
<td>12</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>10</td>
<td>0</td>
<td>74 C C</td>
</tr>
<tr>
<td>18334</td>
<td>Hiawatha</td>
<td>C2</td>
<td>5</td>
<td>12</td>
<td>0</td>
<td>6</td>
<td>6</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>15</td>
<td>0</td>
<td>74 C AC</td>
</tr>
<tr>
<td>NO.</td>
<td>STREET NAME</td>
<td>PL</td>
<td>AN</td>
<td>CD F1</td>
<td>CD F2</td>
<td>CD F3</td>
<td>CD F4</td>
<td>CD F5</td>
<td>CD F6</td>
<td>CD F7</td>
<td>CD F8</td>
<td>CD F9</td>
<td>CD F10</td>
<td>CD F11</td>
<td>CD F12</td>
<td>AL T1</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td>----</td>
<td>----</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>18342</td>
<td>Hiawatha D4</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>26</td>
<td>NC</td>
<td>NC</td>
</tr>
<tr>
<td>18349</td>
<td>Hiawatha E</td>
<td>5</td>
<td>8</td>
<td>0</td>
<td>6</td>
<td>6</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>43</td>
<td>AC</td>
</tr>
<tr>
<td>18350</td>
<td>Hiawatha B3R</td>
<td>5</td>
<td>12</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>15</td>
<td>6</td>
<td>0</td>
<td>47</td>
<td>AC</td>
</tr>
<tr>
<td>18357</td>
<td>Hiawatha B2R</td>
<td>5</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>10</td>
<td>15</td>
<td>0</td>
<td>53</td>
<td>AC</td>
</tr>
<tr>
<td>18358</td>
<td>Hiawatha A4</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>29</td>
<td>NC</td>
<td>NC</td>
<td></td>
</tr>
<tr>
<td>18400</td>
<td>Hiawatha D3</td>
<td>5</td>
<td>12</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>15</td>
<td>0</td>
<td>78</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>18401</td>
<td>Hiawatha A4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>NC</td>
</tr>
<tr>
<td>18409</td>
<td>Hiawatha A2R</td>
<td>5</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>40</td>
<td>AC</td>
</tr>
<tr>
<td>18410</td>
<td>Hiawatha B2</td>
<td>5</td>
<td>12</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>15</td>
<td>0</td>
<td>82</td>
<td>C</td>
</tr>
<tr>
<td>18418</td>
<td>Hiawatha C2R</td>
<td>5</td>
<td>8</td>
<td>3</td>
<td>6</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>47</td>
<td>AC</td>
</tr>
<tr>
<td>18400</td>
<td>Minnehaha D3</td>
<td>5</td>
<td>12</td>
<td>3</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>15</td>
<td>15</td>
<td>0</td>
<td>68</td>
<td>AC</td>
</tr>
<tr>
<td>18401</td>
<td>Minnehaha A4</td>
<td>5</td>
<td>12</td>
<td>3</td>
<td>6</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>15</td>
<td>0</td>
<td>76</td>
<td>C</td>
</tr>
<tr>
<td>18408</td>
<td>Minnehaha A2</td>
<td>5</td>
<td>8</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>6</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>37</td>
<td>NC</td>
</tr>
<tr>
<td>18409</td>
<td>Minnehaha D4R</td>
<td>5</td>
<td>8</td>
<td>3</td>
<td>6</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>15</td>
<td>5</td>
<td>65</td>
<td>AC</td>
</tr>
<tr>
<td>18417</td>
<td>Minnehaha C2</td>
<td>5</td>
<td>12</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>15</td>
<td>0</td>
<td>79</td>
<td>C</td>
</tr>
<tr>
<td>18425</td>
<td>Minnehaha D2</td>
<td>5</td>
<td>12</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>15</td>
<td>5</td>
<td>74</td>
<td>C</td>
</tr>
<tr>
<td>18431</td>
<td>Minnehaha A3R</td>
<td>5</td>
<td>4</td>
<td>0</td>
<td>6</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>15</td>
<td>0</td>
<td>65</td>
<td>AC</td>
</tr>
<tr>
<td>10400</td>
<td>Reseda D4R</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NC</td>
</tr>
<tr>
<td>10412</td>
<td>Reseda B1R</td>
<td>5</td>
<td>12</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>6</td>
<td>0</td>
<td>58</td>
<td>AC</td>
</tr>
<tr>
<td>10424</td>
<td>Reseda C1</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>29</td>
<td>NC</td>
<td>NC</td>
<td></td>
</tr>
<tr>
<td>10436</td>
<td>Reseda A1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NC</td>
</tr>
<tr>
<td>10448</td>
<td>Reseda C1</td>
<td>5</td>
<td>12</td>
<td>6</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>15</td>
<td>0</td>
<td>79</td>
<td>C</td>
</tr>
<tr>
<td>18404</td>
<td>San Jose D2R</td>
<td>5</td>
<td>8</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>15</td>
<td>6</td>
<td>0</td>
<td>47</td>
<td>AC</td>
<td>AC</td>
</tr>
<tr>
<td>18414</td>
<td>San Jose C4</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>6</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>28</td>
<td>NC</td>
<td>NC</td>
</tr>
<tr>
<td>18422</td>
<td>San Jose C3</td>
<td>5</td>
<td>12</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>15</td>
<td>0</td>
<td>81</td>
<td>C</td>
</tr>
<tr>
<td>18430</td>
<td>San Jose B2R</td>
<td>5</td>
<td>12</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>4</td>
<td>0</td>
<td>53</td>
<td>AC</td>
<td>AC</td>
</tr>
<tr>
<td>18438</td>
<td>San Jose B3</td>
<td>5</td>
<td>12</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>15</td>
<td>15</td>
<td>0</td>
<td>58</td>
<td>AC</td>
<td>C</td>
</tr>
</tbody>
</table>