SOME SOCIO-GEOGRAPHIC FACTORS PERTAINING
TO THE SPREAD OF URBANISM IN
THE SAN FERNANDO VALLEY,
LOS ANGELES, CALIFORNIA

By
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TABLE OF CONTENTS

INTRODUCTION ................................................................. xv-xxvi

A. Nature of the Study ...................................................... xv
B. Selection of a Fringe Area ............................................. xviii
C. Problems to be Investigated .......................................... xx
D. Basis of the Study ......................................................... xxii
E. Meaning of Urbanism ..................................................... xxiv

PART I
THE PHYSICAL MILIEU

CHAPTER I MORPHOLOGY ..................................................... 1-13

1. General Characteristics ................................................. 1
2. Significant Pass Routes .................................................. 5
3. Drainage Patterns ......................................................... 8
4. Topography of North Hollywood ..................................... 11

CHAPTER II CLIMATE ............................................................ 14-29

5. General Characteristics .................................................. 14
6. Climate of North Hollywood ............................................ 17
7. Seasonal Weather in North Hollywood ............................... 25
8. Significance of the Climatic Factor ................................. 27

CHAPTER III NATURAL VEGETATION ........................................ 30-41

9. General Characteristics .................................................. 30
10. Historical Developments ............................................... 31
11. Recognition and Investigation of the Chaparral ................. 35
12. Chaparral and the Menace of Urbanism ............................. 39
PART II

HISTORICAL PATTERN OF OCCUPANCE

CHAPTER IV  THE INDIAN AND THE MISSION ...................... 42-55

13. Indian Culture ........................................ 43
14. Spanish Exploration of the Valley ..................... 49
15. Founding of San Fernando Mission ..................... 51
16. Secularization Movement ................................. 54

CHAPTER V  AMERICAN CONQUEST: LIQUIDATION OF THE RANCHOS .......................... 56-73

17. Mexican Land-Grants ................................... 56
18. Sub-dividing the Rancho ................................. 61
19. Founding of North Hollywood ............................ 68

CHAPTER VI  URBAN-SUBURBAN DEVELOPMENT ....................... 74-93

20. The Valley at the Turn of the Century ............... 74
21. Revival of Real Estate Development ..................... 75
22. The Irrigation Boom ................................... 78

PART III

NORTH HOLLYWOOD: A SATELLITE CITY

CHAPTER VII  DEMOGRAPHIC CHARACTERISTICS ..................... 84-118

27. Population Density in North Hollywood
   1920-1946 ............................................ 96
CHAPTER VII (Continued)

29. Racial Composition of North Hollywood: 1940... 105
32. Summary: A Historic–Geographic Sequent ...... 111

CHAPTER VIII  FLOODS AND FLOOD CONTROL .............................. 114-128

33. Floods and the Physical Milieu ..................... 114
34. A Brief History of Floods ............................. 115
35. Flood of March, 1938 ................................. 117
36. Flood Control Developments ......................... 122
37. Significance of Flood Control ........................ 127

CHAPTER IX  LAND USE: RESIDENTIAL OCCUPANCY ...................... 129-169

38. Land Use: General Characteristics ............... 129
39. Land Use Plan for the Valley ......................... 130
40. Land Use in the Valley: 1944 ........................ 131
41. Land Subdivisions in the Valley: 1930–1944 ... 132
42. Land Ownership in the Valley: 1944 ............... 134
44. Owner and Tenant Occupancy in North Hollywood: 1940 ....................................... 138
45. Age of Dwelling Units in North Hollywood: 1940. 143
46. Types of Residential Structures in North Hollywood: 1940 .................................... 146
47. Exterior Finish of Dwelling Units in North Hollywood: 1940 ................................... 150
48. Sub-standard Dwellings in North Hollywood: 1940 153
49. Housing Styles in North Hollywood ................. 155
50. Residential Land Use in 1949: A Socio–
Geographic Sequent ........................................ 161
## MAPS

<table>
<thead>
<tr>
<th>Map</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Morphology of the San Fernando Valley</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>Topography of the Los Angeles Region</td>
<td>5</td>
</tr>
<tr>
<td>3.</td>
<td>Pre-historic and Historic Settlement of the San Fernando Valley: 1870-1870</td>
<td>50</td>
</tr>
<tr>
<td>4.</td>
<td>Historical Evolution of Land Tenure in the San Fernando Valley: 1870-1915</td>
<td>64</td>
</tr>
<tr>
<td>5.</td>
<td>Population Distribution in the San Fernando Valley: 1920-1940</td>
<td>88</td>
</tr>
<tr>
<td>7.</td>
<td>Flood Control System in the San Fernando Valley</td>
<td>112</td>
</tr>
<tr>
<td>8.</td>
<td>Land Use Plan for the San Fernando Valley: 1944</td>
<td>120</td>
</tr>
<tr>
<td>9.</td>
<td>Agriculture in the San Fernando Valley</td>
<td>132</td>
</tr>
<tr>
<td>10.</td>
<td>Subdivisions in the San Fernando Valley</td>
<td>133</td>
</tr>
<tr>
<td>11.</td>
<td>Land Ownership in the San Fernando Valley</td>
<td>134</td>
</tr>
<tr>
<td>12.</td>
<td>Industry and Commerce in the San Fernando Valley: 1944</td>
<td>171</td>
</tr>
<tr>
<td>14.</td>
<td>Areal Relation of the San Fernando Valley to Other Sections of Los Angeles City and Non-city Territory</td>
<td>190</td>
</tr>
<tr>
<td>15.</td>
<td>Aqueducts and Power Transmission Systems Servicing Los Angeles City and Environ</td>
<td>194</td>
</tr>
<tr>
<td>16.</td>
<td>Transportation in the San Fernando Valley</td>
<td>200</td>
</tr>
<tr>
<td>Plate</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Plate I</td>
<td>Land Use: 1938—North Hollywood District, San Fernando Valley, Los Angeles, California</td>
<td></td>
</tr>
<tr>
<td>Plate II</td>
<td>Land Use: 1949—North Hollywood District, San Fernando Valley, Los Angeles, California</td>
<td></td>
</tr>
<tr>
<td>Plate III</td>
<td>Census Tract Key for North Hollywood</td>
<td></td>
</tr>
<tr>
<td>Plate IV</td>
<td>Photo Location Index for North Hollywood</td>
<td></td>
</tr>
</tbody>
</table>

(The above listed maps may be found unbound at the end of the thesis.)
<table>
<thead>
<tr>
<th>Chart</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chart I</td>
<td>Climatic Chart for North Hollywood</td>
<td>19</td>
</tr>
<tr>
<td>Chart II</td>
<td>Population Increase for North Hollywood by Census Tracts (1930-1940-1946) on the Basis of the Data Shown in Table 5</td>
<td>85</td>
</tr>
<tr>
<td>Table</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>1</td>
<td>Significant plants of the chaparral in the San Fernando Valley and percentage distribution of the primary species</td>
<td>33</td>
</tr>
<tr>
<td>2</td>
<td>Chronology of land tenure in the San Fernando Valley, California, 1795-1910</td>
<td>62</td>
</tr>
<tr>
<td>3</td>
<td>Population increase by census tracts for the North Hollywood District, San Fernando Valley, Los Angeles, California: 1930-1940-1946</td>
<td>23</td>
</tr>
<tr>
<td>4</td>
<td>Population density per gross acre by census tracts for the North Hollywood District, San Fernando Valley, Los Angeles, California: 1930-1940-1946</td>
<td>29</td>
</tr>
<tr>
<td>5</td>
<td>Percentage distribution of selected age groups by census tracts for the North Hollywood District, San Fernando Valley, Los Angeles, California: 1940-1946</td>
<td>103</td>
</tr>
<tr>
<td>6</td>
<td>Racial composition of population by census tracts for the North Hollywood District, San Fernando Valley, Los Angeles, California: 1940</td>
<td>106</td>
</tr>
<tr>
<td>7</td>
<td>National origins of selected groups of foreign-born by census tracts for the North Hollywood District, San Fernando Valley, Los Angeles, California: 1940</td>
<td>108</td>
</tr>
<tr>
<td>8</td>
<td>Educational levels of population over twenty-four years of age by census tracts for the North Hollywood District, San Fernando Valley, Los Angeles, California: 1940</td>
<td>110</td>
</tr>
<tr>
<td>9</td>
<td>Estimated expenditures for flood control projects in the San Fernando Valley</td>
<td>125</td>
</tr>
<tr>
<td>11</td>
<td>Owner and tenant occupancy of dwelling units by census tracts for the North Hollywood District, San Fernando Valley, Los Angeles, California: 1940</td>
<td>140</td>
</tr>
<tr>
<td>12</td>
<td>Age of dwelling units by census tracts for the North Hollywood District, San Fernando Valley, Los Angeles, California: 1940</td>
<td>144</td>
</tr>
<tr>
<td>Table</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>-------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>12.</td>
<td>Types of residential structures by census tracts for the North Hollywood District, San Fernando Valley, Los Angeles, California: 1940</td>
<td>147</td>
</tr>
<tr>
<td>14.</td>
<td>Exterior finish of dwelling units by census tracts for the North Hollywood District, San Fernando Valley, Los Angeles, California: 1940</td>
<td>152</td>
</tr>
<tr>
<td>15.</td>
<td>Sub-standard dwelling units by census tracts for the North Hollywood District, San Fernando Valley, Los Angeles, California: 1940</td>
<td>154</td>
</tr>
<tr>
<td>16.</td>
<td>Percentage distribution of employment and occupations by census tracts for the North Hollywood District, San Fernando Valley, Los Angeles, California: 1940</td>
<td>188</td>
</tr>
<tr>
<td>Plate</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>1</td>
<td>Aerial View of the Eastern Section of the San Fernando Valley</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>Los Angeles River Looking Westward from Whitsott Avenue</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>Wash Areas in North Hollywood</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Fig. 3. West Branch of the Tujunga Wash.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fig. 4-5. Middle Branch of the Tujunga Wash.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Chaparral in the Santa Monica Mountains</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Figs. 6-7. Close-up Views of the Chaparral.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Figs. 8-9. Chaparral Covered Slopes.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Culturally Induced Vegetation</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Fig. 10. Orchard Surrounding an Early Dwelling.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fig. 11. Ornamental Trees and Shrubbery.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fig. 12. An Exceptional Stand of Eucalyptus.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Acres of Rotting Apricot and Peach Orchards</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Figs. 13-16. Encroachment of Residential Settlement in Orchard Areas.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Fire in the Chaparral</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Fig. 17. Housing Threatened by a Chaparral Fire.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fig. 18. A Fire-Deposed Slope.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fig. 19. A Slope Well-Covered and Protected by the Chaparral.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Housing in the Chaparral</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Fig. 20. Sub-dividing a Mountain Side.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fig. 21. A &quot;Lot&quot; for Sale in the Mountains.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fig. 22. Suburban Estates in the Mountains.</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Aboriginal Culture in the San Fernando Valley</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>Fig. 23. Model Reconstruction of an Indian Rancheria.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fig. 24. Superb Basketry of the Mission Indian.</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>San Fernando Mission</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Fig. 25. A Typical Mission Structure.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fig. 26. The Cloister.</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>The First Residence in the San Fernando Valley</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Fig. 27. A Restored Historical Landmark:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pico House.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fig. 28. Traditional in the Spanish Home:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Patio of Pico House.</td>
<td></td>
</tr>
<tr>
<td>Plate</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>-------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>12</td>
<td>Aerial View of Lankershim (North Hollywood) looking Northward from the Santa Monica Mountains, circa 1912</td>
<td>76</td>
</tr>
<tr>
<td>13</td>
<td>Los Angeles River in Flood</td>
<td>119</td>
</tr>
<tr>
<td></td>
<td>Fig. 30. Los Angeles River at Flood Crest.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fig. 31. The River after the Flood: A Broad Sheet of Water.</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Aerial View of the March, 1938, Flood as Seen along the Middle Branch of Tujunga Wash in North Hollywood</td>
<td>121</td>
</tr>
<tr>
<td>15</td>
<td>Flood Damage in North Hollywood</td>
<td>122</td>
</tr>
<tr>
<td></td>
<td>Fig. 33. Personal Property Damage.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fig. 34. Municipal Property Damage.</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Flood Damage along the Tujunga Wash and Los Angeles River</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td>Fig. 35. Severe Bank Undercutting along the Middle Branch of Tujunga Wash.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fig. 36. Los Angeles River Flood Control Channel Undermined.</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Vital Transportation Arteries Washed Out</td>
<td>124</td>
</tr>
<tr>
<td></td>
<td>Fig. 37. Highway and Railroad Bridges Destroyed along Vineland Avenue.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fig. 38. Traffic Virtually Halted on Ventura Boulevard.</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Flood Control System on the Los Angeles River</td>
<td>126</td>
</tr>
<tr>
<td></td>
<td>Figs. 39-40. Improved Channel at Lankershim Boulevard.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fig. 41. Serpentining Channel along the River.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fig. 42. Temporary Halt in Construction.</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Flood Control System on the Tujunga Wash</td>
<td>127</td>
</tr>
<tr>
<td></td>
<td>Fig. 43. Temporary End of the Concrete Channel.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fig. 44. Preparing the Channel Bed.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fig. 45. Construction of Vital Cross-Valley Vehicular Bridges.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fig. 46. Juncture of the Wash and the River.</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Sub-standard Dwellings in North Hollywood</td>
<td>153</td>
</tr>
<tr>
<td></td>
<td>Fig. 47. An Old Catholic Church in the Midst of Mexican Squalor.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Figs. 48-50. Housing Blight in the Heart of the Community.</td>
<td></td>
</tr>
</tbody>
</table>
### PHOTOGRAPHS (Continued)

<table>
<thead>
<tr>
<th>Plate</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 Pseudo-Spanish Style Architecture</td>
<td>156</td>
</tr>
<tr>
<td>Figs. 51-54. Representative Types of Stucco Housing.</td>
<td></td>
</tr>
<tr>
<td>22 Two Examples of Contrasting Multiple Dwellings</td>
<td>158</td>
</tr>
<tr>
<td>Figs. 55-56. Monterey Style Apartments.</td>
<td></td>
</tr>
<tr>
<td>Figs. 57-58. The &quot;Court&quot; Type of Residence.</td>
<td></td>
</tr>
<tr>
<td>23 Ranchito and California Bungalow</td>
<td>159</td>
</tr>
<tr>
<td>Figs. 59-60. The Ranchito Type of Residence.</td>
<td></td>
</tr>
<tr>
<td>Figs. 61-62. Representative California Bungalows.</td>
<td></td>
</tr>
<tr>
<td>24 The Ranch House Type of Residence</td>
<td>160</td>
</tr>
<tr>
<td>Fig. 63. A Ranch House on a Town-Lot.</td>
<td></td>
</tr>
<tr>
<td>Figs. 64-65. Secluded Patio of the Ranch House.</td>
<td></td>
</tr>
<tr>
<td>Fig. 66. Post-War Standardized Version of the Ranch House</td>
<td></td>
</tr>
<tr>
<td>25 Contemporary Types of Multiple Dwellings</td>
<td>162</td>
</tr>
<tr>
<td>Figs. 67-71. Diversified Styles of Post-War Multiple Unit Housing.</td>
<td></td>
</tr>
<tr>
<td>26 Depressing Monotony in Housing and Poor Zoning</td>
<td>164</td>
</tr>
<tr>
<td>Figs. 72-74. Row upon Dreary Row of Mass Prefabricated Housing.</td>
<td></td>
</tr>
<tr>
<td>Fig. 75. Individuality in Housing Bordering on the Fantastic.</td>
<td></td>
</tr>
<tr>
<td>Fig. 76. Blighted Farms Cling to the Fringe Areas of Mass Housing.</td>
<td></td>
</tr>
<tr>
<td>27 A Swimming Pool for Every Home?</td>
<td>166</td>
</tr>
<tr>
<td>Fig. 77. A Well-Landscaped Post-War Home.</td>
<td></td>
</tr>
<tr>
<td>Fig. 78. Normal Backyard Functions Crowded to the Rear.</td>
<td></td>
</tr>
<tr>
<td>Figs. 79-80. Sine qua non of Existence: A Private Swimming Pool.</td>
<td></td>
</tr>
<tr>
<td>28 Mansions in the Toluca Lake Area</td>
<td>167</td>
</tr>
<tr>
<td>Figs. 81-85. Pretentious Homes, Spacious Grounds, and Architectural Extravagance.</td>
<td></td>
</tr>
<tr>
<td>29 Toluca Lake Estates</td>
<td>168</td>
</tr>
<tr>
<td>Figs. 86-87. The Choice Sites: Residences Abutting on the &quot;Lake.&quot;</td>
<td></td>
</tr>
<tr>
<td>Figs. 88-89. Toluca Lake.</td>
<td></td>
</tr>
<tr>
<td>30 Huge Gravel Pits Near North Hollywood</td>
<td>174</td>
</tr>
<tr>
<td>Figs. 90-91. The Major Quarry.</td>
<td></td>
</tr>
<tr>
<td>Fig. 92. Close-up of the Pit Side Revealing Alluvial Fan Stratification.</td>
<td></td>
</tr>
<tr>
<td>Fig. 93. A Minor Gravel Pit—A Dump Heap.</td>
<td></td>
</tr>
<tr>
<td>Plate</td>
<td>Title</td>
</tr>
<tr>
<td>-------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>31</td>
<td>Industrial Plants in North Hollywood</td>
</tr>
<tr>
<td></td>
<td>Fig. 84. One of Several Concrete Block and Shape Factories.</td>
</tr>
<tr>
<td></td>
<td>Fig. 85. Bendix Company.</td>
</tr>
<tr>
<td></td>
<td>Fig. 86. Adel Precision Tool Company.</td>
</tr>
<tr>
<td></td>
<td>Fig. 97. A Cluster of Small-Scale Factories.</td>
</tr>
<tr>
<td></td>
<td>Fig. 98. The Trumbull Electric Company.</td>
</tr>
<tr>
<td>32</td>
<td>Aerial View of the Universal Motion Picture Studio in Universal City</td>
</tr>
<tr>
<td>33</td>
<td>Poor Industrial Zoning and Remnants of Agriculture</td>
</tr>
<tr>
<td></td>
<td>Fig. 100. Radio Transmission Station in a Residential Area.</td>
</tr>
<tr>
<td></td>
<td>Fig. 101. Republic Motion Picture Studio in a Commercial and Residential Area.</td>
</tr>
<tr>
<td>34</td>
<td>Commercial Development along Lankershim Boulevard.</td>
</tr>
<tr>
<td></td>
<td>Figs. 104-106. Views of Lankershim Boulevard South of Chandler Boulevard.</td>
</tr>
<tr>
<td></td>
<td>Fig. 107. Lankershim Boulevard as It Appeared in Former Days.</td>
</tr>
<tr>
<td></td>
<td>Fig. 108. Commercial Expansion along Major Boulevards Crossing Lankershim Blvd.</td>
</tr>
<tr>
<td>35</td>
<td>Typical Market Center and the &quot;Super Drive-In&quot; Markets.</td>
</tr>
<tr>
<td></td>
<td>Figs. 111-112. The &quot;Super Drive-In&quot; Markets.</td>
</tr>
<tr>
<td>36</td>
<td>Commercial Development along Ventura Boulevard.</td>
</tr>
<tr>
<td></td>
<td>Fig. 113. A Hodge-Podge of Land Use.</td>
</tr>
<tr>
<td></td>
<td>Fig. 114. Typical &quot;Shoestring&quot; Business Development.</td>
</tr>
<tr>
<td></td>
<td>Figs. 115-116. Tourist Hotels.</td>
</tr>
<tr>
<td>37</td>
<td>Civic Land Use in North Hollywood</td>
</tr>
<tr>
<td></td>
<td>Fig. 117. Pacific Electric Streetcar and Station.</td>
</tr>
<tr>
<td></td>
<td>Fig. 118. Sidney Lanier Branch Library.</td>
</tr>
<tr>
<td></td>
<td>Fig. 119. One of Many New Churches.</td>
</tr>
<tr>
<td></td>
<td>Fig. 120. A New Fire Station.</td>
</tr>
<tr>
<td></td>
<td>Fig. 121. Many Streets Remain Unsurfaced.</td>
</tr>
<tr>
<td>38</td>
<td>Essential Municipal Services</td>
</tr>
<tr>
<td></td>
<td>Fig. 122. A Water Pumping Station.</td>
</tr>
<tr>
<td></td>
<td>Fig. 123. Key Power Transformer Sub-station.</td>
</tr>
<tr>
<td></td>
<td>Fig. 124. Recently Constructed Junior High School.</td>
</tr>
<tr>
<td></td>
<td>Fig. 125. One of the New Grade Schools.</td>
</tr>
</tbody>
</table>
### PHOTOGRAPHS (Continued)

<table>
<thead>
<tr>
<th>Plate</th>
<th>Photograph Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>39</td>
<td><strong>Cahuenga Pass Freeway</strong></td>
<td>202</td>
</tr>
<tr>
<td></td>
<td>Fig. 126. A Modern Express Highway.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Figs. 127-128. A Heavy Flow of Commuter Traffic During the Rush Hours.</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td><strong>Highways: Vital to Healthy Urban Growth</strong></td>
<td>204</td>
</tr>
<tr>
<td></td>
<td>Figs. 129. Valley-ward Rush Hour on the Cahuenga Pass Freeway.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Figs. 130. A Well-Designed Underpass on Lenkersheim Boulevard.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Figs. 131-132. Views of a Super Express Highway.</td>
<td></td>
</tr>
</tbody>
</table>

(The above photographs pertaining to the North Hollywood area have been located according to number on the Photo Location Index Map—Plate IV.)
For each and every city we need a systematic survey, of its development and origins, its history and its present. This survey is required not merely for material buildings, but also for the city's life and its institutions, for of these the built city is but the external shell.

Patrick Geddes

La Nature prépare le site et l'homme l'organise pour lui permettre de répondre à ses besoins et ses désirs.

Vidal de la Blache
INTRODUCTION

A. Nature of the Study.

This inquiry is devoted to an investigation of the salient socio-geographic factors involved in the spread of urbanism in a fringe area of metropolitan Los Angeles—the community of North Hollywood in the San Fernando Valley. (See Frontispiece.) As conceived in this study, these socio-geographic factors are the social processes especially exhibited in the expansion of urban life as acted upon by, and reacting to, the particular geographic circumstances of the area where they occur. These processes are discovered in and comprehend the interactions between human aggregates and the physical and cultural environments—in a study of this character, urbanized aggregates residing in a specific area. They comprise behavior of social groups as conditioned by the geographic circumstances of morphology, spatial orientation, climate, natural vegetation, and stage of cultural development. Formal listings of these processes differ according to purpose and point of view, but for the present study they may be summarized as the populative, perpetuative, regulative, sustentative, communicative, and recreative, all of which reveal historical persistence, slow modifications, or abrupt alterations.

These social processes, thus conditioned, are exhibited in the types of land and resource utilization, the varying modes and standards of living, the attributes of the demography, the characteristics of the governmental structure, the technological aspects of a particular urbanization, and other traits of the culture.
complex, all regarded as products of "change in time". A study of social processes in relation to the geographic circumstances of the urban area under investigation should contribute to an understanding of the social data observed and the patterns of distribution exhibited by these data.

Though there have been numerous geographic studies of urban settlement in the United States, these researches have not been focused upon the development of peripheral areas.** Today, the rapid urbanization of these fringe areas presents the most serious problems in the orderly development of urban life. Within the past few decades, the extremely rapid growth of metropolitan regions or conurbations in the United States and Europe, as well as other parts of the world tinged with Western industrial culture, has accentuated the need for more intensive and extensive types of urban research. Far more attention should be directed toward the study of the geographic circumstances which promote certain patterns of urban settlement and discourage others. In order to assess correctly the probable extent

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* This vital sociological concept has been examined critically by Professor F. J. Tegart in his study, The Theory of History (New Haven, Conn.: Yale University Press, 1925), Part II, "The Study of Change", pp. 71-155.

** Such professional publications as the Geographical Review, The Annals of the Association of American Geographers, and Economic Geography publish many articles relating to urban geography, but few of these have touched upon the problems of fringe areas or have investigated such areas. This also applies to the one comprehensive work on the urban geography of Los Angeles, which is now largely out of date. Anton Wagner, Los Angeles: Borden, Leben, und Gestalt der Zweimillionen Stadt in Sudakkáifornien (Leipzig, Germany: Bibliographisches Institut, 1935). Unfortunately this work has not been translated from the German.
and nature of population movements in urban areas, the geographic
approach must be broadened to encompass an analysis of the socio-
logical aspects of both matured and embryonic occupancy patterns.
By a combination of the geographic and sociologic techniques of
investigation, i.e., on the one hand, the spatial orientation of the
physical and cultural factors by means of maps and, on the other
hand, the arrangement of sociological data in historical sequence
and/or statistical tabulation, the student of urban geography may be
able to arrive at a new and useful understanding of the problem of
city growth.

Whereas most research in urban geography has been concerned
with the spatial development of an entire city or metropolitan area,
in this study attention is concentrated on the fringe area of urban
settlement—the twilight zone marking the transition phase between
rural and urban occupancy. The vast urban centers of contemporary
Western civilization are not unlike enormous blobs of ameboid protoplasm
and the ray-like patterns of extended settlement bear marked resem-
blance to pseudopodia. This urban pattern has been developed to a
high degree by cities such as Los Angeles, which have experienced a
phenomenal growth coincident with mass-production of the automobile.

With the advent of the automotive age, the city blindly
puts forth its tentacles in search of areas suitable for urban oc-
cupance. It does not always achieve success. In many instances the
tentacles of settlement wither and die, perhaps to revive again at a
later date. In other instances, the tentacles may be severed from
the main urban center and the resulting villages valiantly struggle
on alone, only to be engulfed within new tides of urban expansion
decades later.
In reality it is these fringe areas that strongly influence the structure and extent of the city. Therefore the fringe areas, slowly or rapidly evolving into true urban settlements indistinguishable from the rest of the city, merit special socio-geographic study. While the geographic heart of the city may be ossified or in its death throes, the outer margins are in a state of continuous expansion or contraction, pulsating with a virtually animalistic vigor. Why should this anomaly prevail today? Why do fringe areas vary so greatly in rate of growth? What are the geographic and sociologic factors underlying variability in the patterns of peripheral settlement? What may urban society learn about itself from a study of these fringe growths?

B. Selection of a Fringe Area.

Obviously limitations of time and space preclude the investigation of more than one specific fringe area of a given city. The selection of North Hollywood, California, some twelve miles west northwest of Los Angeles and three miles north of Hollywood, was the result of a combination of circumstances. (See Frontispiece.) The author is intimately familiar with the North Hollywood area and has observed its development from a rural to an urban type settlement during the past twelve years. This twelve year period provides an ideal time-base for the contemplated socio-geographic study of the community. In

fact, no other period would be quite so suitable, as the rapid urban expansion in North Hollywood occurred during the decade 1940-1950, especially after the close of World War II in 1945. In addition, North Hollywood is a "pass" town—the product of certain distinctive physiographic features, which at first hindered and then promoted its development as a significant fringe area of urban settlement. (See Frontispiece.) The extreme rapidity of urban occupation in North Hollywood since 1945 seems to point the way toward the extension of fringe area development throughout the San Fernando Valley and at the same time, it provides the urban geographer with pertinent data permitting an evaluation of virtually uncontrolled fringe area occupancy—a common post-war characteristic of metropolitan regions throughout the nation.

Certain aspects of the urban development of this particular urban fringe area may be characterized as typical of such areas in general. North Hollywood is more or less typical in that an independent community existence preceded annexation by Los Angeles; that it has always provided the basic prerequisites of living associated with a small town in close geographical proximity to a large city; that its economic well-being has become increasingly dependent on the fortunes of the nearby metropolis; that it has been occupied by a cross-section of urban social strata peculiar to middle class suburban settlements.

Perhaps even more significant in certain respects are a few atypical characteristics of the North Hollywood fringe area. At least these are of sufficient distinctiveness to sharpen the focus with regard to the urban area under investigation. The geographic
position of North Hollywood at the entry to a pass connecting a thinly populated, mountain-girt valley with a densely populous coastal plain is uncommon. Its site with respect to this large, relatively unoccupied valley and the thrust of urban settlement represented by its recent rapid occupancy tends to establish the pattern for all subsequent development of contiguous fringe areas. The extreme rapidity with which the rural-urban mode of settlement gave way to an urban society in this fringe area would be difficult to match elsewhere. Though North Hollywood provides the essentials of a suburban existence—homes, multiple dwelling, stores, and recreational facilities, the physical aspects and patterns of spatial distribution of these elements differ markedly from those found in other fringe areas.

C. Problems to be Investigated.

The socio-geographic study of an urban fringe area involves a search for answers to a great many questions and a recognition of many problems associated with this type of urban growth. These questions and problems readily group themselves into a threefold basis of inquiry; the physical milieu, historical orsequent occupancy, and contemporary community development.

The physical milieu involves an investigation of the significance of morphology, climate, and natural vegetation in the evolution of urban development in North Hollywood. In the three chapters forming Part I, questions and problems, such as the following, are germane to the inquiry: What influence has morphology and climate exercised on the development of urban growth in North Hollywood? Does the extremely artificial environment created by urbanization affect
the growth of natural vegetation or the hydrologic-ecologic balance?

The historical patterns of occupancy are very important topics of investigation in this type of study. It would be impossible to explain certain features of the urban cultural landscape without some knowledge of the sequent occupancy of North Hollywood and the San Fernando Valley. Part II of this inquiry is concerned with these patterns of occupancy: the aboriginal Indians, the Spanish settlement and land tenure system, American conquest and the evolution from rural-rurban to suburban settlement. These multiple stages of occupancy focus attention on such questions as: What fundamental geographic factors have prevailed in each of the cultural stages of occupancy irrespective of other developments? In what manner did geography enter into the creation of the Spanish rancho system of land tenure and how did this affect subsequent occupancy in North Hollywood and the San Fernando Valley? What combination of socio-geographic factors resulted in the substitution of urban occupancy for a rural-rurban type?

In Part III, the final section of the study, the inquiry is directed toward a consideration of those socio-geographic factors concerned with the contemporary development of North Hollywood. The characteristics of the demography, the problem of floods and flood control, and the patterns of residential, industrial, and commercial land use as well as other attributes of urbanization are expressions of the operation of socio-geographic factors. These aspects of the urban development in North Hollywood give rise to several pertinent questions: In what way does the pattern of population distribution reflect the influence of socio-geographic factors? What role does intensification of urban occupancy play with regard to the control
of a recurrent flood menace? What is the nature of the geographic
distribution of various land use patterns in North Hollywood? In
what manner have geographic factors promoted integration of the North
Hollywood urban fringe area with Los Angeles? To what extent has the
artificial environment of urbanization succeeded in ignoring the
socio-geographic factors prevailing in the North Hollywood area?

D. Basis of the Study.

In view of the preceding remarks concerning the scope of
the problem to be investigated and the types of questions that arise
with regard to this problem, the employment of geographic techniques
of analysis afford a far wider perspective than any other approach.
In contrast to those used by the physical or social sciences, the
methods of research used by the geographer include techniques
utilized by both.

An investigation of the urban fringe area of North Hollywood
from a purely sociological approach would be most instructive, but
because of the limitations imposed on the sociologist by the very
nature of his discipline, it would be incomplete.* Without a thorough
analysis of the physical landscape—morphology, climate, natural
vegetation, soils, etc.—the investigation would be inconclusive.
Few social scientists are trained in the techniques of the physical
sciences. In few instances are physical scientists acquainted with
socio-cultural and historical methods of research. It falls within

* The relation of sociology to geography has been cogently
elucidated by Dr. J. W. Watson in his article, "The Sociological
Aspects of Geography," (pp. 463–500) published in G. T. Taylor (Ed.),
Geography in the Twentieth Century, (New York: The Philosophical
the province of the geographer to attempt to bridge the gap between these two vitally important methods of inquiry and to synthesize the findings of these diverse sciences.* Hence the task of the geographer is both unique and arduous.

In addition to this distinctive position in relation to other sciences, the geographer specializes in use of the map not only as a form of graphic presentation, but also as a tool of research. The plotting of data on maps and the description, classification, investigation, and interpretation of the resulting patterns of distribution is a basic part of the training of every geographer. By means of maps, geography is able to broaden the scope of inquiry and detect relationships inherent in diverse data—relationships that are frequently overlooked by those disciplines limited purely to physical measurements or the study of historical records and statistical tables.

In the following investigation every effort has been made to employ the geographic approach in the study of an urban fringe area. Emphasis has been placed on the geographic interpretation of physical, historical, and sociological data. Maps have been utilized extensively, though not as extensively as would be feasible in such a study. Within the limits of time and resources, every effort has been made to give this inquiry a geographic orientation and to demonstrate that data supplied by geomorphologists, climatologists, botanists, pedologists, historians, and sociologists may be combined, mapped, and thus usefully interpreted.

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* The significant role of the geographer in synthesizing and integrating knowledge subject to a physico-social dichotomy has been succinctly stated by Messrs. S. W. Woolridge and W. G. East in their recent book, _The Spirit and Purpose of Geography_, (New York: Hutchinson's University Library, 1951), 176pp.
E. Meaning of Urbanism.

There is a widespread tendency among students of urban phenomena to neglect the definition of the word "urban". The works of such eminent scholars of urban sociology and geography as Park, Burgess, McKenzie, Mumford, Brunhes, Dickinson, and Taylor reveal a singular lack of definition regarding this vital topic of research. Though the United States Census Bureau defines "urban", the definition is necessarily arbitrary and representative of a distinctly statistical approach in analyzing the concept. Perhaps Professors Sorokin and Zimmerman have most clearly stated the objections to any oversimplification in definition.*

Neither the size of the community, nor the density of population, nor official qualification of some communities, as "the city" or "town", and others, as "village" or "open country", nor any of these usual criteria are sufficient by themselves to give a sound and scientifically acceptable definition of the city and the country, or of the rural and urban social world. (1)

If none of the above criteria are suitable as a basis for defining an "urban" in contrast to a "rural" area, it is necessary to approach the problem from a broader point of view. In a fringe area it is possible to do this quite readily, as both the rural and

* Bibliographical citations have been listed in numerical order at the end of the manuscript under the heading, "Citations". Such citations may refer to a direct quotation, as in the above example, the authority for a specific statement of fact, or simply inform the interested reader of one or more sources of additional information pertaining to a significant topic embodied in the text.

In a few instances footnotes have been employed as a means of presenting pertinent remarks or observations preferably excluded from the text. All works cited in these footnotes may be found listed in the "Selected Bibliography".
urban aspects of society are intermingled. In such a society the urban culture complex has not attained complete mastery of the area and the contacts between two decidedly different social orders are most evident. Thus in the estimation of the author, any definition of the urban phenomenon necessitates an investigation of the social order prevailing in the community—in brief, the way of life. (2)

As this way of life increasingly assumes the pattern of a highly materialistic culture complex—the culture complex which is best exemplified and epitomized by twentieth century America—the community swings out of the orbit of a predominantly rural society into that of an urban one.

Though North Hollywood still retains some of the outward manifestations of its former rural character—scattered truck gardens, areas of rotting orchards and vineyards, decrepit farmsteads, and the "ranch" type home, it is today, thoroughly and completely urban in its way of life. There is a deep-seated desire evident in many residents to emulate the pseudo-glamorous, synthetic way of life pursued by many radio and motion picture personalities living nearby. This philosophy of life may assume any or all of the following expressions of conspicuous consumption: to equip every member of the family with an expensive automobile; to build a gadget-cluttered, pretentious home with a view; to possess a private swimming pool; to employ a landscape gardener, maid, or part-time housekeeper; to own a television set with the largest screen available; to purchase a costly wardrobe from an exclusive apparel shop; to send the children, if any, to expensive private schools and colleges; to frequent the restaurants and cocktail lounges patronized by the "social elite"; to indulge in
"conspicuous waste" in extraordinary degree. By such bluffing and blustering exhibitionism many residents hope to ingratiate themselves with members of the top echelon of the business world, thereby achieving fame and fortune.

These characteristics of urban life are not the only ones by which this society may be identified nor are they peculiar to North Hollywood, the San Fernando Valley, Los Angeles, or California. But as with most culture complexes, the strongest expression of its pristine development is found near the center of diffusion. North Hollywood and the San Fernando Valley are virtually at the fountainhead and geographic center of this cultural efflorescence.

It is essential that all the above facts be borne in mind with respect to this study of the North Hollywood urban fringe area, as they form the basis of the inquiry. They also delimit the method of investigation and determine the goals sought in this research.
PART I
THE PHYSICAL MILIEU
CHAPTERS I - III

The situation, the configuration, the structure, and the climate of a country all help to explain the historical development of a people as a social organization.

J. Brunhes
CHAPTER I

MORPHOLOGY

The San Fernando Valley is a mountain-girt area of approximately 200 square miles, lying some twelve miles west-northwest of the center of Los Angeles. The Valley floor of alluvial fan deposits is surrounded on all sides by steep-sided, abrupt-sloping mountain ranges. Such topography renders "pass" routes of primary geographic significance in the settlement of the area. Cahuenga Pass, a low passage through the eastern section of the Santa Monica Mountains, has been the dominant topographic feature in this respect. North Hollywood, the major urban center in the Valley, covers an area of more than 20 square miles at the northern debouchment of this vital pass. The historical evolution of this settlement, culminating in a highly urbanized community, is largely a response to location vis-à-vis Cahuenga Pass, plus geographical proximity to an urban population bent on expansion and prepared to follow the line of least resistance.

1. General Characteristics.

The San Fernando Valley is located slightly west-northwest of Los Angeles—some twelve miles by highway from the civic center. The Valley is a somewhat triangular-shaped lowland. (Map 1.) The base of this triangle extends along the northern slope of the Santa Monica Mountains for twenty-three miles. The sides of this triangle extend northward about fifteen miles to a point of convergence at the 1500 foot contour. The widest part of the Valley extends from this apex directly southward to the Los Angeles River—a distance of approximately twelve miles. Within this relatively low-lying area of 200 square miles is found 47 per cent of the incorporated territory of the city of Los Angeles. (See Frontispiece.)

The San Fernando Valley is completely mountain-girt, except for the narrow gap affording passage to the Los Angeles River between the eastern terminus of the Santa Monica Mountains and the Verdugo
Range. (Map 1.) In this respect the area might well be considered a small scale replica of the vast intermontane basins so prevalent in the Far West, except for the fact that the Valley lacks the internal drainage normally associated with basin and range topography. Regardless of this fact, the surrounding mountain ranges are extremely significant and do constitute one of the prime geographic factors to be considered in any study of settlement in this region.

Stretching along the northern border of the San Fernando Valley for nearly fifteen miles are the rugged San Gabriel Mountains. (Map 1.) Elevations in this range vary from 1500 feet near the Valley floor to nearly 5000 feet in the extreme northeast. These mountains consist of complex fault blocks of massive size dissected by innumerable steep, V-shaped, youthful canyons.* The San Gabriel Range is truly a formidable barrier to the movement of man. (5)

On the west, the San Gabriel Mountains merge with the Santa Susana Range. (Map 1.) These two mountain ranges frequently are divided arbitrarily at San Fernando Pass—site of the vital Southern Pacific railroad tunnel connecting Los Angeles with the San Joaquin Valley and the San Francisco Bay area. The Santa Susana Mountains are considerably lower than their neighbors to the east—being 1500

* The San Fernando Valley area has been the subject of very little morphological research. A few studies of the San Gabriel Mountains have been made by Dr. W. J. Miller of the University of California. W. E. Kew and H. W. Hoots have contributed monographs on the orography of the Santa Monica Mountains for the U. S. Geological Survey. The Calif. Div. of Water Resources has published a bulletin on the geology and ground water storage capacity of valley fill, which treats of this area. There are a few scattered studies of the Valley made by petroleum geologists, but none of these is exhaustive. The Valley remains a wide open field for morphological research. The above mentioned studies are listed in the "Selected Bibliography".
to 3500 feet in height. In general appearance as well as structurally this range is a continuation of the San Gabriel Mountains. (Map 2.)

To the southwest, the Santa Susana Mountains merge with the Simi Hills. (Map 1.) These hills begin at the Santa Susana Pass, which leads to the Simi Valley and forms a link in the coast highway and railway routes leading to the northern part of the state. The hills have elevations ranging from 1000 to 2000 feet, but their rugged, youthful forms make them part of the barrier belt surrounding the Valley.

The Simi Hills, in turn, merge with the Santa Monica Mountains to the south. (Map 2.) The Santa Monica Mountains extend along the south side of the Valley, and narrow in width toward the east. This range separates the San Fernando Valley from the coastal plain to the south. The one major gap in this range is Cahuenga Pass. This pass, to be discussed in greater detail subsequently, is the dominant physiographic feature of the Valley and a fundamental geographic factor in the settlement pattern of the area. The Santa Monica Range is one of rather low altitude—under 2000 feet. (Map 1.) Though a distinct barrier to complete freedom of movement between Valley and coastal plain, the canyons found in this range are more mature and travel along them is less arduous than in the other mountain barriers. The structural history of this range is one of faulting, igneous intrusions, differential erosion, and a long period of degradation resulting in maturely dissected land forms.

At the eastern end of the Valley, the Verdugo Mountains stand out as a distinct fault block between the San Gabriel Range to the north and the Santa Monica Range to the south. (Map 1.) These mountains vary in elevation from 1000 to 2700 feet. The Verdugo Range is essentially an outlier of the San Gabriel Mountains, in structure and morphology
this rugged mountain block resembles the parent range.

Though these Valley-girdling mountains attain elevations of nearly 5000 feet in places, they are rather puny in comparison with nearby ranges. (Map 2.) The truly striking aspect of this mountain girdle is its relationship to the broad and relatively flat alluvial fan formations that constitute the Valley floor. Such sharp and sudden contrasts in relief are remarkable and most impressive when viewed from any vantage point in the Valley.

A few examples of the very sharp rise in elevation from the Valley floor may help to visualize this important aspect of the morphological picture. In the San Gabriel Mountains slightly west of 116° 25', the elevation increases from 1500 feet in the Valley to nearly 4000 feet in the mountains within less than two miles linear distance. (Map 1.) In the northerly mile of this distance the elevation increases more than 1600 feet. Along the south side of the Verdugo Mountains there are even steeper slopes, but these do not attain the altitudes found in the San Gabriel Range. Along the north-facing slope of the Santa Monica Mountains the rate of ascent may vary from 500 to 800 feet per mile. From almost every vantage point on the surrounding mountains, especially along the crest of the Santa Monica Range, the sharp rise of these slopes may be seen clearly and their hemming effect on the Valley creates a most vivid impression.

The sharpness of this impression is due partly to the Valley floor being virtually a featureless plain of moderate relief. From a low point of approximately 500 feet above sea level in the southeast, the Valley imperceptibly rises to 1500 feet in the north and 1000 feet in the west. (Map 1.) The few isolated hills between 1000 and 1250
feet are limited in size and number, and are insignificant items of local relief. With an increase in elevation of some 1000 feet in fifteen to twenty miles, the Valley appears to be flat with high mountain walls on all sides. In reality the whole Valley consists of a series of overlapping alluvial fans.* Streams issuing from the mountains to the north are suddenly checked in velocity and as a consequence spread over the Valley. During countless ages these streams have spread layer on layer of detritus over the Valley. (Figs. 90-92.) This slow filling of the Valley by water-borne deposits has resulted in a relatively featureless, smooth, conic fan-shaped topography.

2. Significant "Pass" Routes.

Such a vast expanse of fertile, flat land as found in the San Fernando Valley would tend to attract settlement, providing it were readily accessible to a population reservoir and markets. Rimmed in by mountains on all sides, the natural routes of travel—the passes—become important factors in shaping the pattern of settlement and economic development of such an area. Both the inter-circulation and intra-circulation of men and commodities are affected by the number and geographical distribution of passes through these mountain barriers.

To the north lies the San Fernando (Fremont) Pass used by the early explorers of this region. (Map 1.) At best this pass was extremely narrow and difficult to traverse. When Los Angeles secured its first railroad connection with the rest of the nation, it was by means of a tunnel cut along the San Fernando Pass. (Map 2.) In addition to the railroad, there is a modern highway through the pass today. By means

* Additional information pertaining to these alluvial fans and their formation may be gleaned from Chapter VIII.
Morphological Features of the Los Angeles Area

Linear Distance 1" = 2000'
Vertical Distance 1" = 400'
(Vertical exaggeration 5 to 1)

1. Mojave Desert
2. San Gabriel Mountains
3. Southern Cross Range
4. Simi Valley
5. Simi Hills
6. Santa Susana Mountains
7. Santa Susana Pass
8. San Fernando Pass
9. San Fernando Valley
10. Verdugo Mountains
11. NORTH HOLLYWOOD
12. Santa Monica Mountains
13. Cahuenga Pass
14. San Gabriel Valley
15. Los Angeles Plain
16. Los Angeles Harbor

(Relief model constructed by the Office of the County Forester and Fire Warden.)

Photo courtesy of U.S.F.E.D.
(Illustration filed with the original and first copy.)
of this pass Los Angeles is connected with San Francisco via the San Joaquin Valley. Though a vital inter-regional link today, this pass exerted a limited influence on the course of Valley settlement and this occurred during the closing decades of the last century. (See Chapter V.)

The Santa Susana Pass, at the western end of the Valley, also facilitates passage of a railway via tunnel as well as a major highway to the north. (Map 1.) This route of travel also connects with the San Francisco Bay area, but utilizes the coastal route. This pass has had slight influence on Valley settlement, but accounts for heavy through traffic by railroad and highway to the north as in the case of the San Fernando Pass. (Map 2.)

Far more significant are the routes of inter-regional movement between the Valley and coastal plain. Though there are several routes affording passage through the mountain barriers, not all of them are equally important. The Verdugo Mountains may be skirted to the north via the Tujunga Valley. (Map 1.) This route leads southward to Los Angeles via Glendale and is primarily of value to residents in the extreme northeastern section of the Valley. (Map 2.) South of the Verdugo Mountains, the Los Angeles River has carved a passage around the eastern end of the Santa Monica Mountains and into the city. Yet, both of these routes are circuitous, time-consuming, and hence impractical for most travel between Valley points and Los Angeles.

Thus, movement in and out of the Valley is practically confined to Cahuenga Pass, or Laurel Canyon, Beverly Glen, Sepulveda, and Topanga Canyon Boulevards, all of which pierce low divides in the Santa Monica Mountains and debouch on the coastal plain. Of all these routes, the low altitude passage afforded by Cahuenga Pass surpasses all others with respect to ease of travel and accessibility.
Cahuenga Pass cuts through a low divide in the eastern portion of the Santa Monica Mountains.* (Fig. 1.)** Trending from south-southeast to north-northwest, the pass traverses the mountains starting near the 500 foot elevation on the southern slope of this range and terminating at the Los Angeles River in the Valley. (Map 1.) Within a distance of approximately three miles and by means of a gentle rise of some 250 feet, the Santa Monica Mountains are breached. At no point along the pass does the grade exceed 20 per cent and the traverse involves only one crest about midway through the defile. Prior to enlargement by highway engineers, the pass varied in width from 100 to 500 feet. The mountains on either side of this passage tower to elevations of more than 1000 feet within a short distance.

The strategic significance of this pass, joining the San Fernando Valley to the Los Angeles Coastal Plain, is grasped most readily by a brief examination of the Frontispiece or Maps 1 and 2. Before modern highway engineering made it feasible to blast roads through such mountain canyons as Topanga, Sepulveda, Beverly Glen, Coldwater, and Laurel, it would have been necessary for all transportation to skirt the eastern end of the Santa Monica Range along the Los Angeles River in order to reach the Valley, if Cahuenga Pass had not

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* Cahuenga Pass owes its origin and development during a past geologic age to the relatively greater erosive ability of a north-flowing stream in the San Fernando Valley and a south-flowing stream issuing from the Santa Monica Mountains. These two streams flowed over a belt of less resistant rock in the mountains, and in due time the south-flowing stream cut through the divide beheading the Valley stream. This stream disappeared in time and left the present channel through the Santa Monica Mountains.

** The photographs pertaining to North Hollywood have been indexed according to location on Plate IV—Photo Location Index Map. The numbers placed on this map correspond with the number assigned to each photograph in the text.
existed. In addition to being circuitous and time-consuming, the Los Angeles River route into the Valley possessed serious physical limitations imposed by the naturally erratic channel of the river and the relative narrowness of the low-level gap. Without doubt, Cahuenga Pass occupies a strategic position vis-à-vis Los Angeles and the Valley. It is located in the extreme southeastern corner of the Valley has afforded ready access to the rapidly expanding population and market center of Hollywood. It also became the focal point of all movement in and out of the Valley.

Unquestionably Cahuenga Pass has been a major geographic factor in the settlement of North Hollywood. A "pass" town was the inevitable result of movement into the Valley. With pressure on the land in Hollywood, people began to move through the pass and naturally settled in that part of the Valley affording easiest access to the city. With the expansion of Valley-wide settlement and trade, North Hollywood took the initiative in establishing a market center catering to the whole area. Cahuenga Pass made such a development possible and Cahuenga Pass continues to function as a key geographic factor in the promotion of urban growth in North Hollywood today.

3. Drainage Patterns.

The drainage system of the San Fernando Valley is relatively simple in structure, although its regime differs markedly from that prevailing in more humid areas. Here surface flow is intermittent and the river beds are dry during many months of the year. These dry stream beds do not signify a complete lack of water as there is very likely to be considerable sub-surface flow. During the rainy winter season, the surrounding mountains collect an abundance of water. This run-off pours
Fig. 1.

Aerial View of the Eastern Section of San Fernando Valley
Looking North from Hollywood, California, May, 1941.

1. Hollywood
2. Cahuenga Pass (Note the Freeway route through the pass.)
3. Hollywood Bowl (Outdoor amphitheater of world renown.)
4. Hollywood Reservoir (Part of the vast municipal water system.)
5. Mulholland Dr. (Excellent highway along the mountain crest to the west.)
6. Santa Monica Mountains (Eastern terminus on the far right. Note the highways and housing in this portion of the range.)
7. Universal City (Motion picture studio hidden behind the hills.)
8. NORTH HOLLYWOOD (Lankershim Boulevard slanting through the community.)
9. Burbank (Lockheed Aircraft Plant near the air strips.)
10. Van Nuys (Administrative center for the Valley.)
11. West Branch of the Tujunga Wash (Roughly coincides with the western boundary of North Hollywood.)
12. Middle Branch of the Tujunga Wash (Cuts a swath through the heart of North Hollywood.)
13. Hansen Dam (Key storage basin for flood waters in the Valley.)
14. Verdugo Mountains (An outlier of the San Gabriel Range.)
15. San Gabriel Mountains (Lofty barrier to the north of the Valley.)
16. San Fernando City (The pass of the same name lies just to the north.)
17. Santa Susana Mountains (A lower range fronting the San Gabriel.)
18. Hinter ranges (These isolate the Los Angeles region from the deserts to the east.)
(Illustration filed with the original and first copy.)
out of the canyons and across the Valley floor. During this period the drainage channels may be transformed into raging rivers which are capable of causing tremendous damage. (See Chapter VIII.) Thus drainage in the Valley is intermittent, not perennial—dry, sandy river beds during most of the year and violent, rampaging torrents during the brief winter months.

Drainage from the Valley is controlled by the Los Angeles River. The source of this river lies in the extreme southwestern section of the Valley. (Map 1.) The run-off and sub-surface flow of the Simi Hills and Santa Monica Mountains furnish the initial supply of water. These reach the Valley floor via Dayton Canyon, Bull Creek, and Calabasas Arroyo. Each of these streams is intermittent and affords a reliable source of water only during the rainy winter months. In addition to these source streams of the Los Angeles River, there are other intermittent streams which flow into this major drainage channel. These streams issue from steep-sided canyons in the San Gabriel, Santa Susana, and Verdugo Mountains. Those tapping a large watershed with an abundance of moisture during the rainy season manage to cross the alluvial fans and join the Los Angeles River via intermittent surface flow. Such, for example, are from east to west the Big Tujunga, Pacoima, Bull Canyon, and Aliso Canyon channels. (Map 1.)

These streams, more commonly termed "washes", usually have broad channels, which quickly become choked with detritus during the peak flows of winter and this, in turn, promotes the formation of additional channels. Thus, for example, the Big Tujunga River degenerates into a series of braided channels coiling over a vast alluvial fan occupying nearly one half of the Valley. During the dry
season these channels consist of broad, shallow beds of sand and silt, while in winter any one or all of them may transport heavy flows of water across the Valley floor and into the Los Angeles River (Figs. 4-6.) Such uncontrolled movement of water is a constant menace to human occupation and with the advent of extensive urban settlement has necessitated extensive flood control measures. (See Chapter VIII.)

There is an additional source of water for the Los Angeles River. The underground water stored in the alluvial fans radiating from the northern side of the Valley is forced to the surface near the base of the Santa Monica Mountains. It is this supply of moisture, blocked from further sub-surface movement by the impervious strata of the Santa Monica Range, which underlies the southern part of the Valley alluvium, that furnishes much of the surface flow of the Los Angeles River. The sub-surface flow of water from these fans frequently produces surface flow of the river in the eastern part of the Valley at all seasons, while the upper course remains dry. Even during a series of dry years, these alluvial fans may maintain a small surface flow in the lower course of the river throughout most of the year. (Fig. 2.) Though drainage via the Los Angeles River may remain largely underground during most of the year, it is the major channel through which the enormous run-off from the surrounding mountains flows out of the Valley.

One other aspect of the drainage pattern in the Valley merits consideration, i.e., the great disproportion in the lengths of the streams on opposite sides of the Santa Monica Mountains. (Map 1.) Many of the streams flowing southward from the Santa Monica Mountains attain lengths of seven or more miles, while the few flowing northward toward the Los Angeles River rarely attain a length of one mile. There
Los Angeles River looking west from Whitsett Avenue. Though this photograph was taken a few days after the flood of March, 1958, it well represents the Valley section of the river. The water level is somewhat higher than "normal" for this date, but during the winter rainfall season the Los Angeles River does have considerable surface flow. Note the rather high, steep-sided banks—typical of rivers in semi-arid climates. By mid-summer the sandy bed of the river is exposed to view and surface flow reduced to a mere trickle. Nevertheless, water still drains away from the Valley along this channel, but underground.

Photo courtesy of U.S.E.D.
are two quite obvious explanations accounting for this phenomenon:
(1) the greater amount of rainfall on the seaward-facing upslope of
the mountains and the consequent rain shadow condition prevailing on
the northern downslope; (2) the lower base level of the Los Angeles-
Santa Monica Coastal Plain. (5) The steeper gradients and greater
volume of run-off of the south-flowing streams in the Santa Monica
Mountains have greatly increased their erosive power over those to the
north. Thus the south-flowing streams have been able to cut headward
through the crest of the range, so that the present divide lies a
considerable distance north of the main ridge-line. This peculiarity
of the drainage pattern restricts the supply of moisture obtained by
the Los Angeles River from the southern part of its watershed. Though
the Santa Monica Range rises abruptly from the south bank of the river,
especially in the eastern part of the Valley, it is rather insignificant
as a source of stream flow when compared to the other mountain ranges
surrounding the Valley as well as the area covered by the Valley.


The community of North Hollywood covers approximately 20
square miles in the southeastern section of the San Fernando Valley.
(Map 1.) Some 15 square miles or 75 per cent of this area is lowland,
while the remaining portion is rugged highland extending into the Santa
Monica Mountains. From the Los Angeles River, North Hollywood extends
northward over a portion of the huge Tujunga alluvial fan for a distance
of five miles, where it merges with another community center. It
penetrates the Santa Monica Mountains south of the Los Angeles River
for distances varying from one to two miles, as delimited by the serpen-
tine course of Mulholland Drive. (Fig. 1.) From the Los Angeles River
Fig. 5. The West Branch of Tujunga Wash. The sandy and nearly barren wash areas serpentine through North Hollywood do not lend charm to the appearance of the community. The "temporary" wooden vehicular bridge across this Wash at Magnolia Avenue was constructed following the flood of March, 1938. It remained in place until the flood control channel reached this point in 1949. Compare this photo with Fig. 43, which was taken in the same locality.

Fig. 4. The Middle Branch of Tujunga Wash. This ribbon of sandy river bottom cuts through the heart of North Hollywood. Photo taken looking south from Magnolia Boulevard. To the left is North Hollywood Park, which is slowly converting the river bed to parkland; on the right is Westpark Dr. with many fine residences. Compare this photo with Fig. 32.

Fig. 5. Another view of the Middle Branch of Tujunga Wash. Photo taken looking south toward the "temporary" bridge across the Wash at Riverside Dr. As can be readily seen from these photos, the banks of the washes would be incapable of containing a flood.
northward there is a gentle, imperceptible rise in elevation from 525 to 775 feet above sea level—about 50 feet per mile. South of the river the ascent is abrupt—from 525 to 1000 feet in less than one mile. In a few places the rise exceeds 600 feet in less than one mile. The width of the North Hollywood district varies from five miles south of the river in the mountains to less than two miles in the extreme northern portion on the plain. The eastern boundary is dictated by legal fiat and the western boundary is delimited by the claims of another settlement. In overall length the district approximates six miles south to north with slightly more than four miles of this area in the plain. On every side North Hollywood is encompassed by artificial boundaries—not even the Santa Monica Mountains forming a natural barrier to occupancy today.

On the western side of North Hollywood the West Branch of the Tujunga Wash serpentine its way through the community. (Fig. 2.) Passing through the very heart of the community is the Middle Branch of the Tujunga Wash. These washes are dry, sandy, sterile ribbons of wasteland varying in width from 50 to 200 feet. (Figs. 4, 5.) Neither of these washes is very deep—less than ten feet in most instances, since the heavy depositions of recent floods. The banks are nearly vertical and stand firm, except when undermined by raging flood waters. Farther to the east, the surface expression of still another wash has been all but obliterated by heavy settlement. An area in the extreme southeastern part of the community, now occupied by the small artificially created Toluca Lake, was formerly a slough and marshland. From time to time each of these water courses has wreaked havoc in North Hollywood and has been detrimental to the development of urbanization in this area. (See Chapter VIII.)
In brief, the topographic aspects of the North Hollywood site may be characterized as follows: (1) three-quarters of the area consists of a featureless lowland and the remaining one-quarter, mountainous; (2) located in the southeastern section of the Valley, it lies athwart the strategically significant Cahuenga Pass debouchment; (3) all of the community boundaries reflect artificial delimitation and defy topographic considerations or interpretations; (4) the north-south and east-west drainage channels of the Valley traverse this area, which make it the focal point for all run-off in the region.
CHAPTER II
CLIMATE

Climate has been a powerful geographic factor promoting the rapid settlement of North Hollywood as well as all Southern California. It is virtually impossible to overrate the importance of this fundamental physical factor. North Hollywood partakes of the general characteristics of a climate bordering on the semi-arid margin of the misterned Mediterranean type — warm days and cool nights, very mild winters for the latitude, a short season of rainfall concentrated in the winter months, and a maximum amount of insolation throughout the year. People migrating to Los Angeles by the hundreds of thousands in order to enjoy this climate created the population pressure which finally burst through the mountain barrier into North Hollywood and the San Fernando Valley.

5. General Characteristics.

Climate has exerted a most profound influence on settlement in North Hollywood just as in other parts of the San Fernando Valley and the Los Angeles Plain. No other geographic factor can rival climate as a prime agent in the promotion of occupancy in this region. It is virtually impossible for a non-resident to appreciate the tremendous significance of this climatic factor and the role it has played in the rapid urban development of Los Angeles. Though the resident of North Hollywood may experience certain transient irritations resulting from the operation of other geographic factors, these annoyances do not outweigh the climatic advantages. Few residents of this community would willingly trade places with those dwelling in more rigorous climes. Regardless of social or economic status all the inhabitants of this land equally partake of the benefits of an
extremely pleasant and moderate climate.*

In general this climate may be best characterized as a dry-summer subtropical type, sometimes not too accurately designated as Mediterranean. It is especially noted for its mild winters with average monthly temperatures ranging from 40 to 50 degrees F. Frost conditions are limited to a few scattered nights in midwinter. Snow is such a rare occurrence as to attract considerable attention and comment. Winter days, for the most part, are bright, sunny, and warm; nights are clear, brisk, and stimulating. Frequently the early morning hours are engulfed in a vertiable sea of radiation type fog, which dissipates as the warmth of the midwinter sun increases. The winter season is also noted as the period of precipitation with rainfall averaging from 15 to 25 inches. The moisture-bearing cyclonic storms are usually brief—one or two days at the most—with rather violent and intense rainfall.

In summer the average monthly temperature may range from 70 to 80 degrees F. The maximum diurnal temperatures in late summer are likely to be high—90 to 110 degrees F., but the relative and absolute humidity is extremely low. The minimum temperatures are quite low—50 to 70 degrees F., necessitating the wearing of a light topcoat and sleeping beneath a blanket. Summer days, for the most part, are bright, 

* It is not uncommon to hear residents of regions subject to continental climates decry this apparent emphasis upon "mere physical comfort and well-being," especially those who have spent all their lives in daily jousts with heat, humidity, blizzard, sleet, and sub-zero temperatures. As a rule, they speak without first-hand knowledge of the area. Perhaps it is just as well that a few people still think in these terms, as far too many of their brethren have visited Southern California and soon decided to make it their permanent abode without regard to costs. What was once regarded as shameless Chamber of Commerce ballyhoo has now come home to roost with a vengeance!
sunny, and warm; nights are overcast, cool, and most refreshing. Frequently the late afternoon, evening, and following morning hours are enshrouded in overcast—advection fog, which "burns off" by mid-morning. The summer season is nearly rainless—less than one inch of rain occurring from May through September, and most of it falling during late spring or early fall.

The seasons of spring and autumn usually lack the violent fluctuations in weather characteristic of these periods in other climates. They are, nevertheless, transition periods: in spring the rains wane and the temperatures increase with the approach of summer; in autumn the rains wax and temperatures decrease with the approach of winter. In addition to the waxing and waning of precipitation and temperature, the type of fog, hours of sunshine, percentages of relative humidity, and other significant meteorological phenomenon undergo change during these two transitional seasons.* Thus, spring and autumn bridge the gap between the more contrasting seasons of summer and winter.

These seasonal differences, which characterize the dry-summer subtopical climate, reflect a unique geographic location. Lying poleward of the subtropical high pressure belt, the whole of Southern California occupies an intermediate location between the dry center of a semi-permanent, anti-cyclonic cell on the one hand, and the rain-producing fronts and cyclones of the prevailing Westerlies on the other hand. With

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* Not infrequently this climatic regime is criticized on the grounds of being too monotonous and lacking that vital stimulus to nervous energy provided by the more "vigorous" continental climates. Yet, there are definite seasons—even spring and autumn—to those accustomed to more subtle changes in weather. This is not a land subject to violent and well-nigh continuous changes in weather associated with the two or three day cycle commonly experienced in the mid-latitude belt of cyclonic disturbances.
the apparent migration of the sun equatorward and decrease in the rate of insolation beginning in autumn, the whole planetary wind system also shifts southward. Under these conditions, this region comes under the influence of the Aleutian low pressure center with its succession of moisture-bearing cyclones. With the advent of spring and the apparent poleward migration of the sun and rapid increase in the rate of insolation, the moisture-bearing cyclones characteristic of the humid mid-latitudes retreat northward. With the poleward retreat of the Aleutian low pressure disturbances, Southern California comes under the dominance of a semi-permanent high pressure cell along the coast. Such high pressure is typical of regions having a dry, semi-tropical climate. Thus in summer this area is subject to the desiccation associated with dry, semi-tropical constancy and in winter with moist, mid-latitude cyclonic changeability.

It is a region characterized by a transition type climate, which lies between the hot, dry, low latitude steppe and desert lands equatorward and the cool, humid, mid-latitude marine west coast lands poleward.


The average monthly temperature in North Hollywood varies from a mean January low of 51 degrees F. to a mean August high of 72 degrees F.——a range of approximately 20 degrees between the coldest and warmest months. (Chart I.) This is an extremely small range for a mid-latitude location. It reflects, in large measure, the typical mildness of winter temperatures in areas subject to the Westerlies as well as the stabilizing influence induced by proximity to the ocean. The occurrence of the maximum average monthly temperature in August rather than July is further reflection of marine influence.
Winter temperatures range from nocturnal minimums of 20 to 50 degrees F. to diurnal maximums of 60 to 80 degrees F. Daily ranges may vary from 20 to 50 degrees F. Clear, cool nights, especially following a cyclonic storm, may result in a killing frost. The frost season usually extends from mid-November to mid-March, though killing frosts seldom occur more than ten days during the winter. (6) North Hollywood is particularly susceptible to frosts and low temperatures due to the drainage of cold air from the northern and western sections of the Valley. The topography of the Valley and the location of this community make it one of the coldest spots in the Los Angeles region.

Summer temperatures range from nocturnal minimums of 45 to 65 degrees F. to diurnal maximums of 75 to 110 degrees F. Daily ranges may vary from 20 to 55 degrees F. Clear, cloudless days, especially on those rare occasions when hot, dry air pours in from the desert, may result in very warm days. Clear, cloudless nights promote rapid nocturnal radiation and relatively low temperatures. Cloud cover at night tends to check rapid nocturnal radiation, but it also checks rapid heating of the air in the day time. Slow heating of the nearby cool ocean retards the maximum temperatures on land until mid-August and sometimes September. Though North Hollywood is subject to warm summer days, temperatures elsewhere in the Valley are frequently higher—especially on the upper slopes of the south-facing alluvial fans. For the most part, though, topography has a hemming-in effect on North Hollywood and restricts the benefits to be derived from certain alleviating meteorological phenomena common to the Los Angeles area.

Though the summer temperatures in North Hollywood would appear to be excessively high and the area virtually untenable during this season, such a conclusion would be completely erroneous. Summer is not as severe
as the temperature readings seem to indicate due to a low relative humidity, the sea breeze, and advection fogs. These three meteorological phenomena exert a mitigating effect on the high temperatures of summer.

During the extremely dry summer months both the relative and absolute humidity drop precipitously. By late August the relative humidity may decline to less than 25 per cent and the danger from fire in the nearby mountains is great. The normal pattern of diurnal fluctuation in relative humidity at this season reveals a general decline with an increase in temperature. The relative humidity may be approximately 80 per cent in the early morning and drop below 25 per cent by mid-afternoon.(?)

Though this very low relative humidity presents serious problems in regard to forest fires, non-irrigated agriculture, and decorative vegetation, it renders the high temperatures of summer far more bearable than similar conditions along the Gulf Coast or Atlantic Seaboard areas of the United States. Evaporation of moisture is extremely rapid under these conditions and the human cooling mechanism is able to operate with a high degree of efficiency. Only a slight difference in relative humidity at high temperatures is required to produce a marked difference in regard to sensible temperatures and consequently human comfort.

As the whole San Fernando Valley experiences somewhat higher summer temperatures than most sections of the Los Angeles Plain, it also experiences a somewhat sharper decline in the relative humidity. Thus North Hollywood is benefited by the decrease in relative humidity with the rise in temperature and derives a modicum of compensation for these high summer temperatures denied residents in other climes.

In summer the sea breeze exerts a most pronounced influence on mid-afternoon and early evening temperatures. Upwelling of a cold
water mass just offshore, due to the California current, plus excessive heating of dry land, especially under influence of intensive summer insolation, provide the prerequisite temperature differentials that cause a localized disequilibrium of air masses. With the forced updraft of warm, light air over the land in the form of convective currents, the relatively cool, dense air mass over the ocean tends to move inland along the surface. This phenomenon is likely to be very limited in scope and may be easily checked by high hills, mountains, or other physical configurations.

The sea breeze is restricted in occurrence in the San Fernando Valley due to the Santa Monica Mountains and the lack of low, sea-facing entrants. This fact is most evident on reaching the crest of the Santa Monica Mountains from the Valley floor on a hot summer afternoon. The cooling effect of the sea breeze moving across the Santa Monica Plain is most refreshing from such a vantage point. North Hollywood, lying in the shadow of the Santa Monica Mountains, does not derive much benefit from the sea breeze, except for its passage through the Cahuenga Pass.*

Advection fog is a common meteorological phenomenon occurring in this region during late spring, summer, and early fall. During the remainder of the year radiation fogs are most likely to occur in the evening and early morning hours. Advection fog is dependent on the presence of a cold, off-shore ocean current in close proximity to a warm land mass. Frequently, in late afternoon, a relatively low-lying cumulus cloud or advection fog bank forms over this cool water mass due to the

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* North Hollywood does derive some benefit from another meteorological phenomenon related to the sea breeze—the mountain-valley breeze. It is extremely localized and reflects the topography of the area, blowing out of the steep, V-shaped canyons in the late afternoon.
chilling and condensing of drifting warm air. Gradually this amorphous layer of fog moves over the land. Its thickness may range from tens of feet to more than 2500 feet. It generally remains at altitudes ranging from 200 to 2500 feet. It may remain overhead throughout the night and gradually dissolve away by mid-morning or late afternoon of the following day. As this fog cover seriously retards nocturnal cooling by hampering radiation, it reduces the diurnal temperature range. It also tends to reduce the maximum temperature of the following day due to its late departure. By checking nocturnal radiation and retarding subsequent insolation, the advection fog mechanism exerts a strong influence on diurnal temperature range—a factor of considerable importance during the late summer period of very high temperatures.

Advection fog, as in the case of the sea breeze, is somewhat hampered by the physical configuration of the landscape. The Santa Monica Mountains are relatively low and a well-developed advection fog may pour over their crests into the San Fernando Valley. Such fog may lose some of its potency as it billows down the north slope of this range due to compressional heating, but this is not too frequent an occurrence. A somewhat similar action may occur as the fog ascends the alluvial fan toward the distant San Gabriel Mountains. Most advection fogs are relatively high and are not affected by these physical limitations to any great extent. North Hollywood, being located in the southeast section of the Valley, receives the full benefit of any advection fog capable of surmounting the nearby Santa Monica Mountains. Such fog is an extremely important temperature moderator in that both the minimum and maximum temperatures are subject to less variability. This is particularly significant in an area experiencing pronounced diurnal
temperature ranges in contrast to the more temperate seaward facing slopes just across the Santa Monica Mountains.

Precipitation in the form of rainfall is largely confined to the winter season.* (Chart I.) Of the total yearly rainfall of approximately 18 inches, nearly 80 per cent occurs during the four month period from December through March. Of this amount, nearly 25 per cent occurs in February. Rainfall is cyclonic in type and winter storms seldom last for more than a day or two. These storms are likely to be torrential and may account for 20 to 60 per cent of the monthly total precipitation in one violent deluge.

A redeeming feature of this unique rainfall regime, both as to occurrence and amount, is the fact that the largest percentage of the total precipitation falls during winter—the period of low sun and reduced evaporation. Plant transpiration and general evaporation are at a minimum during this vital period of moisture replenishment. The widely spaced nature of this cyclonic rainfall reduces excessive runoff and promotes moisture absorption, although the torrential intensity of many storms may have the opposite effect.

Regardless of the fact that rainfall is concentrated during these winter months, the relatively brief period of cloud cover associated

* Snow is by no means unknown in this region, although its occurrence is rare—once every fifteen to twenty years. There was a light snowfall in the winter of 1920–1921 and another heavier one in 1948–1949. It snows at night or during the early morning hours in mid-winter. Usually the sun melts the snow before afternoon. The storm in 1949 deposited three to six inches of snow in North Hollywood and it was a day or two melting away. Naturally, children and some adults, especially the native-born, regard snow in one's own backyard as an event. Usually their acquaintance with snow is limited to trips to the nearby mountain resorts during the winter sports season.
with such cyclonic storms permits North Hollywood to enjoy more than 75 per cent of the possible hours of sunshine at this season. (b) Such a high percentage of actual sunshine during the rainy winter season coupled with an even higher percentage in the dry, cloudless summer has a direct bearing on the type of natural vegetation, the nature of land use, and mode of occupancy prevailing in this community.* (See Chapters III, VI, IX.)

7. Seasonal Weather in North Hollywood.

In order to more fully round out the picture with regard to climate and settlement in North Hollywood, a brief description of the contracting seasonal weather seems to be most advisable. The following characterizations of the four seasons form a composite picture of the weather prevailing in the months of February, May, August, and November.**

* There has been a dearth of objective study and analysis of meteorological data relating to the San Fernando Valley. Climatic classification of this region, utilizing the Köppen system, place this area in the Csa category. Yet, the available data would indicate a marginal position bordering on Bw or steppe climate. According to the Thornthwaite classification this is a DB'g' type climate with an 18 inch moisture deficiency. Thus, the climate would appear to be semi-arid or steppe rather than sub-humid or Mediterranean. There is room for much additional work by climatologists in regard to the correct appraisal and proper classification of climate in the Valley. A start has been made in this direction by G. A. Deen, The Climate of the Los Angeles Area According to the Köppen Classification (Los Angeles, Calif.: University of California, Dept. of Geography, M.A. Thesis, MS., 1947).

** These synoptic characterizations of the weather for each of the four seasons of the year are based upon a careful study of the daily meteorological records of the North Hollywood Cooperative Weather Station for fourteen years—the total period of recorded observations. These word pictures depict the expected conditions likely to occur during the selected months and ignore the exceptional or freak weather phenomenon. The selection of these particular months takes into account the rainfall and temperature lags of a marine type climate as well as providing an equal spacing of time intervals.
February being the month of maximum precipitation, there are usually three or four cyclonic storms. These storms are scattered throughout the month and average about one to two inches of rainfall apiece. Such a storm may persist for two or three days and generally is preceded by a period of cloudiness moving inland off the coast. Rainfall may be light and quite prolonged, due to a weak low pressure cell, or heavy and brief due to a well-developed, rapidly moving center. Though North Hollywood lies somewhat in a rain shadow zone created by the Santa Monica Mountains, these cyclonic storms are too general in extent to permit this topographic feature to seriously affect the amount of rainfall.

Temperatures during the period of cyclonic disturbance range from maximums of 58 to 68 degrees F. to minimums of 39 to 48 degrees F. Cloud cover reduces the diurnal range and the temperatures rise. With the passage of a cyclonic storm the skies clear and the temperatures slowly mount to maximums of 68 to 80 degrees F. With clear, long winter nights nocturnal radiation may result in minimums of 20 to 40 degrees F. There may be five to ten nights of heavy frost and one or two nights of killing frost. The drainage of cold, heavy air from the upper slopes of the alluvial fans to the north and west of this lowest section of the Valley may promote frost conditions in North Hollywood. These long winter nights also promote the formation of radiation fogs, which form thick blankets near the ground and melt away in the morning. Relative humidity is likely to be quite high during this month (50 to 65 per cent), particularly during the periods of cyclonic disturbance. Approximately three-quarters of the month will be clear, warm and bright during the day and rather cool, crisp and stimulating at night.
Generally by May the belt of low pressure has shifted poleward to such an extent that rainfall no longer occurs in this section. Usually the last cyclonic storms occur in early April. May ushers in the period of sub-tropical high pressure. Temperatures range from maximum of 70 to 85 degrees F. to minimum of 40 to 55 degrees F. With clear skies during the day, there is intensive insolation and a gradual building up of solar energy intake over nocturnal radiational outgo. Nights are likely to be clear and a rapid dissipation of heat tends to keep temperatures low. Radiation fogs give away to an occasional advection fog, but for the most part the days and nights are clear. Relative humidity begins to decline and evaporation to increase. To all intents and purposes North Hollywood becomes a part of the much larger weather picture dominating the Los Angeles area.

By August all Los Angeles is experiencing the full force of the sub-tropical high pressure climatic regime. This month usually registers the maximum temperatures for the year. The lag of a full month or more in the maximum temperature readings is due to a marine location plus very cold off-shore water. This upwelling of cold water, caused by the passage of the California current, warms slowly and tends to keep the temperatures of the nearby land mass unseasonably low until late August or September. Gradually as the water is warmed by intensive insolation, the difference between land and water temperatures decreases. Then the highly prized moderating effect of cool oceanic air masses is somewhat abated. The absolute maximum temperatures in North Hollywood vary from 88 to 105 degrees F. and the absolute minimum temperatures from 48 to 60 degrees F. Diurnal temperature ranges of 35 to 55 degrees F. are common during this period.
On rare occasions a trace of convective rainfall may occur as the result of an unexpected surge into the Valley of a thunderstorm from the nearby San Gabriel Mountains. The days are clear and calm, though an advection fog bank may "boil over" the Santa Monica Mountains from time to time. Such fogs move in during the late afternoon or early evening and melt away the following morning. Usually the maximum temperature of a day subject to slowly dissipating overhead fog will be somewhat lower than normal as the previous evening temperature tends to be somewhat higher. At times the sea breeze blowing over the Los Angeles Plain breaks through the Santa Monica Mountains, especially at Cahuenga Pass, relieving North Hollywood. The mountain-valley breeze also affects temperatures in a highly localized manner. Relative humidity drops precipitously—below 20 per cent. The evaporation rate rises rapidly and a very serious fire hazard results. (See Chapter III.)

Though August is extremely warm, North Hollywood residents are not confronted by sweltering heat waves comparable to those frequently occurring in other parts of the nation during this month.

By November the sun has dropped low in the mid-day sky and the rate of insolation fails to keep pace with the rate of nocturnal radiation. There is a gradual restoration of the winter dominance of the Aleutian centered cyclonic disturbances. Precipitation is light—one to two inches for the month. The cyclonic storms are likely to occur toward the close of the month, when the low pressure disturbances become stronger and exert more influence on the weather. The absolute maximum temperatures in North Hollywood vary from 80 to 85 degrees F. and the absolute minimum temperatures from 50 to 50 degrees F. There may be approximately ten days of light frost during the month, especially on
clear, calm nights following cyclonic disturbances. The chilling of the air near the ground tends to form radiation fog during the long evenings. The factor of air drainage begins to plague North Hollywood once again. Relative humidity rises as moisture bearing air masses move over the land. For the most part, days will be clear and warm; nights, cool and calm. A certain briskness in the air presages the arrival of winter.

8. **Significance of the Climatic Factor.**

Most of the choice sections with very favorable climate in the Los Angeles Coastal Plain area (the southfacing slopes of the Santa Monica Mountains) were settled several decades ago. Land values in these choice sections are extremely high at present, though this is not attributable solely to the climatic factor. There are still several other areas in Los Angeles, especially to the east and south, which would bear favorable comparison with North Hollywood as to climate and other aspects of urban development.

An extremely important aspect of settlement in North Hollywood is the very noticeable variation in atmospheric conditions within short distances. Not infrequently location with respect to Cahuenga Pass, the low section along the Los Angeles River, or near the debouchment of mountain canyons has a direct bearing on the sensible weather conditions experienced by residents. Such highly localized differences—sometimes within two or three residential blocks—defy analysis or determination from climatic records, but a walk through North Hollywood in summer or winter reveals their existence. Thus, it behooves the prospective resident to consider this matter before settling here, as some areas receive cool breezes in summer and others cold blasts in winter. In an area of high maximum and low minimum temperatures with respect to the
prevailing climate, this matter of location becomes a rather important factor within the confines of North Hollywood. In addition, the location factor with respect to precipitation run-off and flooding also merits careful consideration by the prospective resident. (See Chapter VIII.)

Though the North Hollywood-San Fernando Valley area in general possesses certain climatically undesirable features when compared with other sections of the Los Angeles Plain, it still enjoys the full benefits of an extremely moderate climate when compared with many other parts of the nation. To the migrants from more rigorous climates its virtues far outrank its faults. For these people the important facts are: the lack of snowfall in winter, a small fuel bill during the cold season, a definite and limited period of precipitation, and the possibility of enjoying maximum outdoor living the year around. No rain during six to eight months of the year and a relatively warm winter with few inclement days permit maximum enjoyment of the outdoors.

These basic climatic advantages prevail over any of the disadvantages which may be demonstrated by analysis of meteorological data. Once settled in this region and adjusted to this climatic regime the resident of North Hollywood, as well as those in other communities of Southern California, ceases to display any interest in further migration. Such a resident would prefer to remain here in modest or even straitened circumstances than to return to a more rigorous climate providing superior economic advantages. Such a philosophy of life makes climate a key geographic factor in the vast migration and rapid urbanization of this land. In the words of Dr. E. W. Bissell: "There can be no question as to the outstanding resource of Southern California. It is climate." (9)
Though climate is the outstanding resource of North Hollywood, it is also a basic geographic factor in the urbanization of this area. It is the climatic factor, which this chapter has attempted to describe in some detail, that must be regarded as the main attracting influence accounting for both the proportions and rapidity of the population growth, the attendant urban expansion, the hazards of floods, the type of technological development, the architectural motifs, the everyday mode of living, and the consequent problems that beset this community.
CHAPTER III

NATURAL VEGETATION

Chaparral, the climax vegetation growing on the mountain slopes surrounding the San Fernando Valley, has permitted the settlement of a land that might be regarded as a veritable desert. This sclerophylic vegetation complex, product of thousands of years of slow evolution, maintains the precarious ecologic-hydrologic balance in a region of semi-arid climate. The encroachment of residential settlement into these mountains, especially widespread in the North Hollywood section of the eastern Santa Monica Range, now threatens the priceless chaparral with wanton destruction by fire and bulldozer. A continuation of this ruthless destruction of the native vegetation will eventually produce a grave problem whose solution will be difficult and costly.

9. General Characteristics.

A minor geographic factor, yet one having considerable bearing on the course of urban expansion in the San Fernando Valley and particularly North Hollywood, has been the type of natural vegetation growing in this area. To a considerable degree it has influenced man's activities and, in turn, has been influenced by him. The unique characteristics of the vegetation association found on the mountain slopes surrounding the Valley merit study, because the nature of this plant growth constitutes an essential part of the physical milieu and the occupance patterns reflect man's relationship to the ecology of the area. Even such a highly urbanized society as found in North Hollywood today cannot successfully ignore the natural vegetation complex—the chaparral.*

The chaparral, which blankets the mountain slopes surrounding the San Fernando Valley, is a vegetation formation stunted by lack of

* Contrary to general opinion in the Southwest, the term "chaparral", denoting the scrub vegetation of this region, is not derived from the word "chaps"—the ornate leg protection worn by the Spanish "vaquero" (cowboy). Rather it is derived from "chaparro" the Spanish word for scrub oak. F. M. Fultz, The Elfin Forest, (Los Angeles:1923), p.63.
moisture. Trees are widely scattered and seldom exceed twelve to fifteen feet in height. The predominant vegetation consists of low, dense, bushy shrubs and dwarf trees. (Figs. 6-9.) In a region of limited rainfall, confined to the winter season, plant growth is extremely slow. (See Chapter II.) The color of such vegetation is mostly deep olive green. The woody parts of the plants are more extensive than the foliage. Leaves are small, stiff, thick and leathery, with hard, waxy surfaces designed to prevent rapid transpiration. Tree bark is frequently thick, spongy, and rugose as found in the cork oak. The gnarled growth of these shrubby thickets makes travel through them extremely difficult, if not virtually impossible. (Figs. 6, 7.) The interlocking, tenacious root systems and intertwining, spiny branchlets of each plant provide a magnificent ground cover, but practically defy the passage of any man lacking a machete or a full suit of armor.

The chaparral, as a response to a particular set of environmental conditions, plays a vital role in maintaining the ecologic-hydrologic balance in this area. The steady encroachment of residential settlement into the foothill areas of the Valley, especially the rapid urban expansion of North Hollywood into the eastern portion of the Santa Monica Mountains, is fraught with serious problems relating to this balance. Such a pattern of settlement may easily destroy the delicate balance of Nature, evolved during thousands of years, bringing catastrophe to the inhabitants and severely damaging the land.

10. **Historical Developments.**

The first Europeans known to have visited the San Fernando Valley were members of the Portola expedition. In 1769 this party of intrepid Spanish explorers gazed down upon the Valley from the Santa
Fig. 6. Chaparral in the Santa Monica Mountains. This thick and virtually impenetrable vegetation forms the natural covering of these slopes. Photo taken along the side of Laurel Canyon Boulevard.

Fig. 7. Close-up of the chaparral. The covered sign in the foreground announces to all concerned that this property is for sale as a residence site. Photo taken about ten feet to the left of Fig. 6.

A five minute journey by car from this point would place one in the heart of the highly artificial urbanized developments of North Hollywood or Hollywood. Few cities have such areas of natural vegetation close to the urban centers.

Fig. 8. Laurel Canyon Blvd. serpentine through the dense chaparral of the Santa Monica Mountains. Such highways merely enhance the threat of serious fires in the chaparral. To the left, the highway leads directly into Hollywood and to the right, North Hollywood. Photo taken from Mulholland Drive looking west-southwest.

Fig. 9. A magnificent slope of chaparral. This well-protected slope is being endangered by the stripping of vegetation from the crest in order to construct homes. Photo taken on Laurel Canyon Blvd. looking south-eastward toward Mulholland Drive.
Monica Mountains. According to the official chronicler of the expedition, the Valley floor was covered with various kinds of grasses—mostly wild mustard and tules—while the banks of the washes were covered with a luxuriant growth of cactus and other native shrubs. (10) Along the course of the then unnamed Los Angeles River were groves of willows, alders, sycamores, and numerous hydrophytes. Near the base of the Santa Monica Mountains stood large clumps of oaks (los encinos), the remnants of which are still to be seen today in the communities of Encino and Sherman Oaks—about three miles west of North Hollywood. The surrounding mountains were covered with a low, dense and nearly impenetrable mass of shrub-like vegetation not unlike that found in southern Spain. (11). In honor of the impressive, isolated stands of oak the Spaniards named the Valley, "Santa Catalina de Bononia de Los Encinos" (Saint Catherine of Bononia of the Oaks).

This vegetation pattern remained undisturbed until the founding of San Fernando Mission in 1797. (See Chapter IV.) Even then, the padres managed to bring only a small part of the Valley under European-type cultivation. Though the Mission maintained from one to three thousand head of livestock at different times, overgrazing did not prevail nor were all sections of the Valley subject to this pastoral economy.

In 1858, Colonel Blake's party, which was conducting detailed surveys of possible railroad routes from the Mississippi River to the Pacific Coast, passed through the Valley via San Fernando Pass on its way to Los Angeles. He described the upper portion of the Valley as "without trees or verdure". (12) The road across the Valley from the Mission southward to Los Angeles was "bordered in some places by a low
growth of shrubbery and cacti, which gave a peculiar aspect to the country, and reminded some of the party of Mexican landscapes." (13) The route over the hills (such seemed the Santa Monica Mountains to men who had just traversed the Rockies) was "...lined with clumps of prickly pears rising to heights of two to ten feet and bearing fruit which was exceedingly abundant and in full perfection." (14) Another member of the party mentions the abundance of fine meadow grass in the northern part of the Valley near the Mission as well as the presence of wild oats everywhere. (15)

With the secularization of San Fernando Mission and consequent development of vast ranchos devoted almost exclusively to livestock grazing, practically all trace of cultivated crops disappeared from the Valley. (See Chapter V.) The "haciendados" (ranch owners) were not particularly interested in growing crops or extensive farming operations, and under such a regime the Valley reverted to wild vegetation. A few introduced European grains managed to thrive in a wild state and soon preempted the place of some of the weaker native grasses and weeds. From time to time attempts were made to improve the pasturage on the surrounding mountain slopes by setting fire to the "valueless" scrub vegetation. But the worthless scrub was never replaced by a growth of more succulent species and, as a consequence, these slopes were regarded as just so much wasteland, if not a positive menace.

Annexation of the California territory of Mexico to the United States in 1848 resulted in a rapid dismemberment of the vast ranchos. (See Chapter VI.) Livestock grazing in the Valley was replaced by dry farm cultivation of wheat, oats, barley, and rye. With the drilling of deep wells for water and the importation of vast quantities
of water via the Owens Valley aqueduct, dry farming of grains gave way to irrigated fruit and nut orchards, and truck crops. (See Chapter VI.)

The Valley floor assumed a green hue throughout the year instead of during the brief season of winter rains. Except for narrow ribbons of land near the washes, native vegetation almost completely disappeared from the Valley floor.

During the past two decades tremendous expansion of suburban settlement has pushed agriculture ever further westward in the Valley. (See Chapters VI and IX.) In time—a not too distant time—it may succeed in completely dominating the land-use pattern of this area thereby eliminating commercial farming. This process has very nearly been completed in North Hollywood in less than twenty years. With land subdivided into residential plots, truck gardens and orchards have been replaced by small patches of lawn, young ornamental trees, and various species of decorative shrubs or vines. (Figs. 12-14.)

A few vacant lots scattered throughout North Hollywood may still produce a stand of wild mustard or oats reminiscent of former days. Other lots may now contain rows of disease-ravaged, dead or slowly dying peach, apricot, and walnut trees, bearing mute evidence of former extensive commercial agricultural production. (Figs. 15-18.) Such remnant orchards are a menace to the few remaining groves of healthy trees found in other sections of the Valley.

During this period of development and even earlier, the eucalyptus tree became an important aspect of the culturally induced landscape of North Hollywood. Large and stately eucalyptus trees, not infrequently found in definite linear arrangement, testify to the former location of roads leading to ranchos or excessive enthusiasm on the part of some pioneer realtor. (Fig. 12.) Scattered throughout the
Fig. 10. Vegetation around a home. In the older sections of North Hollywood the houses still show traces of orchards. In this photo, to the left, is a remnant of a peach and apricot orchard. There is a peach tree in the front yard. Along the side of the house are young eucalyptus trees. The house probably was built about 1920. Note the sandy loam soil typical of the Tujunga formation.

Fig. 11. A well-landscaped section of North Hollywood near Valleyheart Drive North. The houses are shaded by magnificent stands of eucalyptus of various species. These houses were constructed in the late 'twenties or early 'thirties. The trees were approaching maturity by that time, as the eucalyptus is a very fast-growing tree.

Fig. 12. A magnificent stand of eucalyptus. In all likelihood these trees mark the site of a road leading to a farm or ranch of a former day. Trees of this size are at least fifty or sixty years of age. Such a row of trees is a rarity. Photo taken looking north from Chandler Boulevard near Coldwater Canyon Avenue.
relatively older residential sections of North Hollywood there are fairly extensive plantings of pepper, crepe myrtle, oleander, copper beech, sycamore, willow oak, lombardy pine, various palms, and the ubiquitous, fast-growing eucalyptus. (Fig. 11.)

11. Recognition and Investigation of the Chaparral.

While this culturally induced reconstruction of the vegetation pattern on the Valley floor proceeded apace, the low, dense, matted scrub growth of the mountain slopes remained more or less undisturbed. Until the turn of the century this mass of nearly impenetrable vegetation was regarded as utterly useless and a blot on the landscape. Gradually trained foresters began to recognize the tremendous importance of this vegetation complex in the retardation of run-off during the periods of intensive rainfall and the prevention of disastrous gully erosion. (16)

Time after time the spreading fires in this highly combustible plant growth, during the prolonged dry season in summer, have had consequences in destructive flooding of the rich Valley lands, during the rainy season in winter. Officials have repeatedly brought this menace to the attention of an ever-growing and shockingly careless population.

All students of plant life are agreed that the chaparral is a truly unique vegetation association. Some authorities refer to it as an "elfin or dwarf forest". Though bearing slight resemblance to other forested areas of the world, the chaparral may be so considered on the basis of its composition, extent, and function.

There are roughly 150 species of chaparral. Approximately twenty dominant plant types constitute nine-tenths of the total growth.*

* Six species of the chaparral dominate the mountain slopes surrounding the San Fernando Valley. These are known by their common
In addition, some sixty secondary species make up the bulk of the remaining ten per cent of the forest. Each of the major species tends to preempt those areas most favorable for its growth, both climatically and edaphically. But as a rule, it is more common to find mixed stands of diverse species.

names as: Chamis or Greasewood, Ceanothus, Manzanita, Sumac, Sage, and Scrub Oak. Two lesser species of such distinctive appearance as to be worthy of note are: Yerba Santa and Yucca.

(1) Chamis or Greasewood is the most plentiful of all chaparral species—constituting over one-third of the total cover. It is characterized by small, almost needlelike, olive green leaves. In shape the plant may vary from a slender isolated spire to a massive hemispherical-shaped bush, when found in nearly pure stands.

(2) Ceanothus or Buckthorn ranks second to chamise in area covered. It grows most luxuriantly, and its tiny branchlets have stiff, sharp spines. It usually forms a squat and nearly impenetrable mat of relatively lowly vegetation.

(3) Manzanita (Spanish—little apple) is a very common and quite easily identified species of the chaparral. It has a wood nearly as hard as bone; smooth, velvety red and greenish bark; trunk and limbs that twist, turn, and angle until a straight piece two feet in length is regarded as a collector’s item. The Indians ate the berries like apples (hence the name), and also used them in making vinegar or brandy.

(4) Sumac is generally an evergreen species having large single leaves and limbs of white wood with dark centers. Its extensive foliage, in contrast to other types of chaparral, make it an excellent source of sorely needed ground shade. Its strong root system renders it extremely fire resistant and a highly valued shrub for purposes of rapid reforestation of burned over areas. Poison Oak is a Sumac as is Toyon or California Holly. It was the heavy stand of toyon on the site of Hollywood that gave that city its name, according to romantic legend.

(5) Sage brush of the common desert variety is not a true plant of the chaparral complex, but a sister species, the California sage brush, is common to all semi-arid regions. It has an ashy, grey-green foliage and a characteristic strong, pungent sage scent.

(6) Scrub Oak or Chaparro, source of the common name of this vegetation association, may be a true live oak or a type that holds its leaves until new foliage appears. These oaks are evergreen, and due to their dwarf size may be best identified by the presence of the acorn cup. Most of these oaks attain heights of four to six feet. They are shrubby in form and have a foliage consisting of small rounded leaves.
Fig. 15. Residential encroachment into the dead orchard land of North Hollywood. The sign board tells an old familiar story in this community. Thousands of acres, formerly used for agricultural purposes, have been transformed into blocks of suburban residences. Photo taken near Fulton Avenue on Magnolia Boulevard.

Figs. 14-15. Rotting orchards scattered throughout the residential sections of North Hollywood. These photos show the steady encroachment of residential land use in areas formerly devoted to orchard crops. Fig. 14 taken near Riverside Drive and Laurel Canyon Boulevard. Fig. 15 taken near Oxnard Street and Coldwater Canyon Avenue.

Fig. 16. Formerly a magnificent peach orchard. This dead orchard will eventually be uprooted and the land covered with more residences. The soil is excellent Tujunga sandy loam, and the orchard located close to the West Branch of Tujunga Wash. Photo taken looking south from Burbank Boulevard near Whitsett Avenue. Fig. 70 is a view directly across the street from the orchard and bares mute testimony to the likely fate of this acreage.
Generally the chaparral is found most extensively between sea level and five thousand feet elevation, from the Mexican-California border on the south to Santa Barbara on the north, and covering the windward moisture-gathering slopes of such mountains as the Santa Rosa, San Jacinto, San Bernardino, San Gabriel, Santa Susana, Santa Monica, and Santa Ines. It is estimated to cover approximately five and a half million acres of land subject to the dry summer sub-tropical climate.

Located in the very heart of this geographical defined vegetation province, the mountainous slopes surrounding the San Fernando Valley are completely covered with chaparral, except for the higher elevations in the San Gabriel Range.

Functionally, the chaparral protects the rugged slopes from excessive erosion during the periods of brief, torrential rain common to semi-arid climates. By means of its extensive root system, the soil is held in place and protected from the onslaught of free flowing water. Also, the chaparral acts as a temporary water reservoir by slowing down

(6) Continued. The scrub oak grows in low, dense, nearly impenetrable thickets. The wood is extremely tough; the trunk and branches very crooked; and the twigs are small, stiff, and spiny. The "chaps", leather trousers worn by the vaqueros, were definitely required for protection of any horseman traversing areas covered by this cordially disliked vegetation. The Indian, though, found the acorn of this oak a staple item in his precarious diet.

(7) Yerba-santa plants have long tapering leaves that are dark, shiny green on top and covered with a nearly pure white, woolly down on the underside. The "saintly plant" was so named for its curative properties in the treatment of respiratory ailments. Its medicinal value was made known to the padres by the Indians.

(8) Yuca, Spanish Dagger, Wild Date or "Sentinel of the Desert" is one of the most distinctive plants found in the chaparral. It stands upright far above the mass of low-lying vegetation and may appear like a beacon when in full bloom. Though very repellent, due to needle-like leaves, the Indians made extensive use of this plant. In springtime the lush, tender flowering shoots served as a vegetable oyster. Later in the season the seed pods were ground into flour. The dagger-like leaves were shredded and yielded a fiber for cloth.
TABLE 1. Significant plants of the chaparral in the San Fernando Valley and percentage distribution of the primary species.*

<table>
<thead>
<tr>
<th>Botanical Name</th>
<th>Common Name</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adenostoma fasciculatum</td>
<td>Greasewood</td>
<td>45</td>
</tr>
<tr>
<td>Adenostoma sparsifolium</td>
<td>Red shark</td>
<td>15</td>
</tr>
<tr>
<td>Arctostaphylos glauca, pungens, manzanita, tomentosa</td>
<td>Manzanita</td>
<td>15</td>
</tr>
<tr>
<td>Quercus dumosa or chrysolepis</td>
<td>Scrub and live oak</td>
<td>12</td>
</tr>
<tr>
<td>Ceanothus cordulatus</td>
<td>Duckthorn</td>
<td></td>
</tr>
<tr>
<td>Ceanothus divaricatus</td>
<td>Wild lilac or myrtle</td>
<td></td>
</tr>
<tr>
<td>Eriodictyon californicum</td>
<td>Yerba-santa</td>
<td></td>
</tr>
<tr>
<td>Eriognum fasciculatum</td>
<td>Wild buckwheat</td>
<td></td>
</tr>
<tr>
<td>Heteromeles arbutiolfolia</td>
<td>Toyon berry or Calif. holly</td>
<td>12</td>
</tr>
<tr>
<td>Ramona stachyoides</td>
<td>Black sage</td>
<td></td>
</tr>
<tr>
<td>Rhus integrifolia</td>
<td>Wild mahogany or lemonade berry</td>
<td></td>
</tr>
<tr>
<td>Rhus diversiloba</td>
<td>Poison oak</td>
<td></td>
</tr>
<tr>
<td>Yucca whipplei</td>
<td>Yucca or Spanish bayonet</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>


the rate of run-off, thereby promoting slow percolation of the precious moisture through dense foliage into the soil. It aids in moisture retention by providing a heavy ground shade and by an extremely low
Many of the component species of chaparral spring up again after they have been burned off. The first year the charred bases of Toyon, Rhus, Rhamus, and some Manzanita and Ceanothus bushes become green tufts of new growth and the bare ground between their groups of dreary blackened stems begins to be downy with young annuals, seedling perennials and seedling shrubs—for fire is a tremendous incentive to germination. By the second year the new growth has risen almost level with the tops of some of the black branches. By the third year there are the dark and light green of Scrub Oak, the diller green of Mountain Mahogany, the greens and greys of Manzanita, the shiny green of Rhamus, and the varied greens of Ceanothi—all blending in a beautiful redeeming cloak come back to guard the hillsides."

L. Rowntree
Flowering Shrubs of California.

Fig. 17. Fire in the chaparral. In August, 1940, there was a serious brush fire beyond the slope shown in this photo. The fire raced over the crest of this hill and down the gully, only to be stopped a few yards short of this home. Photo taken about nine months after the fire, looking northward. In the foreground is Iredell Canyon Road deep within the Santa Monica Mountains. North Hollywood can be clearly seen from the crest of this slope. Though there are no houses to the left of the one shown in this photo on the north side of the street, there are three residences on the south side. Fortunately, none of these homes suffered damage from this fire, but there very likely will be others in the future.

Fig. 18. The Iredell Canyon fire to the west of the area shown in the above photo.

Fig. 19. Chaparral slopes as they should appear except for the road cut indicating the course of Mulholland Drive. A carelessly tossed cigarette butt, a match still glowing, or sparks from an automobile exhaust pipe may turn this slope into a raging inferno and leave it as denuded as the photo to the left. Then nature must begin recovering the slopes once again, while erosion takes its toll.
rate of transpiration, which results in an important reduction of evaporation during the long period of summer drought.

Without doubt, the chaparral is the climax vegetation in this region of semi-arid climate with a long, dry summer and a short, rainy winter. Though some students have claimed that these mountain slopes were forested with much larger trees in pre-historic and early Spanish days, there is no valid evidence of such a sweeping change in climate or in vegetation to warrant this assumption. (18) Considering all relative ecological factors, there seems little doubt as to the suitability of the chaparral cover for these slopes.


The greatest danger to chaparral cover has always been man and his well-known carelessness in the use of fire. With the passing weeks of a long dry summer and precipitous decline in relative and absolute humidity, the chaparral becomes highly inflammable. The smallest spark, even that emanating from the exhaust of a passing automobile, may set off a raging brush fire. The stunted nature of its growth causes every blaze in the chaparral to assume the form of the dreaded crown fire. A stiff breeze from the ocean or a nearby canyon may fan the flames upslope as if by forced draft. Intricate configuration of the topography makes each fire a unique problem and a challenge to both the wits and stamina of the highly trained forest fire fighter. Spread of urban settlement up these mountain slopes, especially in the eastern section of the Santa Monica Range—the North Hollywood area—and construction of high speed highways through the major canyons has seriously aggravated the problem of fire protection and control in the chaparral. (19) (Figs. 8, 17-19.)
During the dangerous summer months strict regulations governing the use of fire prevail in these areas. At no time may open fires or smoking occur in the mountains, but the enforcement of these regulations is most difficult. The tax payers of Los Angeles annually contribute enormous and unwarranted sums toward the maintenance of an elaborate system of fire patrol stations, fire fighting personnel, and an extensive network of reservoirs to supply water to combat forest fires in these mountainous areas.* (20)

Most of this unwarranted financial burden could have been avoided and the life-sustaining chaparral permanently and adequately protected had the city been far-sighted enough to purchase the whole Santa Monica Range a few decades ago. The cost at this time would have been nominal as compared with the expenses which have subsequently been incurred and must now be sustained. The whole area should have been permanently zoned so as to prevent all types of private ownership or occupancy. No individual has the right to own a residence nor dwell in an area exposed to such extreme fire hazard—not alone for his own safety, but also in consideration of the general welfare of the whole community.

These areas of chaparral should be closed to the public during the dangerous summer months and in winter devoted to recreational activities

* The menace of fire in the chaparral and the inclusion of large areas of such vegetation within the city necessitates the purchase of rather unusual equipment for a metropolitan fire department: skip loaders, graders, tractors, auxiliary water tank trucks, tractor trucks, patrol cars, etc. To fight fires that can not be reached by pipelines, special tanks holding up to 2000 gallons of water and mounted on high-powered truck-trailers are available. Such equipment requires the construction and maintenance of an elaborate system of special roads over private property for the exclusive use of the Los Angeles Fire Department. It, also, requires an elaborate system of communications throughout the mountains.
Fig. 30. Real estate sub-dividing in the Santa Monica Mountains. Like a garish landscape on the moon, the real estate interests have cut and filled these small platforms for residential view-sites. The sign announces the sale of "Metropolitan Estates". Within a short time, this slope will be covered with homes such as appear in the foreground. These houses are poorly designed for hillside sites as the structures are too angular for the contours. Note the swimming pool near one of the houses. A ten minute drive southward or northward reaches downtown Hollywood or North Hollywood. Photo looking east from Mulholland Drive, approximately a mile from Cahuenga Pass Freeway.

Fig. 21. A residential lot for sale in the mountains. This space along Mulholland Drive is for sale as a home site. The slope is covered with a dense stand of chaparral and the road cut has grown over with vegetation. The rock consists of Topanga shale with some basaltic intrusions and white streaks of natrolite—hydrated sodium aluminum silicate.

Fig. 22. Large estate homes are scattered throughout the North Hollywood section of the Santa Monica Mountains. During most of the year this is a critical fire hazard area. Everywhere there are large warning signs: "No Smoking In or Out of Cars and No Open Fires". Note the swimming pools. The city must maintain water pressure sufficient to service these mountain side residences. Photo taken on Mulholland Drive looking eastward toward the same highway curving off to the right.
as parkland. Year by year the real estate sub-divider encroaches ever deeper into this valuable natural cover. (Figs. 22-24.) The land is slashed and the vegetation stripped away, exposing steep slopes of decomposed granite to violent rainfall and run-off. Eventually the subdivision is sold to prospective home owners or the land permitted to revert to chaparral. The new dwellers merely intensify the fire hazard and the danger of being burnt out of house and home some summer day.

Given half a chance for survival, the chaparral protects the lowland areas from torrential flash floods, conserves the ever-precious, life-sustaining water supply, and prevents the land from assuming the characteristics of the adjoining Mojave Desert. (Map 2.) It even sustains a few individuals by providing excellent bee pasturage and limited commercial production of honey.* Unfortunately, the residents of North Hollywood and other Valley communities have little or no conception of the value of the chaparral nor how necessary it is to their welfare. They are utterly incapable of making an effective use of the chaparral as were the much despised Indians. To them the chaparral is something to be despoiled by a wanton perversity in regard to housing, or bypassed as rapidly as modern means of transport permit, while carelessly tossing a lighted match or cigarette into the brush. This thoughtless and selfish philosophy, promoted by the highly artificial urban society spreading over this Valley, may eventually turn a hospitable land into a desert as once befell rich cities of the Mediterranean region.

* The chaparral is not without an abundance of wildlife.
Among the animals and birds to be found in such areas are: the lizard, horned toad, gopher, rattlesnake, squirrel, brush rabbit, jack rabbit, deer, coyote, California jay, housefinch, Lewis woodpecker, wren-tit, California thrasher, goldfinch, and valley quail. W. Holt, Chaparral, (Sacramento, California: California State Department of Education, 1937), p.4.
PART II
HISTORICAL PATTERN OF OCCUPANCE

CHAPTERS IV – VI

For as Geography without History seemeth a Karkasse without motion; so History without Geography wandreth as a Vagrant without a certaine Habitation.

John Smith
CHAPTER IV

THE INDIAN AND THE MISSION

The aboriginal left little more than a legacy of Hispanized place names and a romantic myth in the San Fernando Valley despite his remarkable cultural adaptation to this semi-arid land—a manner of adaptation in some degree imitated by the contemporary urbanite. Establishment of a Spanish Mission in the Valley led to the decimation of the Indian population and destruction of his culture. Though completely dependent on Indian labor, the Mission failed to create a permanent basis of settlement or a social order involving the successful acculturation of the natives. Though an attempt was made by the Mission to promote agriculture in the North Hollywood area, the nascent pueblo of Los Angeles prevented this development. The legacy of the Mission era consisted of dispossessed and demoralized Indians, a demonstration of the possibilities of irrigated and dry-farming agriculture, the rudiments of an architectural style, the name "San Fernando", and a popular myth concerning Mission life.

The San Fernando Valley is a mere segment of a vast metropolitan area, yet it has experienced a series of occupancy patterns which reflect every cultural stage in the settlement of Southern California. Few regions in the United States offer for study such diverse patterns of sequent occupancy, especially in view of the relatively short span of time involved.

Within a period of 175 years the San Fernando Valley has witnessed four distinct cultures—aboriginal Indian, Franciscan Mission, Spanish rancho, and American urbanism. Though only a romantic and highly fictionalized idealization of these pre-American cultures remain in vogue today, they have, nevertheless, exercised some influence on contemporary society and deserve recognition as part of an investigation of contemporary settlement. In many instances complete dominance of one culture by another and the consequent distorted expressions of remorse on the part of the stronger culture group may be highly significant in the study of a region. Such has been the fate of the Indian, Mission, and Spanish cultures at
the hands of the Americans.

13. Indian Culture.

Although no vestige of the aboriginal culture of the San Fernando Valley has survived European settlement, it, nevertheless, should be regarded as a significant aspect of the historical pattern of occupancy. This preliterate culture merits consideration because it represents one of the four types of environmental response which have prevailed in this area. In addition, the existence of a native populace provided a docile labor force that proved to be an indispensable source of manpower during the period of Franciscan, Spanish, and early American settlement, and thus contributed to the development of the region.

The aboriginal settlement of Southern California occurred several thousand years before the arrival of any Europeans. These settlers were part of the migratory movements from Asia, which crossed over to North America and filtered down into North, Central, and South America. Due to the relatively isolated location of the California lowlands suitable for settlement, these Indians remained little disturbed by invaders and cultural innovations until the arrival of the Spaniard. In many respects their culture lacked the more complex differentiation and development found among aboriginal groups in other parts of the Americas.

As a consequence of these migratory movements, the San Fernando Valley was occupied by a people of Shoshonian speech and culture generally referred to as Fernandillos. The number of inhabitants in the Valley has never been ascertained accurately, although a few of their village sites (rancherias) have been studied by archaeologists and
ethnologists. These studies plus a few scattered accounts by Franciscan missionaries and others constitute the bulk of present-day knowledge regarding these people. The mis-guided zeal of the Franciscans and the brutal subjugation inflicted by Spanish and American settlers quickly destroyed every vestige of Indian life and eventually the Indian. A few Indian place names, somewhat corrupted by Hispanization, are all that remain of this highly ingenious, primitive culture. Nevertheless, this Indian culture does reveal that certain geographic factors have apparently elicited somewhat similar responses from local inhabitants irrespective of the prevailing culture level.

The Indians of the San Fernando Valley invariably located their villages near a perennially flowing stream or spring, thereby securing a steady water supply. All known "rancherias" in the Valley were so located. (Map 3.) In most instances villages were confined to relatively flat areas somewhat elevated above stream level, but within portable distance of the vital water supply. As most of the present-day site of North Hollywood consists of relatively flat land subject to inundation by the washes and the Los Angeles River, the Indians apparently refrained from establishing villages in this area. Nevertheless, it is probable that settlements were located on higher ground in the foothills of the Santa Monica and Verdugo Mountains contiguous to North Hollywood. (Map 3.) Also, the North Hollywood section formed a vital part of the sustenance-seeking area available to these Indians—being part of a

* The author is deeply indebted to Mr. E. F. Walker, research assistant at the Southwest Museum, for many hours spent in personally conducted tours of the magnificent collection of Southern California Indian artifacts housed in the Southwest Museum in Los Angeles, California. Mr. Walker also assisted in the compilation of the accompanying map portraying Indian village sites in the San Fernando Valley. Much of the above discussion pertaining to the Indians of the Valley is based upon his research and excavation of Indian rancherias.
rich hunting range and source of other foodstuffs.

Once established a village was seldom abandoned, although at different seasons fishing trips were made to the nearby coast, hunting trips to the local marshes, or seed-gathering journeys into the surrounding mountains. Apparently there was no fixed pattern dictating the arrangement of structures in the village—houses were scattered about a site at random. It is known that a few of these communal centers were of considerable size, but archaeological evidence is insufficient for estimating the number of inhabitants in a village or for the whole Valley during this period. Although under optimum conditions the number of Indians in the Valley probably did not exceed a few thousand, the density of settlement was remarkably high in comparison with other North American tribes.

The "jacal" or house of the Fernandilino Indian was composed of brush, dome-shaped, and bearing remarkable resemblance to the Algonquian or Ojibway wigwam. The floor of the house generally was covered by mats of tules (bulrushes) obtained from nearby marshes. Around the inside walls were piles of tule mats or animal skins for use as beds and bedding. The "jacal" was used mainly as a protection against inclement weather or periods of extreme temperature. Except for sleeping purposes, it was seldom occupied. The Indian family lived out-of-doors. Cooking was done at an open fireplace near the house. Recreational pursuits were largely confined to the open. (Fig. 23.)

The contemporary resident of North Hollywood does not differ a whit from his aboriginal predecessor in regard to outdoor living. Though homes are far more substantial today, the emphasis still remains on living, cooking, and eating out-of-doors. The backyard patio becomes the basis of home life. (See Chapter IX.)
Clothing among the Indians was scanty for the most part. Indian women wore short skirts of skin, or grass and bark. Men wore loincloths or breechcloths of deerskin or yucca fiber. Children did without clothing. In winter both sexes used skins as robes in the daytime and as blankets at night. In addition, there was the usual elaborate attire used in ceremonials.

Again, the natives and contemporary residents bear a marked resemblance. The sun cult of today limits clothing to the minimum essentials, especially around the home. Abbreviated play or sun suits are common attire among the women of the Valley in summer and part of winter. Shorts and swim trunks suffice for the men. The very young wear nothing more than a breechcloth. Only in the evenings and colder days of winter do the residents of North Hollywood dress in warmer attire.

In the matter of food the Indians and contemporary occupants reveal no similarities. Among the Indians acorn mush was the staple of diet. The acorns were gathered from oaks in the chaparral in early fall, stored in wicker baskets, and ground into meal as needed. This dietary mainstay was augmented by several other foods. Fish, fowl, and meat were frequently roasted in a deep pit filled with live coals. (Today, the backyard barbecue pit performs the same function.) Mesquite beans, nearly a balanced diet in themselves, were prepared in several ways. More than a hundred different types of seeds were shelled, winnowed, and ground on large grinding slabs (metates) by means of stone millers (manos). (21) Many kinds of edible roots and bulbs were dug up and pounded, or ground into meal for boiling. Various wild berries were important additions to the food supply. Manzanita and toyon berries were widely used as food. (See Chapter III.) Nutmeats were obtained
from walnut, pine, pinon, and other trees or bushes. A wide variety of meats were consumed in limited amounts: deer, mountain sheep, tule elk, antelope, jackrabbit, cottontail, squirrel, rodents, lizards, grasshoppers, and even caterpillars and larvae. Fowl consisted of ducks, geese, swans, pigeons, and quail. Scores of shellfish, fresh water fish, and salt water fish were abundant.

Obviously the contemporary Valley resident does not consume such foods, except on those rare occasions when hunting in the mountains or attending an exclusive restaurant. The North Hollywood urbanite could not make use of these Indian foods, even though population were drastically reduced. Subsistence off the chaparral is possible, but the 20th century resident would starve to death before learning how to utilize the food supply at his doorstep.

Trade was a very important aspect of life among the Fernandilino Indians. A significant item in the local economy was steatite or soapstone. This relatively soft stone could be easily shaped into all manner of fire-resistant vessels. Such highly prized utensils were traded great distances. The Valley Indians secured them in barter for baskets, sooms, animal skins, and desert-made pottery. The obsidian deposits of the Mojave desert were fashioned into knives and projectile points, and then traded over several hundred miles. Salt was obtained by evaporation of sea water, salt marsh water, or beating it from salt grass. The skins of deer or tule elk were tanned by the Valley Indians, who were expert leather workers. Artistic robes of deer, elk, and rabbit skin were easily traded to other Indians far removed from hunting grounds. Asphaltum, gathered along the sea shore as a result of underwater oil seepage, was a very important article of trade. For
Fig. 23. Mission Indian site. A re-construction of an Indian camp site by the Southwest Museum. Note the tule or brush type of house, the chaparral vegetation, and the canoe in the foreground.

Fig. 24. Mission Indian basketry. Though these Indians did not practice agriculture nor appear as advanced as other aboriginal tribes in America, they were excellent artisans. Baskets of all types were a vital part of their existence. These three examples form only a part of the many styles utilized by the Indians. In many instances, these baskets were water-proof and used as receptacles for liquids. The basket at the bottom of the page illustrates the famous rattlesnake design.
a primitive people lacking the rudiments of civilization (written
language, agriculture, etc.), according to the dictates of the European,
these Indians reveal a remarkable specialization of production. (Fig. 24.)

The San Fernando Valley Indians were very religious, which
fact was exceedingly important to the Franciscan missionaries in their
program of "saving souls and civilizing the heathen". These Indians
believed in an after-life, as evidenced by their custom of breaking and
burning the possessions of the deceased so that the "spirits" of such
objects would be released to accompany the spirit of the departed on
his journey to the afterworld. These people had many gods or spirits
and a multitude of legends concerning the creation, death, birth, incest
and other significant aspects of life. There were very elaborate
puberty rituals. The Jimson weed ceremony, initiating the young men
of the tribe into adulthood, was the most significant and it influenced
all future acts of the participants. Today, the Jimson weed continues
to grow profusely in uncultivated areas around North Hollywood.

In his monumental study, Handbook of the Indians of California,
Dr. A. L. Kroeber characterized the Indians of this land as follows:

* Ethnologically California may be said to be characterized
  by the total absence of agriculture and of pottery, by the
total absence of totemism or gentile organization, by an
unusually loose social organization, in which wealth plays, for
a somewhat primitive and an American group, a rather important
part; by the very rude development of all arts except basketry,
by the lack in art of realism; by a slight development of
fetishism and by the conspicuous lack of the symbolism and
ritualism so highly developed by most American Indians; by the

* It is interesting to note that women were held in high
esteeem by these Indians. Not infrequently women were elevated to
the office of village chief or shaman (medicine man). In addition,
these Indians were quite peaceful and not given to internecine conflict,
except on rare occasions.
marked prevalence of religious restrictions connected with birth, death, sexual matters; by the predominance among ceremonial of mourning and initiation rites; and by a considerable development of creation mythology. (22)

Though subsequent archeological investigations have revealed certain facts not known at the time of Professor Krober's admirable summation, the overall cultural setting was much as he describes it when the Spanish first appeared on the scene. When Rodriguez Cabrillo cast anchor in Santa Monica Bay and claimed California for the Spanish crown in 1542, he found the Indians along the shore living in the manner just described. They continued to live at this cultural level for another 250 years after the voyage of discovery by Cabrillo. It was in 1769 that Gaspar de Portola's party reached Southern California from Mexico and ushered in the era of the Spaniard—nemesis of the Indian.


Governor Portola of Baja California was commissioned by the Spanish Crown to lead an exploratory party into Alta California for the purpose of establishing colonies at San Diego and Monterey, and to found five missions. These colonies and mission establishments were to be the basis of further settlement and substantiation of the Cabrillo discovery of California in the name of the Spanish monarchy.

After five months of arduous overland travel, the Portola expedition reached the site of present-day Los Angeles. From this point, the party pushed on toward the Santa Monica Mountains, which were crossed by means of an Indian trail through what is now known as Sepulveda Canyon—some three and a half miles west of the present-day site of North Hollywood. (Map 1.) At the crest of the mountain passage, Portola and his cohorts gazed down upon the San Fernando Valley—the first Europeans
ever to view this land. (Cabrillo did not venture inland further than the beach at Santa Monica Bay.) In honor of the magnificent oak trees clustered along the north base of the Santa Monica Mountains, the Valley was named, "Santa Catalina de Bononia de Los Encinos". (Saint Catherine of Bononia of the Oaks) (See Chapter III.)

The Portola party crossed the Valley without molestation and continued their fruitless northward search for Monterey via San Fernando Pass. Some five months later the expedition again traversed the Valley on the return journey to Baja California. This time the Indian guides, who were necessary adjuncts to all such explorations, used Cahuenga Pass as the exit route. Thus the first Europeans traversed the Valley and walked over the site of North Hollywood without noting anything more remarkable than a few stands of live oaks.

With its discovery and naming by Portola, Santa Catalina de Bononia de los Encinos passed under the yoke of an autocratic Spanish government. During the tenure in office of ten Spanish governors, who ruled Alta California in the name of the Crown from 1769 to 1822, the San Fernando Valley never achieved significance as a center of colonization. Situated some three hundred miles from the seat of government at Monterey, the Valley received scant attention, though it was ever in view of those who travelled over El Camino Real (the public highway). (Map 5.) This "Royal Road" passed the length of the Valley on its journey from San Diego, on the south to Monterey, on the north. There was simply so much territory and so few prospective settlers that the Valley, like so many other localities in Southern California, was obliged to await its turn as an area of settlement.

In 1780, Governor Felipe de Neve promulgated the first set of
PREHISTORIC AND HISTORIC SETTLEMENT
SAN FERNANDO VALLEY
CALIFORNIA
P. = 1870

SCALE

SANTA SUSANA MTS.

SANTA MONICA MTS.

Rancho Ex Mission San Fernando (1846)

DRAWING:
Base Map E. S. Kelley
Data M. Mitchell
Compilation G. R. Pappas
Source:
Southwest Museum, Los Angeles, Calif.
National Archives, Washington, D.C.
regulations pertaining to land tenure in Alta California. Under this
code, El Reglamento, the pueblo of Los Angeles was founded in September,
1781. (23) A strategic site was chosen near the Rio Porciuncula (Los
Angelas River). It was use of the water flowing down this river by the
original colonist that established priority of right and laid the foundation
for legal claim by Los Angeles City to all underground water in the San
Fernando Valley. The establishment of Los Angeles and confirmation of
this vital water title foredoomed all future settlement along the river
above the site of the pueblo. (24)

In 1795, the first known land grant in the San Fernando Valley
was given to Francisco Reyes, "alcalde" of Los Angeles. It was named
Encino Rancho, and virtually covered the whole Valley. (25) Though
Mayor Reyes held title to most of the Valley and carried on quite extensive
grazing activities, there were numerous squatters also pasturing in the
area at this time.

15. Founding of San Fernando Mission.

On his many journeys through San Fernando Valley, Fra Junípero
Serra, member of the Portola party, founder of innumerable missions, and
President-Head of the far-flung mission system of Alta Baja California,

* "Popular talk of 'Spanish grants' is often misinformed.
It comes chiefly from descendants of first settlers and from writers of
romantic fiction who like to think of a far-distant ruler taking kindly
thought of Californians and signing beribboned documents that gave whole
valleys to aristocratic men.

"Viceroyal authority over land in New Spain dates back at least
to October 15, 1754—fifteen years before the beginning of the occupancy
by Spain of Alta California. By a royal regulation of that date, affirming
the powers of viceroys, the necessity of applying to the King for con-
firmation of title to non-pueblo, non-presidio lands was abolished." W. F.
Robinson, Land in California (Los Angeles and Berkeley, Calif.: Univ. of
was impressed by the strategic location of this section with respect to San Gabriel and San Buenaventura Missions. A mission in this Valley would provide a most convenient resting point between these other two missions, augment the resources of the whole mission system, and "Christianize" the poor, pagan Indians. Lack of funds and the need for establishing more vital links in the chain of missions northward in California prevented Fra Serra from building a mission in the Valley before his death.

In 1787, Alcalde Reyes was prevailed upon to relinquish his Encino land grant in return for territory elsewhere, and San Fernando Mission was founded. (Figs. 25, 26.) The Mission came into possession of an area two leagues by five leagues—roughly 450 square miles. After carefully surveying the whole area, the padres selected a site for the Mission on the north side of the Valley, mid-way between the mountains to the east and west. (Map 3.) This site afforded easy access to El Camino Real and the neighboring missions. In honor of the new Mission the name of the Valley was changed to San Fernando—the name it bears today.*

The padres found the Indians of San Fernando Valley easily enticed to the Mission by offers of food, beads, and trinkets. By skillful use of ceremonials and pageants the curiosity of the Indian was aroused. Being extremely religious by nature, it was a simple matter to win converts at first. The hard labor, restrictions on movement, and the staggering death rate prevailing at the Mission

* San Fernando Mission was founded in honor of Fra Serra, and was named after the renowned Franciscan college in Mexico City, which was the training center for mission personnel and headquarters for the mission organization.
Fig. 25. San Fernando Mission. The Mission was founded in 1797, and building continued until the secularization of 1854. In addition to the church, there were dormitories for the monks and neophytes, workshops, and related structures. After the secularization of the Mission most of the buildings fell into disrepair and were completely neglected by those residing in the vicinity. Within the past decade or two, there has been considerable interest in restoring these buildings. This work has been made possible by publicly donated funds. All restoration is being carried out in conformance with the original plans and by means of traditional methods—adobe brick, heavy timbers, etc.

Photo taken looking north and east along Brand Boulevard. The town of San Fernando is just to the right of the picture. Pico House, first permanent residence in the Valley, is a few yards to the south. This is the main long building with the famed archway—the dominant "mission motif" in Southern California architecture.

Fig. 26. Interior view of the famed cloister of San Fernando Mission. Wall and arches of adobe more than two feet thick, heavy timbered ceiling to support the massive weight of the tile roof, stone walkway, hewn wooden benches, iron grill work on the windows. Such construction is typical of Spanish Colonial America. In large measure, it is a response to local environmental conditions similar to those prevailing in southern Spain.
soon made it increasingly difficult to secure sorely needed workers. (26) The Mission was completely dependent on the labor of the Indians and the desire for "neophytes" frequently was a thinly disguised device employed to obtain additional laborers. In time this system of forced labor spread throughout the mission system—the padres "farming-out" their Indian charges to the "rancheros". Within a few decades this system of forced labor completed the degradation of the Indian and ultimately led to his destruction at the hands of the Spanish "haciendados" and Americans. Not only was the Indian destroyed by being made the object of slave labor, but the whole economy of Southern California suffered serious retardation as a consequence. (27)

Under the capable leadership of a select group of Churchmen and by means of the ruthless exploitation of a bountiful labor force, the San Fernando Mission proved an exceedingly profitable and successful venture—too much so, as events were to reveal. Vineyards were planted on the south-facing slopes near the Mission and the wine from these fields became a major source of revenue. Luxuriant pasturage for the herds of sheep and cattle were developed throughout the Valley. Though Mexican cattle were a far cry from present-day stock, being thin, wiry, and long-horned, nevertheless, their tough, stringy flesh was a staple of diet. Meat, hides, and tallow derived from these mangy beasts were an additional source of revenue to the Mission. *

Transportation of large tallow cakes and wine casks from San Fernando Mission to the coast was accomplished by crude ox-carts. The

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* All labor at the Mission was performed by the neophytes, who were virtually prisoners on their conversion to the Church. The padres taught them the rudiments of farming and tending livestock, and in return they received a bare subsistence.
route to the pueblo of Los Angeles and thence to San Pedro Bay was southward across the Valley and over the tortuous grades of Cahuenga Pass—the same route used by American grain shippers some fifty years later. (Map 3.)

During the period of Mission occupancy in the Valley, the area now known as North Hollywood was largely neglected. Apparently an effort was made to improve the pasturage in this section of the Valley, as the padres built a dam across the Los Angeles River in 1810. The rising pueblo to the south forced the Mission fathers to destroy the dam by establishing a legal right to all water in the river. Under legal compulsion, the Mission was forced to abandon any plans for development of irrigation in the southern part of the Valley. Only a dusty, deep-rutted road from the Mission to Cahuenga Pass disturbed the natural landscape of the North Hollywood area during this period.


At the height of its economic power between 1820 and 1825, San Fernando Mission filed a yearly property inventory with the civil and religious authorities. According to available records, this inventory averaged about 26,000 head of livestock (14,000 cattle, 5000 horses, 7000 sheep, goats, and pigs), 8000 bushels of grain, and 5200 gallons of spirits. (25) These riches plus the revenue derived from "farming-out" Indian laborers made the Mission an oasis of wealth in a virtual desert of destitution. It caused the civil authorities and "haciendados" to look upon the Mission with envious greed.

As early as 1813 the Spanish Cortes (parliament) had decreed secularization for all missions in the New World. By 1823 the padres were ordered to relinquish authority over the missions by acknowledging
civil control. The common lands, supposedly held in trust for the Indians during their apprenticeship in the ways of European culture, were to be equably distributed among the natives. By the time this royal decree was confirmed in 1821, Alta California had come under jurisdiction of a sovereign, revolutionary, anti-clerical, semi-heretical Mexico.
CHAPTER V

AMERICAN CONQUEST: LIQUIDATION OF THE RANCHOS

With the dying gasp of the Spanish-Mexican era of independence, the Mission was secularized and nearly all the Valley sold as one vast landed estate—Ex Mission de San Fernando. American conquest spelled the doom of the rancho economy and society in an avaricious scramble for land. American capitalists converted the southern half of the Valley into one huge wheat field. North Hollywood became the site of the Lankershim wheat ranch, and the great real estate boom of the 'eighties resulted in the platting of a town—Lankershim. Successful cultivation of deciduous fruits by sub-irrigation methods plus geographical proximity to the Cahuenga Pass route into Los Angeles were influential in the location and development of this community.


In 1822 California came under jurisdiction of the newly created Republic of Mexico. The change was largely one of allegiance and not of culture. The population remained Spanish and Indian in origin; the language continued to be Spanish; and the problems of civil administration remained the same. (29) At San Fernando Mission there was considerable unrest and apprehension concerning the turn of events. Los Angeles was rapidly becoming an important center of settlement and potential settlers were in search of land. The nearby Valley was just one of many areas suitable for pastoral exploitation. It was not long before some of these newcomers were encroaching on the Mission domain, and the government made little or no attempt to interfere.

The terms of secularization promulgated and executed by the Mexican government were more drastic than those proposed by the Spanish Crown. (See Chapter IV.) The Indians were completely stripped of all title to their lands. The Church was reduced to such buildings and equipment as were required for the performance of religious services.
The Mission economy in the Valley was disrupted, the Indians scattered, and all nonreligious assets of the Church were confiscated by the civil government.

Secularization of the Mission lands merely aggravated the problems of civil administration. Every "jefe político" (political boss) in Southern California was jockeying for political power, de jure authority, and land. Several pitched battles between these opposing groups were fought in the wide open spaces of San Fernando Valley. The area now known as North Hollywood was a frequent scene of these "battles", which residents of Los Angeles pueblo viewed from the surrounding slopes. Most of these struggles bordered on the comic opera variety, but even such disreputable, irregular forces could wrest control of the government from the hands of a duly appointed executive lacking a personal "army".

This period of internecine politico-economic conflict also witnessed a small, though steady, infiltration of Americans into California. These early settlers married into the aristocratic landholding Spanish families of Southern California, joined the Roman Catholic Church, and adopted the Spanish language and culture wholeheartedly. Nevertheless, these Americans were prepared to assist the United States in every way possible should war occur with Mexico.

The steady deterioration of diplomatic relations between the United States and Mexico made conflict inevitable by 1846. With an empty treasury and little likelihood of ever collecting a land tax or capital levy from the powerful "haciendados", the Governor of California was hard-pressed for ready cash with which to equip an army.
for the defense of the territory.* But there remained one asset readily convertible into cash—land, square leagues of land. Following the secularization of 1834, the government had been in possession of the San Fernando Valley Mission lands. The territory had been leased in 1845 for a period of nine years, but this agreement was readily set aside and thirteen square leagues or 121,000 acres in San Fernando Valley were sold in June, 1846, to Eulogio de Celis for $14,000. (30)

De Celis named his vast estate, "Rancho Ex Mission de San Fernando". (Map 3.) This enormous territory, purchased from the Mexican government and title to which was subsequently recognized by the United States, became the de jure basis for all future land sales in the Valley, except for the small grants of Ranchos El Escorpion, San Rafael, and La Providencia. (Map 3.)

There is no positive evidence that Governor Pico received the full purchase price of $14,000 for the rancho nor what was done with

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* The following letter from the Mexican Minister of War and Marine to the Governor of California in 1846 is a most significant document in subsequent litigation concerning title to San Fernando Valley property. This letter was introduced as evidence in the United States District Court hearings regarding the sale and legal ownership of Rancho Ex Mission de San Fernando and was instrumental in upholding the Mexican title by the American government. (Translated from the Spanish.)

The preparations which the United States are making and the approach of their naval forces leave no doubt that war is about to break out, and His Excellency the President, pro tem, is resolved to sustain the rights of the Nation, he wishes that in all ports of the Republic where the enemy may present himself a rigorous defense be made, capable of giving honor and glory to the National Flag. For that object and until the Supreme Government appropriates and sends you the necessary means, he relies upon your patriotism and fidelity to dictate the measures necessary for the defense of that Department, for which purpose you and His Excellency are invested with full powers. And I have the honor to insert the same to you for your cognizance, hoping that you on your part will lose no efforts to preserve the rights of the Nation." U.S. District Court, Southern California Division, Mission San Fernando: Transcript of the Proceedings in Case #548. (Washington, D.C., National Archives.)
the sum paid by de Calic. Obviously it was not used to equip an army for the defense of Los Angeles, as General Fremont concluded a peace treaty with the local Mexican forces near Cahuenga Pass in January, 1847—the Treaty of Cahuenga Pass. Thus a most important historical event—the ceding of California Territory to the United States—occurred near the northern end of Cahuenga Pass in the San Fernando Valley. This site, now in North Hollywood, is commemorated by a monument and small plaza and park.

The era of great landed estates was not long destined to survive American conquest and consequent introduction of a vastly different cultural milieu. A combination of political, economic, social, and environmental factors played a major role in the collapse of the Spanish landed gentry and development of a radically different system of land tenure in the San Fernando Valley. A few of the more significant factors responsible for this sweeping change of the culture pattern were: the Land Act of 1851, which resulted in long and financially ruinous litigation involving vague land titles to most of these great estates; continuance of an extravagant way of life and display of a rare talent for financial ineptitude on the part of the "haciendados"; skillful manipulation of inequitable short-term mortgages and charging of fantastically high interest rates by money-lending land-grabbers; prolonged depression of prices in the cattle market, following a period of inflationary prices induced by the 1848 Gold Rush; and finally, the historic drought of the mid-sixties, which for all time wiped out the great cattle barons. (51)

Title to Rancho Ex Mission de San Fernando was quite easily established in the American courts, due to the fact that it was one of
the last parcels of land "sold" by the Mexican government. In July, 1855, the Public Land Commission of the United States Land Office confirmed the Mexican sale and in 1871 the final Letters of Patent were issued. Rancho Ex Mission de San Fernando was declared to include all the Valley up to the crests of the surrounding mountains, excluding the Rancho El Escorpion of 1100 acres, owned by the Indian Urbano; Rancho El Encino of 4464 acres, owned by Vicente de la Csa; and Rancho Mission San Fernando of 77 acres, confirmed to the Bishop of Monterey. (32) Map 5.)

Life on a rancho, such as Ex Mission de San Fernando, was entirely different from that introduced by American settlers. Each rancho was a little kingdom in itself and not in the least overburdened with the cares of government or pueblo politics. Here the "haciendado" dwelt in ease and plenty, while enjoying the pleasures and prerogatives of absolute freedom. Great winding dray trains laden with thousands of hides and tons of tallow moved down to the harbor to be exchanged for silks, velvets, brocades, jewelry, and fideral from all corners of the world. (33) At the ranchos gathered the landed aristocracy, and Spanish life flowed at floodtide, buoyed up by the unceasing toil of dispossessed Indians—a legacy of the Mission era. (Figs. 27 and 28.) As a city-builder and entrepreneur, the Californian was a failure, but as a man in the saddle on a vast rancho and the practitioner of gracious living, the ranchero epitomized Spanish creole culture at its best.

Though the owners of Rancho San Fernando managed to avoid many of the pitfalls of their less fortunate brethren, they, too, were victims of the disastrous drought of 1862-1864. Little rain fell during the winter season of 1862-1863, and pasturage became very
Fig. 27. Pico House. About the time San Fernando Mission was secularized, circa 1834, this typical California ranch home was built near the Church. It probably was occupied by members of the de Celia family and used as a country home by Andrés and Pío Pico. Even after Ex-Mission de San Fernando was sold, the Pico family retained the land around this home. With the passing years, the house fell into disrepair just as the nearby Mission. It was restored by Mr. Harrington of the Southwest Museum, who lived here for nearly sixteen years. In 1945, the present owner purchased the house and completed the restoration.

The house is constructed of adobe. The walls are nearly two feet thick. This view was taken looking west along the front of the house. Note the long tile roofed porch running the full length of the house. The present owner removed a shingle roof and put on the tile one. The second floor has been converted into bedrooms, as it was a loft space in the olden days.

Fig. 28. The Pico House Patio. In every Spanish house the interior patio was the center of activity. This view of the patio was taken looking east toward the main body of the house. To the left and right, there are wings of the house extending to the rear. The back of the house consists of a wide wooden gate capable of admitting an ox cart and team as well as small rooms for appliances, etc. Note the well to the left and the fountain in the center. The flowers and shrubs are typical of the Spanish period and not Anglo-Saxon importations. Naturally, the dining room faces out on the patio. The garden may be entered from all sides—a delightful spot on a hot, dry summer day. Many a fiesta has been held within this enclosure and many señorita and señor has danced on these bricks.
scarce by the following winter. During the season of 1863-1864 there was about three inches of rain. Pasturage and water supplies again failed to meet the need. Not only in the Valley, but throughout Southern California, cattle died by the tens of thousands and the countryside was littered with sun-bleached skeletons of these wretched beasts. The drastic losses incurred as a consequence of this drought doomed the ranchos and brought to a close the era of "Spanish" domination.

18. Sub-dividing the Rancho.

With the introduction of a general land tax, the owners of Ranchos Ex Mission de San Fernando, Encino, and Escorpion found it increasingly difficult to realize any profit from their holdings. (Map 4.) Like most of the rancheros, they were seeking an opportunity to dispose of their properties. In 1854 an undivided half interest in San Fernando Rancho was purchased for $1854. (See Table 2.) In 1856 the rancho was put up for sale at fifty cents per acre, but there was no interest in Valley land at this time.

For nearly a decade there was very little activity in the Valley. A few Indians, who had acquired tracts of land north of the Mission prior to its secularization, demonstrated the feasibility of orchard and vineyard crops in the area. There were a few scattered settlers engaged in agriculture north of Rancho Escorpion. Some farming was practised at Encino, Escorpion, and Providencia ranchos. In the North Hollywood area there was no activity and the landscape remained as in the days of the Mission.

Some effort was made to improve the roads passing through the Valley in order to facilitate travel between Los Angeles and the
**TABLE 2. Chronology of land tenure in San Fernando Valley, California, 1795-1910.***

<table>
<thead>
<tr>
<th>Year</th>
<th>Tenant and/or Owner</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1795</td>
<td>Francisco Reyes</td>
<td>Encino Rancho</td>
</tr>
<tr>
<td></td>
<td>José Verdugo</td>
<td>San Rafael Rancho</td>
</tr>
<tr>
<td>1797</td>
<td>Franciscan Order</td>
<td>All the Valley, except for the Verdugo grant.</td>
</tr>
<tr>
<td>1845</td>
<td>Ramon, Francisco, and Roque</td>
<td>El Encino Rancho—4464 acres.</td>
</tr>
<tr>
<td></td>
<td>Urbano, Odon, and Manuel</td>
<td>El Escorpion Rancho—1100 acres.</td>
</tr>
<tr>
<td></td>
<td>José Miguel</td>
<td>Section north of the Mission, 200 acres.</td>
</tr>
<tr>
<td></td>
<td>A. Pico and J. Manso</td>
<td>All Mission territory.</td>
</tr>
<tr>
<td></td>
<td>J. Castro, L. Arenas, and V. de la Osa</td>
<td>La Providencia Rancho—4064 acres</td>
</tr>
<tr>
<td>1846</td>
<td>E. de Celis</td>
<td>Ex Mission de San Fernando Rancho</td>
</tr>
<tr>
<td>1851</td>
<td>A. Bell and D. W. Alexander</td>
<td>La Providencia Rancho</td>
</tr>
<tr>
<td>1854</td>
<td>A. Pico</td>
<td>Half interest in Ex Mission de San Fernando</td>
</tr>
<tr>
<td>1857</td>
<td>J. R. Scott</td>
<td>Exchange of La Cañada Rancho for 4600 acres of San Rafael Rancho.</td>
</tr>
<tr>
<td>1862</td>
<td>P. Pico</td>
<td>A. Pico's half interest in Ex Mission de San Fernando Rancho.</td>
</tr>
<tr>
<td>1864</td>
<td>Bishop J. S. Alleman of Monterey</td>
<td>Mission grounds—77 acres.</td>
</tr>
<tr>
<td>1867</td>
<td>Dr. D. Burbank</td>
<td>La Providencia Rancho and part of San Rafael Rancho.</td>
</tr>
</tbody>
</table>

* J. B. Thompson 11 Encino Rancho
Valley were mere trails following the best available routes after the ravages of winter storms. With the increasing importance of the Mission-rancho trading post in relation to through traffic, an effort was made to improve the old Mission-Fort Tejon road. In later years the southern portion of this diagonal route through Cahuenga Pass to the Mission became Lankershim Boulevard—major thoroughfare of North Hollywood today. (Map 3.)

Gradually the population increased in various pueblos scattered up and down the California coast. A regular stage line provided public transportation between San Francisco and Los Angeles via San Fernando and Cahuenga Passes. (Map 4.) Another stage line extended service between Santa Barbara and Los Angeles via Santa Susana Pass, El Camino Real (now Ventura Boulevard), and Cahuenga Pass. (Map 4.) An alternate route from Los Angeles to Valley points was the Puerto Suelo passage along the Los Angeles River between the eastern terminus of the Santa Monica Mountains and the Verdugo Range. (Map 4.) All these routes passed over that part of the Valley later known as North Hollywood, but such through traffic failed to exert any influence on the development of this site.

The year 1869 marked the turning point in the development of San Fernando Valley, as it witnessed the introduction of American capital into the area and a complete modification in the system of land tenure and land-use. Isaac Lankershim, wealthy immigrant-owner of extensive farm land around San Francisco, came to Southern California in quest of suitable acreage for large-scale grazing operations. On a chance visit to the Valley, he was impressed by an exceptionally fine stand of wild oats and grass growing there. Negotiations were opened with the owners of Ex Mission de San Fernando Rancho and agreement was
<table>
<thead>
<tr>
<th>Year</th>
<th>Tenant and/or Owner</th>
<th>Area</th>
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<tbody>
<tr>
<td>1869</td>
<td>San Fernando Farm Homestead Association</td>
<td>Southern half of Ex Mission de San Fernando Rancho.</td>
</tr>
<tr>
<td></td>
<td>E. Garnier</td>
<td>El Encino Rancho</td>
</tr>
<tr>
<td>1874</td>
<td>G. Maclay, B. F. and G. K. Porter</td>
<td>North half of Ex Mission de San Fernando Rancho</td>
</tr>
<tr>
<td>1881-1882</td>
<td>C. Maclay</td>
<td>Northeastern portion of the Valley.</td>
</tr>
<tr>
<td></td>
<td>G. K. Porter</td>
<td>Northcentral portion of the Valley.</td>
</tr>
<tr>
<td></td>
<td>B. F. Porter</td>
<td>Northwestern portion of the Valley.</td>
</tr>
<tr>
<td>1888</td>
<td>Lankershim Ranch Land and Water Company</td>
<td>Eastern 12,000 acres of the Los Angeles Farm &amp; Milling Company holdings.</td>
</tr>
<tr>
<td></td>
<td>D. Amestoy</td>
<td>El Encino Rancho</td>
</tr>
<tr>
<td></td>
<td>Providencia Land, Water and Development Company</td>
<td>Dr. D. Burbank property.</td>
</tr>
<tr>
<td>1910</td>
<td>Los Angeles Suburban Homes Company</td>
<td>Remaining holdings of the Los Angeles Farm and Milling Company.</td>
</tr>
</tbody>
</table>


northern pueblos via San Fernando and Santa Susana Passes. (Map 1.)

Prior to 1854, when Los Angeles County was established, roads over the
HISTORICAL EVOLUTION OF LAND TENURE
SAN FERNANDO VALLEY, CALIFORNIA
1877-1915

Scale

Legend

- Ranch Grants
- Rancho Enchido
- Lankershim Ranch Land and Water Co.
- Lankershim Tract
- Maclay Tract
- G.B. Porter Land and Water Co.
- E. Porter Tract
- Chatsworth Park Tract
- Los Angeles Olive Growers and
- Rancho Dedication
- Los Angeles Farm and Milling Co.
- Bing's Angeles Hospital (1903)
- Potted Areas
- Railroads

Santa Susana Mts.

Santa Monica Mts.

San Gabriel Mts.

Simi Hills

Chatsworth

C. Maclay Tract

Verdugo Mts.

SAN GABRIEL MTS.

SANTA SUSANA MTS.

RANCHO ENCIANO

RANCHO TAHILA

RANCHO RANCHO Tujunga

Simi Hills

Chatsworth

C. Maclay Tract

Verdugo Mts.

SAN GABRIEL MTS.

SANTA SUSANA MTS.

RANCHO ENCIANO

RANCHO TAHILA

RANCHO Tujunga

Simi Hills

Chatsworth

C. Maclay Tract

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RANCHO Tujunga

Simi Hills

Chatsworth

C. Maclay Tract

Verdugo Mts.

SAN GABRIEL MTS.

SANTA SUSANA MTS.
reached on a purchase price of $115,000.

I. Lonkershim, I. N. Van Nuys, and several other San Francisco capitalists joined forces and formed the San Fernando Homestead Association. The Association brought friendly court action against the de Calis heirs for partition of the vast Valley estate. By decree of the United States District Court in 1871, the Association obtained full title to the southern half of the Valley—an area approximating 60,000 acres. (34) (Map 4.) In time this huge domain became the site of many present-day communities—North Hollywood, Van Nuys, Encino, Reseda, and Canoga Park. (See Table 2.)

The San Fernando Homestead Association immediately began extensive grazing operations in the Valley. Great herds of sheep and cattle soon covered the land, and within a short time the Association was re-organized and re-named as the San Fernando Sheep Company. Within four years of its purchase, this vast tract was pasturing more than 40,000 head of sheep. (35)

In 1875 Van Nuys joined his partner in the San Fernando Valley operations. Though impressed with the success of the sheep raising venture, he thought the land better adapted to grain production. Leasing a few hundred acres of land from the company, he planted wheat and at the close of the first harvest three cargoes of grain were shipped to Liverpool. (36) In the following year, 1877, the curse of the Valley struck once again—drought. Though Van Nuys suffered a serious crop failure, the San Fernando Sheep Company lost nearly 40,000 head. This disaster, coupled with Van Nuys’ successful demonstration of wheat growing, resulted in the pooling of the Lonkershim-Van Nuys interests. The entire southern half of the Valley switched from a
pastoral to an agricultural economy.

To facilitate operation of such large wheat acreages, the area was divided into several functional units: Lankershim Ranch to the east, the present site of North Hollywood; Sheep Ranch, an area now occupied by the Lakeside Country Club of North Hollywood; Kester Ranch, the general location of the community of Van Nuys today; Patton Ranch, an area now occupied by the towns of Reseda and Tamarac; Home Ranch, the section just to the north of present-day Van Nuys; West Ranch, an area just west of Canoga Park; Workman Ranch, a section to the west of Woodland Hills and Canoga Park today. (Map 4.)

Wheat production proved so successful that Van Nuys and Lankershim established their own flour mill. In 1860 the company was re-organized as the Los Angeles Farm and Milling Company. For twenty-two years this company operated without a single crop failure. In 1888 a record crop of 510,000 bushels of wheat were harvested. (37) Flour was shipped to San Francisco, the Far East, eastern United States, and Europe. Profits from these harvests formed the basis of the Lankershim and Van Nuys fortunes, which were re-invested in Los Angeles real estate. The Lankershim Hotel, the San Fernando and Van Nuys office buildings in the heart of downtown Los Angeles were built with funds derived from the productivity of San Fernando Valley soils.

With the construction of the Southern Pacific railroad tunnel through San Fernando Pass and the linking of Los Angeles with the rest of the nation, interest in the northern portion of the Valley revived. In 1874 Senator Maclay purchased the northern part of the Valley for $118,000. With this sale of the remaining acreage of Ex-Mission San Fernando Rancho, the Valley passed into the hands of American owners.
and the "days of the dons" were definitely at an end. (See Table 2.)

In the fall of 1874 Maclay founded the first town in the Valley—San Fernando. (Map 4.) It became the northern terminus of the railroad until the completion of the San Fernando tunnel. It also became the headquarters for mule teams operating between Los Angeles and the silver mines at Cerro Gordo in the nearby mountains. With all this activity underway, Maclay placed a thousand acres of his holdings on sale in the form of town lots and small farms. He set the style for all subsequent real estate promotions in the Valley and elsewhere—excursion trains from Los Angeles, free barbecue luncheons, and a propaganda barrage in the local newspapers. Though the community had a most auspicious beginning, the small population in nearby Los Angeles, a small-pox epidemic, the disastrous flood of 1877, and completion of the railroad construction work put a damper on this pioneer urban development. The Valley was not yet ripe for community projects—certainly not as long as it remained so distant from Los Angeles in terms of travel time and transportation accommodations.

Senator Maclay and his two financial supporters, the Porter brothers of San Francisco, soon came to a friendly difference of opinion regarding community planning in the Valley. As a consequence, the northern half of the Valley was divided into three nearly equal tracts in 1881. (Map 4.) The Porters emulated Van Nuys and Lankershim by planting their acreages in wheat and barley. In later years these holdings proved to be ideal for citrus and were converted to orange, lemon, and grapefruit orchards. Though a few scattered parcels of land were sold during this period, extensive subdivision development was still many years in the future. (See Chapter VI.)

In the 1880's Southern California was swept by a tumultuous real estate boom. (28) San Fernando Valley merely basked in the pale reflection of this boom. Yet, three new communities were established here before the collapse—Pacoima, Burbank, and Lankershim (North Hollywood). (Map 4.) These towns managed to survive the deflationary period of the post-boom years, and two of them developed into major centers of urban settlement in the succeeding decades.

In 1887 Senator Maclay reorganized his forces and formed a new syndicate—the Maclay Colony and Rancho Water Company. This company subdivided a 20,000 acre tract of land into 40 acre farms. A townsite, Pacoima (Indian word meaning running water), was also platted within this tract. It was located southeast of San Fernando and along the tracks of the recently completed Southern Pacific Railroad route through the Valley. (Map 4.) Though its founding was accompanied by the usual ballyhoo, Pacoima never became a very significant center of settlement.

Dr. David Burbank, who had acquired 4800 acres of San Rafael Rancho in 1870, sold this property and his adjoining Providencia Rancho to the Providencia Land, Water, and Development Company in 1886. (See Table 2.) This tract of 3000 acres was surveyed and a townsite platted as well as farm plots of varying size. With the usual fanfare and promotional activity, this site was placed on public sale. Though strategically located and offering many advantages not to be found elsewhere in the Valley at this time, settlement was very slow and the boom contributed little toward its development other than the initial fever of community organization. (Map 4.)
In 1888 the final community development of this frenetic period of real estate speculation was undertaken with the founding of Lankershim (North Hollywood). This new town occupied the site of Lankershim Ranch—the most easterly located unit of the vast Los Angeles Farm and Milling Company property. Adjoining it on the east was Providencia Rancho and Dr. Burbank's newly founded community. (Map 4.)

In the late 'eighties a series of tests were conducted on the Lankershim Rancho which clearly demonstrated the feasibility of growing deciduous fruits, such as peaches, apricots, plums, and pears without recourse to irrigation. The loam soils were capable of retaining moisture derived from winter rains, and the nearby Los Angeles River augmented the underground water supply. The practicability of this sub-irrigation technique of farming was sufficient incentive to promote a new settlement.

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* The agricultural development of Lankershim (North Hollywood) and the San Fernando Valley as a whole was not solely due to the discovery of the applicability of sub-irrigation techniques. Far more important was the presence of some of the finest soils in the state of California. (For a more detailed discussion of these soils, one may consult the U. S. Dept. of Agriculture and University of California, Soil Survey of the San Fernando Valley (Washington, D.C., 1917), 115pp.

There are two major soil series in the Valley—the Yolo and the Hanford-Tujunga. Pedologists define these two allied series on the basis of the alluvial materials from which they are derived. The Yolo series is derived from alluvial wash flowing out of the mountains in the western part of the Valley, while the Hanford-Tujunga series partakes of alluvium descending from the eastern mountains.

The Hanford-Tujunga soils are found spread over the eastern half of the Valley—the North Hollywood-Van Nuys area. These soils are light brownish grey in color, micaceous, easily tilled and highly retentive of moisture. (An extremely important factor in the pre-irrigation period.) In the southern portion of the Valley these soils may attain a depth of ten to fifteen feet. As these soils have been subjected to the vagaries of floods, there is a lack of uniformity...
The Lankershim Ranch Land and Water Company, founded by a group of Los Angeles capitalists and promoters, purchased 12,000 acres of the ranch. (Map 4.) This land was then sub-divided and platted as farms ranging in size from 2 to 250 acres. These plots sold for $5 to $150 per acre.

The potentialities of this site were sufficient to cause the Pacific Improvement Company, a real estate subsidiary of the all-powerful Southern Pacific Railroad, to purchase a tract one-half mile square in the heart of the settlement. The railroad subsidiary proceeded to plot a townsitc on its newly acquired land, establish a station, and name the resulting village Toluca. A few settlers had previously located in this area under auspices of the Los Angeles Farm and Milling Company. (Map 4.) There was a school, general store, hotel, blacksmith shop, and a scattering of dwellings. (40) These settlers referred to the town as Lankershim.

comparable to the Yolo soils to the west. Though the moisture retentive characteristics of these soils was highly significant in the dry farming, sub-irrigation era, it later proved most undesirable with the introduction of Valley-wide irrigation. These soils, especially near the Los Angeles River, became water-logged and this proved most detrimental to the extensive orchards in the North Hollywood area.

The Yolo soils are found throughout the western half of the Valley and are acknowledged to be among the finest in the state. These soils are light brown or dark greyish brown in color, easily tilled, and well-drained. The Yolo soils are far more uniform in texture than the Hanford-Tujunga, due to their not having been subjected to extensive flooding of numerous washes. Though the most fertile soils are these in the west, this portion of the Valley was not the scene of extensive agricultural development until the advent of irrigation water. It was then that truck crops, citrus, deciduous, and walnut orchards, grain crops etc. spread rapidly over this area. These crops are still widely grown here, though the highly productive soils appear to be doomed to non-productivity within the next few decades. The spread of urban development seems destined to engulf this section of the Valley in a manner comparable to what has recently occurred in North Hollywood. (See Chapter IX.)
These new communities, especially Lankershim and Burbank, induced a few boom-struck individuals to buy and settle in the San Fernando Valley. For a few months a pseudo-prosperity prevailed, engendered by the over-all inflated economy of Southern California. Yet, within a year of the founding of Lankershim the boom collapsed. The fantastic values established by speculating real estate operators vanished, settlers began to drift away from embryonic communities, and investors stopped payment on their lots. Land reverted to realty companies and prices tumbled. Saddled with property taxes based upon fictitious values, these companies allowed the land to revert to the county or cities by defaulting on payments, or else managed to obtain scaled-down valuations. Great confusion reigned throughout the region in regard to land titles as a result of forfeitures, foreclosures, and nonpayment of debts.

In Lankershim settlers began the planting of 50,000 deciduous fruit trees during this period. It was truly a venturesome project, as the growers had no previous experience in the technique of sub-irrigation farming to guide them. Consequently there was a considerable period of experimentation with various types of fruits and proper methods of cultivation. There were many disappointments before the correct procedures were developed, and during this trying period not a few of the settlers met with overwhelming obstacles and financial ruin. The persevering few were amply rewarded within a few years and this section of the Valley provided the first practical demonstration of successful fruit growing in Southern California by dry farming methods. Peaches and apricots became the most widely grown fruits in Lankershim. Canning and drying plants were established, and a popular slogan of the day was:
"Lankershim, Home of the Peach". Today, there are mere remnants of these once prosperous orchards interspersed among the acres and acres of residences. (Figs. 14-16.)

During this boom period of the eighties the climate was most propitious for agricultural development. There was abundant rain every year and a superabundance in some. (See Chapter VIII.) Vegetation of all kinds flourished, the vast underground reservoir of the Valley was filled to capacity, and the new farming enterprises received a most auspicious and profitable inauguration. But these years of plentiful water supply were followed by seven years of below average precipitation and consequent drought. From 1895 to 1900, the average annual rainfall was approximately nine inches per year. During the last three years of this period the average fell below six inches—in the 1898-1899 winter season to less than five inches.

Though conditions in the San Fernando Valley were serious with regard to water supply, it was the effects of the drought in Los Angeles that proved most damaging to continued development of this area. Los Angeles, with its rapidly growing population, was faced with a major crisis as the water level continued to fall in the San Fernando Valley underground storage basin of the upper Los Angeles River. Farmers in the Valley, who maintained their own water wells, were notified by the city to shut down their pumps. Once again acrimonious debate and litigation erupted with regard to the ownership of sub-surface water storage in the Valley. (41) After a lengthy period of litigation between the City of Los Angeles and Valley property owners regarding title to this water, the city successfully established forevermore its incontestable right to all water in the drainage basin of the Los Angeles River. (42) The San Fernando Basin was delimited by the
courts to include 174 square miles of surrounding mountains, 155 square miles of foothills, and 175 square miles of Valley floor.

By this time it had become painfully apparent to all concerned that Los Angeles and its multitude of satellite communities would have to discover a new and economically feasible source of abundant water or else suffer creeping paralysis and decline. Without an additional water supply, the agricultural and industrial development of this region would stagnate, then slowly disintegrate. It was a critical point in the struggle to maintain and augment a breathtakingly rapid rate of urban expansion.
CHAPTER VI
RURAL-SUBURBAN DEVELOPMENT

In 1915, land tenure in the San Fernando Valley underwent far more remarkable changes with the introduction of an abundant supply of irrigation water—changes incident to the fact that the Valley provided a natural terminal storage basin for the Owens Valley Aqueduct. While other sections of the Valley began rapidly to assume a type of occupancy closely resembling the one already established in North Hollywood—rural settlers and land devoted to orchard, truck, and field crops—North Hollywood, in turn, began a transition from rural-suburban to a more intensive urban type of occupancy. As the contagion of rural settlement swept over the Valley, North Hollywood expanded rapidly as a focus of urbanized residential occupancy. Improved transportation, establishment of motion picture studios, persistence of a rural atmosphere with relatively cheap acreage suitable for residential development, and geographical proximity to the Hollywood-Los Angeles urban nucleus via Sahueng Pass were all instrumental in keeping this nascent community in the forefront of urban expansion into the Valley.

20. The Valley at the Turn of the Century.

From 1890 to 1910 the San Fernando Valley marked time. There was very little increase in population and the largest gains were in the communities of Burbank and San Fernando. Neither of these towns could boast a population in excess of one thousand residents. Lankershim (North Hollywood) and Pacoima were struggling villages trying to make the best of extremely limited opportunities. (Map 4.) The groves of citrus and deciduous fruit trees increased slowly, but steadily. Truck crops were grown in ever-expanding acreages around Lankershim and these other communities. A few districts in the western part of the Valley produced crops of alfalfa, but wheat was still the dominant crop on the vast expanse of land west and north of Lankershim.

There appeared very little prospect for promoting more intensive settlement or further development of agriculture without first securing a more bountiful and dependable water supply. San Fernando, Burbank,
and Lankershim were virtual oases in a parched plain. The dense growth of cactus, chaparral, and other vegetation along the river banks and arroyos provided convenient hunting grounds for Los Angeles sportsmen. Quails, pheasants, rabbits, and doves were plentiful. Deer were to be bagged in the nearby foothills and mountains. Coyotes roamed the Valley in droves; rattlesnakes were a menace to man and beast in the cactus and chaparral; ground squirrels, gophers, and badgers were a plague to farmer and orchardist alike. (43)

Few public improvements were made in the Valley during this period, except for schools. There were no surfaced roads or streets between any of the towns, or leading into Los Angeles. Cesspools were the only means of sewerage disposal. Telephone and telegraph service was limited to such centers as Lankershim and San Fernando. There were no street railroads connecting the Valley with the city. Transportation and communication was but slightly superior to that enjoyed by the padres a century prior.

21. Revival of Real Estate Development.

Though Los Angeles had won legal title to all water in the upper drainage basin of the Los Angeles River to the detriment of the Valley, it soon began to fear possible future water famines. (See Chapter V.) It was proposed that an aqueduct be constructed from Owens River and Lake in the Sierra Nevada Mountains to Los Angeles—a distance of approximately 250 miles. (Map 15.) Work was begun on this project in 1907 and the aqueduct completed in 1913. The Owens Valley project brought hundreds of millions of gallons of water to the doorstep of Los Angeles. (44)

A few enterprising capitalists in Los Angeles were quick to
grasp the tremendous significance of the Owens Valley project and the opportunity it presented to further the development of the San Fernando Valley. Within a few years prior to completion of the aqueduct system, a series of real estate transactions laid the foundation for a complete revolution in land tenure and land use patterns in the San Fernando Valley. Consumption of these real estate deals plus the ability of water to transform a semi-arid land into a lush garden set in motion a chain of spectacular changes in occupancy and land use in the Valley.* The social repercussions incident to these drastic changes still echo across the Valley today, engulfing the land in a flood-tide of surging humanity.

The first major transaction in this vast real estate promotion involved purchase of 16,000 acres of land from the G. K. Porter holdings, located near the town of San Fernando. (Map 4.) This block of land was purchased by the Mission Land and Water Company in 1905. The purchase price for the Porter tract was slightly more than $500,000. Within a few months, an additional 2500 acres of this estate were sold for $200,000.

There was a lull in further large-scale sale of land in the Valley until 1910. During this year, the newly created Los Angeles Suburban Homes Company purchased the 47,000 acres of the Los Angeles Farm and Milling Company for $2,500,000. (Map 4.) Other promotional companies soon purchased the Encino Rancho, the B. F. Porter estate, and other parcels of land not previously sold to the big real estate speculators. (Map 4.) Three years before completion of the Owens

* It is unfortunate that the few existing statistics pertaining to these significant changes in land use in the San Fernando Valley constitute an inadequate source of data for purposes of cartographic presentation.
Valley Aqueduct, various syndicates controlled more than 100,000 acres of land in the San Fernando Valley. (45)

Almost at once four new Valley townsites were platted as community centers having small acreage suitable for urbanites—Zelzah (Northridge), Van Nuys, Marian (Reseda), and Owensmouth (Canoga Park). (Map 4.) Van Nuys was the most important center and typical of such developments. It was located in the Los Angeles Suburban Homes' tract just west of Lankershim. (Map 4.) The Van Nuys area was placed on sale in Los Angeles in the form of two to ten acre suburban "rural estates" or forty to sixty acre farms. (46) The usual auction sales and barbecues were forthcoming. Land was set aside for public buildings and public utilities. Water was obtained from deep wells and an abundance was available for domestic and agricultural needs during this formative period. Sub-irrigation, similar to that practised in nearby Lankershim, was possible on land near the river. Van Nuys was a successful promotion and its future growth was assured, especially if and when aqueduct water became available. The Los Angeles Suburban Homes Company had already begun to reap profits from its vast holdings.

Lankershim (North Hollywood) also experienced a rejuvenation and renewal of interest in community development. The townsite underwent extensive re-arrangement, new areas were platted, and the local water supply augmented by additional wells. Wide publicity was given the town regarding its advantages for deciduous fruit growing and its independence from outside sources of water. A syndicate was formed by wealthy local residents and the remaining acreage of the Pacific Improvement Company was purchased. A large block of this land was placed on sale, accompanied by the usual commercial ballyhoo. Real estate offices were maintained in downtown Los Angeles and Hollywood,
and considerable number of would-be suburbanites were inveigled into settling in Lankershim. A bank was opened as a service to local agricultural and business interests in the Valley. (47) The proximity of Lankershim to Cahuenga Pass and the expanding community of Hollywood made it the most attractive settlement in the Valley. This favorable location was further enhanced by improvement of the highway through the pass and construction, in 1911, of the Pacific Electric Railway (a rapid transit inter-urban) from Hollywood to Lankershim and thence throughout the Valley. (Map 4; Fig. 29.)

22. The Irrigation Boom.

In November, 1913, Los Angeles secured a temporary super-abundance of water from the Owens Valley Aqueduct. Any scheme providing a lucrative means of disposing of the excess was certain to meet with general approval. Thus the irrigation projects for the San Fernando Valley, which were actively promoted by members of the real estate syndicate, met with approval. It was proposed that irrigation districts be established in the Valley and the surplus water sold to the farmers. In addition to the revenue so derived, it would be possible to re-claim from one-fourth to one-third of the water so utilized. (48) (The Valley serves as a vast underground storage basin in which irrigation water tends to seep back into the ground.) This water could then be re-sold to domestic and industrial users in the city. Hence, the cost of water to all concerned would be reduced by having it do double duty.

This grandiose scheme could not be put into operation unless the land so serviced was a part of the legally incorporated City of Los Angeles. This was clearly stated in the Congressional authorization which permitted purchase of the right-of-way and construction of the
Aerial View of Lankershim (North Hollywood) Looking Northward from the Santa Monica Mountains, circa 1912.

(A photograph of this area taken twenty years later would reveal very little change in the cultural landscape.)

1. Lankershim Boulevard
2. Vineland Avenue-Pacific Electric tracks. (Note bridges over the Los Angeles River and Middle Branch of the Tujunga Wash, see photo 37.)
3. Ventura Boulevard
4. Moorpark Street
5. Riverside Drive-Camarillo Street
6. Chandler Boulevard
7. Tujunga Avenue (Juncture with Lankershim and Chandler Boulevard—initial focus of settlement.)
8. Site of North Hollywood Park
9. Los Angeles River
10. Middle Branch of the Tujunga Wash
11. West Branch of the Tujunga Wash
12. Town of San Fernando
13. San Gabriel Mountains
14. Verdugo Mountains
15. Western margin of Burbank
16. Cahuenga Pass debouchment

Photo courtesy of the Title Insurance and Trust Company, Historical Pictures Collection, Los Angeles, California.
Illustration filed with the original and first copy.)
aqueduct. In 1815, all of the Valley, except for the towns of San Fernando, Burbank, and Lankershim, was annexed to Los Angeles. (Map 4.) The incorporated towns of Burbank and San Fernando, having adequate municipal water systems, avoided annexation and remain independent to this day. Lankershim, with sub-irrigation agriculture and no pressing need for additional domestic water supply at the time, managed to remain independent until 1923. In one tremendous annexation Los Angeles nearly swallowed the whole San Fernando Valley and thereby more than doubled its area.

With the flow of life-sustaining irrigation water into this semi-arid land, the whole occupancy pattern was drastically altered. Gone forever were the days of vast acreages of relatively unproductive land in the hands of a few men. Almost overnight the brown, bare acres were transformed into green, lush fields of grain and truck crops. Prior to 1815, there had been approximately 5000 acres under irrigation in the Valley, but by 1817 this figure had already increased tenfold. By 1920, irrigated acreage in the Valley had become stabilized at roughly 50,000

* Between 1915 and 1917, the San Fernando Valley was underlain by a complex network of irrigation pipes and an elaborate pumping system was installed to service the farms. The source of this water supply was the upper basin of the San Fernando Reservoir. (Map 4.) Huge pipes (50 to 70 inches in diameter) formed the southward extending trunk lines. From these trunk lines, pipes of decreasing size (12 to 24 inches in diameter) formed the transverse connections. The overall pattern of this underground irrigation system closely resembled the rectilinear arrangement of the major boulevards extending north-south and east-west throughout the Valley. Though gravity fed in large measure, a system of pumping stations was established to maintain proper water pressure. Smaller pipe lines were extended to each farm desiring irrigation water and these pipes were metered. Thus by means of an intricate arrangement of underground pipes, irrigation water was not exposed to the extremely high evaporation rates of a semi-arid climate until spread over the farmer's fields. For a more detailed discussion of this irrigation system see P. Fwing, The Agricultural Situation in the San Fernando Valley, California, (Washington, D.C.: U.S. Dept. of Agriculture, 1939), pp. 40-44; Fig. 99, f.p. 40.
acres. This acreage more or less reflected general agricultural development in the Valley until the close of World War II, when the sharp increase in residential subdividing began to encroach upon farm land. (See Chapter IX.)


During the decade 1930-1950, Southern California was swept by another great real estate boom. Population increased more than 150 per cent, and a general inflationary movement enveloped the land. A great many settlers were attracted to the Valley. Everyone apparently wanted a home in the "country" with a small acreage in fruit or nut trees, and a sense of semi-independence from the work-a-day world.

Lankershim was ideally located for individuals desiring such acreage within a reasonable commuting distance to Hollywood and Los Angeles. There was an abundance of land with a few productive fruit and nut trees for sale. The town was quiet, uncrowded, and untainted by the urban hustle-bustle. Within a few years, this area proved sufficiently attractive to urbanites to necessitate obtaining a larger water supply for both domestic and agricultural purposes. In 1925 annexation to Los Angeles was voted. At the same time, the name Lankershim, which had become an anathema to local residents, was dropped and North Hollywood substituted.* Even at this early date the synthetic popularity of Hollywood had begun to exert an influence over the newcomers spilling through the pass.

* The only significance which this name bears is strictly geographical, North Hollywood being due north of Hollywood. Far more euphonious and in accord with the Spanish background of the Valley would have been a name such as El Portal (the gateway)—also, a name having geographical connotation with respect to North Hollywood.
During this period suburban settlement spread westward across the southern section of the Valley. It was most clearly defined in the North Hollywood-Rurbank-Van Nuys area. (Map 4.) The extensive acreages of grain crops gave way to truck and orchard production. The small holdings of the suburbanites produced limited crops of peaches, apricots, or almonds. The more intensively tilled acreages supplied truck crops for the nearby metropolis. Thus North Hollywood and environs reflected a transitional type of occupancy and land use—no longer strictly a farm area, but neither as yet, a full-fledged urbanized zone of the city.

The economic collapse of the 'thirties slowed down activity in North Hollywood as well as elsewhere in the Valley. The urge for a home with a little acreage in such a suburban area was intensified by the vicissitudes of life in the city, but the means of attaining this coveted goal were seldom forthcoming. The suburbanite found life in the "country" and the dream of economic independence somewhat of a nightmare. Fortunately, most of these recent settlers were employed in the city—a source of vitally needed cash income. In many instances, though, the small acreage did afford some measure of subsistence for the hard-pressed—fruit, eggs, honey, and chicken or rabbit meat.

By 1937, there were only 140 "farms", with a total of slightly more than 2000 acres, remaining in the North Hollywood area. (49) Most of these so-called farms were devoted to truck crops grown on rented land by non-resident Japanese or Mexicans. Though the suburbanite could not hope to compete with these commercial producers of foodstuffs, he did derive many benefits from life in a suburban community, e.g., there were uncalculable psychological values and a sense of well-being gained from
such a way-of-life—a fact of considerable importance to the family man
in a time of great social stress and strain.

Closely associated with the small-scale agricultural development
of North Hollywood were specialized servicing or derivative industries—
industries which largely disappeared from the scene with the decline in
agriculture after 1958. North Hollywood became a leading center in the
processing of local products. There were packing plants for fruits,
vegetables, and eggs; several dairies supplied milk products to Valley
residents; nurseries supplied local and city florists with cut flowers
and plants; backyard butcheries furnished an abundance of rabbit meat
for local and city markets.

The availability of large tracts of relatively cheap land, a
climate noted for its sunny skies the year around, and diversified
natural settings within a short distance of North Hollywood attracted
the motion picture studios from locations in the Los Angeles—Hollywood
area, where land values were rapidly rising.* (See Chapter X.) The
period from 1915 to 1930 witnessed the establishment of this new form of
land use and, as a consequence, additional settlers were attracted to the
southeastern section of the Valley. Emphasis shifted from a rural to
a more suburban or urban type of occupancy. By the late ’thirties the
outlook of North Hollywood residents was oriented toward production
schedules and employment opportunities in the motion picture studios
rather than toward "urbanized" agriculture.

* An abundance of cheap land, ideal weather conditions, and a
low rate of property taxation induced a part of the embryonic aircraft
industry of Southern California to establish plants in Burbank and Glend-dale. These plants and the first major airport in the Los Angeles area
were in close geographical proximity to North Hollywood—a significant
factor in urban expansion after 1940. (See Chapter X.)
In 1933, the Valley was struck by a disastrous flood, the motion picture industry was languishing, and the whole of Southern California was in the doldrums of an economic "recession". Once again the San Fernando Valley appeared to be marking time. The prospects for North Hollywood were none too cheerful and few persons would have been so audacious as to predict a future development in any manner approaching subsequent reality. To look back on the North Hollywood of 1936 and the contrasts that it presents to the North Hollywood of 1949 is to be wary of prognostication in a time of great social ferment.

The war-siad and inflationary 'forties ushered in a new era in North Hollywood and the Valley. Though the Valley was literally engulfed by a flood-tide of humanity during these years, the quantitative aspects of this vast migration of urbanized people still had to be superimposed on the existing socio-geographic base. To investigate and analyse the totality of this vast surge of urban expansion would tax the energies and ingenuity of a corps of specialists. Nevertheless, a few of the basic developments relative to this well-nigh calamitous urban migration into the San Fernando Valley since 1940 merit consideration, especially with reference to the area bearing the full brunt of the human tidal wave—North Hollywood.
Every city is a product of its time and can only be understood in terms of the society in which it comes into being.

E. Shevky

The study of a city, like the study of a living individual, can never be definitive. The one constant in the life of both the city and the individual is change.

E. Hanson
The stimulus of a vast war-time and post-war migration into Los Angeles promoted very rapid growth of population in San Fernando Valley, especially in the North Hollywood section. Settlement during this period continued to follow the historical pattern established in previous decades—new settlers flocked to North Hollywood, the most accessible community possessing available residential sites. An examination and evaluation of the 1940 census tract data for North Hollywood relative to various demographic characteristics, such as age distribution, racial composition, minority and foreign-born residents, and educational attainment, revealed the salient socio-geographic aspects of the fundamental attribute of any community—-the human resource.


The San Fernando Valley, especially in the section known as North Hollywood, has witnessed an almost unbelievable expansion in urban population during the past three and a half decades. This population growth has occurred at an ever accelerating rate, until today, it has become a virtual tidal wave of humanity. In 1920, the population of the Valley was approximately 20,000 and represented a mere three per cent of the city's total number of inhabitants. By 1930, these figures had increased to 55,000 and four per cent respectively; in 1940, 112,000 and six per cent. In the Special Census of Los Angeles held in January, 1946, the count for the Valley was 275,000 or 15 per cent of the city.

In January, 1949, a conservative estimate of the Los Angeles County Regional Planning Commission set the population of the Valley at 370,000 or 18 per cent of the city.* It is predicted that the population

* At this point it would be remiss not to mention that all population and housing data subsequent to the Special Census of Los Angeles held in 1946 are based upon estimates. These estimates were
of the Valley in the 1950 Census will exceed 400,000 or more than 20 per cent of the expected city population at this date. It is obvious from these figures that population during the past decade has received a tremendous spurt, especially since the close of World War II.

North Hollywood more than kept pace with this surge of population into the Valley. In 1920, the population in this community was approximately 2600 and represented 15 per cent of the Valley's total number of inhabitants. By 1930, these figures had increased to 15,000 and 26 per cent respectively; in 1940, 82,000 and 35 per cent; and in the Special Census of January, 1946, 87,000 and 25 per cent. The estimate of the Los Angeles County Regional Planning Commission was approximately 95,000 or 25 per cent of the Valley total in January, 1949. Each succeeding official count of population in North Hollywood has revealed a numerical increase of considerable proportion, but the percentage of Valley residents located in this community has begun to decline as other parts of this huge area become settled. If this downward trend is substantiated by the 1950 Census, which seems more than likely, it will mark a turning point in the development of the Valley and an end to the brief era of population concentration in North Hollywood. Such a decline is to be expected as North Hollywood attains or surpasses its optimum growth and other parts of the Valley still offer attractive, uncongested areas suitable for intensive urban occupancy.

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obtained from the Los Angeles County Regional Planning Commission. For nearly a decade this local agency has been revising and refining a technique of population estimating developed by the staff. In 1948, Regional Planning's estimate for Los Angeles City was a mere two per cent below the official count. San Fernando Valley was underestimated by nearly seven per cent at this time.

The general distribution of population in San Fernando Valley for the past three decades is revealed by the accompanying series of decennial dot maps. (Map 5.) The dot map for 1920 reflects the period of agricultural settlement following introduction of irrigation in 1915. (See Chapter VI.) There were four distinct communities in the Valley at this time—San Fernando, Van Nuys, Burbank, and North Hollywood. Each of these small towns served as a market center for surrounding areas.

The independent communities of Burbank and San Fernando were larger than Lankershim (North Hollywood). Both of these towns were located along the Southern Pacific Railroad route leading from Los Angeles to the San Joaquin Valley via San Fernando Valley and Pass. Obviously such location promoted their growth. Burbank also benefited from its location at the junction of two cross-Valley routes of the Southern Pacific Railroad with the one coming in from the north. These two rail routes serviced the Valley and continued northward via the Santa Susana Pass. (Map 4.) Population in these two towns mainly clustered near the railroads during this era—southwest of the tracks in San Fernando and northeast of the tracks in Burbank.

The Van Nuys settlement, recently annexed by Los Angeles along with most of the Valley, was considerably larger than the still independent, struggling community of Lankershim (North Hollywood). (See Chapter VI.) Population was nearly equally settled east and west of Van Nuys Boulevard and the Pacific Electric Railway. (West of North Hollywood, the Southern Pacific and Pacific Electric lines made extensive use of the same trackage.) (Map 5.)

Further west in the Valley, there were scattered settlements
of an agricultural type, but definite community development of significant size was still a future event. There were hints of future settlements at Canoga Park, Pacoima, and Sunland-Tujunga. (Map 5.)

Widespread interest in a suburban or suburban type of occupancy by city dwellers in the southern portion of the Valley was still a few years forthcoming. Population in North Hollywood was largely oriented toward agricultural pursuits. Settlement clustered along the east-west Southern Pacific tracks and the north-south Pacific Electric Railway from Hollywood via Cahuenga Pass and Vineland Avenue. (Map 5.)

It was to be expected that population would also string out along Lankershim Boulevard—the diagonally aligned commercial center of North Hollywood and through route from Hollywood via Cahuenga Pass to San Fernando and northward out of the Valley. Thus population in North Hollywood centered in a triangle defined by these three routes of travel—the Southern Pacific tracks along its northward base, by Vineland Avenue on its eastern side, and by Lankershim Boulevard on its western side. Beyond this nucleus, settlers were widely scattered and reflected emphasis on agricultural sparsity rather than urban concentration.

By 1950, population had increased considerably throughout the Valley, but the general pattern of distinct community concentration of settlement remained much the same as in 1920. (Map 5.) Population in San Fernando had increased and the focus of settlement southwest of the railroad tracks became more clearly defined. There was still an abundance of land for occupancy on the gently ascending slope of the alluvial fan covering the northeast section of this town. Burbank also revealed a noticeable increase in population, but settlement had moved northeastward and away from the railroad. (Map 5.) Settlers were
interested in residential or urban property removed from the commercial-industrial center of the town. Van Nuys had been expanding and population was spreading eastward and westward from the main boulevard and interurban tracks. Elsewhere in the Valley scattered nuclei of settlement continued to expand very slowly. Canoga Park, to the west, maintained its rural character far removed from urban-suburban activity in the southeast. (Map 5.) Pacoima, just south of San Fernando, remained a relatively unchanged agricultural settlement. The "shoestring" development in the Sunland-Tujunga area continued to expand slowly.

Far to the south, Ventura Boulevard had begun to develop a ribbon-like pattern of settlement, especially in the eastern part of the Valley.

North Hollywood revealed a truly remarkable expansion of population during this decade—the first since its annexation to Los Angeles. Settlement spread north and south from the Southern Pacific tracks, but the heart of the community remained the Vineland-Lankershim-Southern Pacific triangle. (Map 5.) A desire to remain in close geographical proximity to the interurban line along Vineland Avenue northward and thence westward along the Southern Pacific right-of-way resulted in a slight northward and eastward movement of settlers. Yet this settlement remained peripheral to the triangular concentration that was the heart of North Hollywood. The desired rural atmosphere and reasonable priced acreage were no longer obtainable near the center of town and this fact promoted drift toward the "outskirts". Settlers in the southern part of the community clung close to Vineland Avenue and diagonal Lankershim Boulevard in order to maintain ready access to the commercial center of town and the interurban line. The urban-suburban type of occupancy was gaining adherents, and harassed urbanites
MAP 5

POPULATION DISTRIBUTION 1920
SAN FERNANDO VALLEY

Population 19,592

Legend

Each dot represents

Los Angeles, California
Department of City Planning

EACH DOT REPRESENTS

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1942

B Burbank
N North Hollywood
V Van Nuys
W Whittier
T Tarzana
U C Universal City
from Hollywood and Los Angeles were being attracted to the area.

The following decade, 1930-1940, ushered in the period of intensive urban settlement in the San Fernando Valley—an era still in its heyday. Advent of the cheap, mass-produced automobile and the accompanying development of well-constructed highways resulted in a high degree of population mobility. Tens of thousands fled the ever-increasing population congestion of Hollywood and Los Angeles. A mobile, motorized population swept through Cahuenga Pass and descended upon the Valley in search of peace and quiet, elbow-room and breathing space.

There was a slight increase in population at San Fernando and its environs (Etiwanda), but this section of the Valley was still too far removed from the center of urban life and livelihood to attract many settlers. (Map 5.) Van Nuys experienced considerable expansion of settlement and so did the territory surrounding it. Canoga Park remained much the same as in the previous decade—distance also proving detrimental to its growth. Two new communities, slightly east of Canoga Park and west of Van Nuys, began to attract settlers—Tarzana and Reseda. (The small town of Tarzana received the impetus for its development under the guidance of Edgar Rice Burroughs of Tarzan fame.) In the extreme northeast, the Sunland-Tujunga area more or less maintained its relative rate of growth. To the far south, Ventura Boulevard greatly increased in population, especially along its eastern half—the section readily accessible to Cahuenga Pass and Hollywood.

Burbank revealed an extraordinary rate of growth. (Map 5.) The neck of territory extending northeastward became very densely settled, and, as a consequence, the area west of the railroad tracks, as far as the North Hollywood boundary, became a new major center of settlement.
The desire for flat, relatively cheap land in this community finally pushed settlement away from the mountain barrier to the northeast back across the railroad tracks to the southwest. Thus Burbank had begun to experience the pressure exerted by topography on the course of its settlement.

During this decade North Hollywood expanded in population by leaps and bounds. (Map 5.) Accessibility by highway, bus lines, and interurban railroad (streetcar) to Hollywood and Los Angeles resulted in this community being the focus of urban expansion in the Valley. Though the heaviest concentration of settlement still centered in the triangular heartland, an increasing amount of residential development occurred southward. Lankershim Boulevard (indicated on the 1940 dot map by a diagonal strip of vacant land) remained the arterial route of travel and population continued to cluster near it. The area immediately north of Universal City showed a remarkable expansion of settlement when compared with that prevailing in the previous decade. This was due in large measure to development of a country club in this section and promotion of the Toluca Lake Estates.

Though the area west of Lankershim Boulevard was beginning to attract settlers, occupancy of this section was still relatively sparse, except for a zone immediately south of the Southern Pacific-Pacific Electric tracks and near North Hollywood High School. For the most part, this area was still devoted to rural living and agricultural pursuits—not too attractive to the incoming urbanites. Farther west, the Tujunga Wash cut a swath through the land and settlement petered out, but it picked up again on the outskirts of Van Nuys—the intervening zone being largely agricultural. Immediately south of Ventura
Boulevard, North Hollywood settlement began tentatively to push into the Santa Monica Mountains.

Thus, the population of North Hollywood in 1940 revealed the following salient features: an enormous increase in the number of residents, a rapid occupancy of agricultural land by urban-conditioned settlers, and unmistakeable evidence of a concentration of population in the southeastern section of the San Fernando Valley.

Although detailed population data relative to the 1960 Census will not be forthcoming for a year or two, the overall pattern of distribution will not reveal any marked changes, but the intensity of settlement will be reflected in these statistics. Thinly occupied areas, such as the one stretching between North Hollywood and Van Nuys, will reveal a heavier concentration of settlers. (Map 5.) The density of settlement in North Hollywood, especially near its heartland, will be greater and the area of high density enlarged. The overall increase in population may make it necessary to change the dot values on the future demographic maps in order to adequately reflect the tremendous rate of growth. From all appearances the decade 1940-1950 marks the beginning of a new era of extremely intensive Valley-wide settlement of a highly urbanized population.


An adequate investigation of the population characteristics of North Hollywood necessitates extensive employment of census tract data.* During an inter-censal period, especially near the date of the

* "Information on a small-area basis is essential for the analysis of modern problems of large cities and for the efficient administration of their municipal, welfare, and commercial enterprises."
next decennial census, this procedure may be subject to grave error,
but in this particular instance the changes have been mostly quantitative
and not qualitative. (50) In addition to the 1940 Census, the Special
Census of Los Angeles for 1946 provides some pertinent data on the tract
basis.

The North Hollywood section of metropolitan Los Angeles
embraces seven census tracts (#19-#25) of varying size and population.
(Map 6.) Though the boundaries of these tracts were delimited in
accordance with the population specifications of the Census Bureau—
3,000 to 6,500 inhabitants per tract, the rapid growth of population
in North Hollywood has necessitated a slight internal modification of
some tracts. In order to overcome the difficulty inherent in unwieldy
population size, provision has been made for subdividing tracts such

To meet this need, certain large cities, and sometimes their suburbs,
have been divided into census tracts. In current practice, each tract
ordinarily contains a population between 3,000 and 6,500. The tracts
are permanently established so that comparisons can be made from year
to year and from census to census; they are laid out with a view to
approximate uniformity in population and with some regard for uniformity
in size; and each is designed to include an area fairly homogeneous
with respect to race, national origin, economic status, and living
conditions. H.W. Green and E.M. Wright, Census Tract Manual, (Washington,
p.1.

Although the census tract may well be regarded as one of the
more important tools of statistical research now available to students
of urban society in the United States, it is interesting to note that
urban geographers apparently have failed to grasp its significance in
furthering the geographical interpretation of urban data. Urban
sociologists have not been quite so reluctant to adopt the census tract
as a means of investigating urban social phenomenon. Even so, there is
a paucity of published studies by urban sociologists or geographers in
which the census tract technique is employed in the analysis and mapping
of urban statistical data. Among the outstanding studies of this type
have been those contributed by H. W. Green, E. Hanson, W.C. Reckless,
H. Hoyt, E. Shevky, S. A. Queen, and H. L. Hombeck. For further
information regarding the works of these authors consult the "Selected
Bibliography" under the headings: Population, Urban Geography, and
Urban Sociology.
as #19, #21, and #25 without disturbing the outer boundaries of these tracts. Since no further changes are to be made regarding the boundaries of these census tracts, the 20 square miles comprising North Hollywood is divided among the seven tracts as follows: Tract #19—5.6 square miles or 18 per cent of the total area; Tract #20—1.1 square miles or 5.5 per cent; Tract #21—3.8 square miles or 19 per cent; Tract #22—.9 square mile or 4.5 per cent; Tract #23—1.4 square miles or 6.5 per cent; Tract #24—1.1 square miles or 5.5 per cent; and Tract #25—8.2 square miles or 41 per cent (29.5 per cent mountainous and 11.5 per cent flat land).

Population growth with respect to these seven census tracts has by no means been uniform. (Table 3 and Chart II.) In the decade 1930-1940, the greatest percentagewise increases in population were registered by Tracts #25, #20, #21, #24, and #23 respectively. By far the greatest numerical gain (8200) was recorded in the largest tract—#25. Though more than 70 per cent of this tract is mountainous, population swept through Cahuenga Pass and westward along Ventura Boulevard to settle in the lowland section of this extensive area. Though there was some occupancy of the mountainous portion of this tract during the decade, it was of a highly restricted nature due to the cost of building and inaccessibility.

The sharp increase in population in diminutive Tract #20 reflected the westward movement of settlers desiring to remain close to the heart of North Hollywood—the southern part of Tract #21, the western part of Tract #22, and the northern corner of Tract #23. (Map 6.) This numerical increase of some 400 residents was confined largely to the southern half of Tract #20, as the northern portion was utilized for truck crops or stood idle.

<table>
<thead>
<tr>
<th>Census Tract</th>
<th>Population 1930(a)</th>
<th>Population 1940(b)</th>
<th>Percent Increase 1930-1940</th>
<th>Population 1940(b)</th>
<th>Percent Increase 1940-1946</th>
<th>Population 1946(c)</th>
<th>Percent Increase 1940-1946</th>
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</thead>
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<td>7,114</td>
<td>164.3</td>
<td>319.0</td>
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<tr>
<td>20</td>
<td>648</td>
<td>2,077</td>
<td>220.0</td>
<td>3,750</td>
<td>80.5</td>
<td>479.0</td>
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<td>7,925</td>
<td>194.0</td>
<td>18,933</td>
<td>137.6</td>
<td>526.0</td>
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<td>3,536</td>
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<td>5,293</td>
<td>47.1</td>
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<td>5,762</td>
<td>110.0</td>
<td>8,212</td>
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<td>200.0</td>
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</tr>
<tr>
<td>24</td>
<td>1,857</td>
<td>5,089</td>
<td>174.0</td>
<td>7,725</td>
<td>51.8</td>
<td>316.0</td>
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</tr>
<tr>
<td>25</td>
<td>3,211</td>
<td>11,582</td>
<td>260.0</td>
<td>18,658</td>
<td>45.8</td>
<td>419.0</td>
<td></td>
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<tr>
<td>Total</td>
<td>15,187</td>
<td>38,582</td>
<td>154.0</td>
<td>67,585</td>
<td>75.0</td>
<td>550.0</td>
<td></td>
</tr>
</tbody>
</table>

(a) Special tabulation on the basis of enumeration districts to give comparability with the 1940 census tracts. In E. Hanson and P. Beckett, Los Angeles: Its People and Its Homes, Haynes Foundation, Los Angeles, California, 1944, pp. 67.


(c) Special Census of Los Angeles City, 1946. U. S. Bureau of the Census, Washington, D. C., Table #2, p. 4.

During this period Tract #21 experienced a gain of 4200 occupants, who, for the most part, settled in the southern section.

(Table 3.) This portion of Tract #21 afforded ready access to the Pacific Electric Railway, North Hollywood High School, North Hollywood Park, and the commercial center strung along Lankershim Boulevard. In many respects this section of Tract #21 was ideally located with regard to the core area of North Hollywood.
Tract #24 also recorded a sizable numerical increase—5200 new residents in an area of slightly more than one square mile. (Table 3.) Settlement in this tract was distinctly bifurcated with part of it in the north near Lankershim Boulevard and the Pacific Electric tracks along Vineland Avenue and part of it in the south near Toluca Lake and the country club. This southern development of Tract #24 represented an extension of the settlement pattern found in the southern part of Tract #25. These were areas of wealth and prestige. (Map 6 and Plate II.)

Though Tract #25 was slightly smaller than neighboring #24, it registered a numerical increase of 5000 inhabitants. (Table 3.) Nearly all of this tract forms part of the geographic heart of North Hollywood. The eastern half of it hugs Lankershim Boulevard and the Pacific Electric route along Vineland Avenue. Its northwestern boundary along Tract #21 abuts North Hollywood Park. Just beyond the park lies North Hollywood High School. Thus Tract #25 has ready access to the shopping center, transportation, educational and recreational facilities. (Map 6 and Plate I.)

Tracts #19 and #22 revealed relatively small increases in population during this decade. Tract #19 sprawls along the western and northern boundary of North Hollywood. It was far removed from the center of town and not particularly conductive to settlement, except for those desiring agricultural land or rustic setting. (Map 6.) With an abundance of unoccupied land in Tracts #20 and #21, there was little or no incentive for a non-agricultural urbanite to settle far out in the "wilds". (Plate I.)

Tract #22 constituted part of the oldest settled portion of North Hollywood, especially the southwest corner of the tract. (Map 6.) Its occupancy at an early date by Mexican workers, obnoxious industries,
and the prevalence of a state of general debilitation discouraged settlement, even though its geographical proximity to the core area of North Hollywood would normally be expected to make it an extremely desirable section.

The Special Census of 1946 provides a clue to the trend of population movement in North Hollywood during the war years and for a short period thereafter. Tracts #22, #23, #24, and #25 reveal somewhat similar percentage gains, although Tracts #15, #24, and #25 sharply declined in numerical gains. (Table 3 and Chart II.) The most desirable sections of these tracts—areas close to transportation, schools, and the commercial center of North Hollywood—were intensively occupied by 1940. Though Tract #25 registered a numerical increase of roughly 5000, this was readily absorbed by such a huge area. A greater interest in settlement in the area of very rugged terrain accounted for a considerable share of the increase noted in Tract #25. The slight increase recorded in Tract #22, within a six year period as compared to the one during the decade 1930-1940, was due to geographical proximity to the aircraft plants in Burbank and not to its favorable location with respect to North Hollywood. (See Chapter IX and Plate I.)

The greatest numerical increase in population, nearly 11,000 inhabitants within a six year period, occurred in the overly large Tract #21. (Table 3.) With an over-all increase of 75 per cent in the population of North Hollywood, new settlers flocked to the area offering abundant land and accessibility to the commercial center of town. Settle—

* Pertinent to this analysis of population growth, density, etc., is the percentage distribution of population in North Hollywood by census tracts. In 1940, it was as follows: Tract #19—10.5%; Tract #20—5.5%; Tract #21—28.0%; Tract #22—9.0%; Tract #23—12.0%; Tract #24—11.4%; Tract #25—24.6% (excluding the mountainous section).
Population Increase for North Hollywood by Census Tracts (1930-1940-1946) on the Basis of the Data Shown in Table 3.
ment spread northward along Lankershim Boulevard and thence both eastward and westward. (Map 6.) Some of this settlement spread into Tract #20 and the northern section of this area began to fill up. Vacant land, dead orchards, and fields of truck crops disappeared in order to make room for this sudden influx of humanity.

The largest percentage gain in population was registered by Tract #19, although the numerical increase was only third in rank—4,600. (Table 3.) Nearly all of this new settlement occurred in the "panhandle" stretching along the western border of the northern half of North Hollywood. (Map 6.) It was confined to this section because of the development of mass housing facilities along this strip of land at the close of the war. (See Chapter IX and Plate II.) With an abundance of relatively cheap agricultural land available here, large corporations constructed thousands of pre-fabricated, post-war houses to meet the demand for residences in North Hollywood. (Figs. 71-73.)


Approximately 70 per cent of North Hollywood consists of a smooth, flat, and relatively low-lying alluvial plain, as evidenced by the rectilinear pattern of streets in the area and contrasted with the curvilinear pattern prevailing in the mountainous southern portion of Tract #25. (Map 6.) (See Chapter I.) The only serious obstructions to settlement on this plain are the two sandy river beds or washes. The Middle Branch of the Tujunga Wash cuts a swath through the heart of North Hollywood from northwest to southeast and passes through parts of Tracts #19, #20, #21, #25, and #25. (See Plate I.) The West Branch of the Tujunga Wash cuts across the southeast corner of Tract #19 and the western part of Tract #25 to the Los Angeles River. Neither of
these washes occupies much territory and both of them become increasingly
constricted to the south. Nevertheless, there has been a tendency for
settlement to crowd the banks of these "dry" channels, especially in the
more desirable sections of the community. The danger inherent in such
intensity of settlement has been amply demonstrated on more than one
occasion. (See Chapter VIII.) Fortunately, these physical barriers
to settlement have involved a very small percentage of the total area
available for occupancy in North Hollywood.

Far more significant, especially with respect to Tract #25,
has been the mountainous area along the southern border of North
Hollywood—the area between Ventura Boulevard and Mulholland Drive in
the Santa Monica Mountains. Of the 20 square miles comprising the
community, nearly 30 per cent is represented by a portion of the Santa
Monica Mountains. (Plate I.) Though Tract #25 accounts for more than
40 per cent of the territory constituting North Hollywood, only 11 per
cent of this area is lowland suitable for intensive, urban settlement.
Though a surprising number of residents have settled in this mountainous
portion of Tract #25, the rugged nature of the terrain will always
prevent intensive settlement and limit occupancy to those in a position
to pay the high cost of improvement and construction.

In 1920 the highest density of settlement was confined to
Tracts #22 and #25. (Table 4.) Both of these tracts are relatively
small and form a part of the core area of North Hollywood. Lenkertshim
Boulevard, commercial center and key artery through town, cuts a diagonal
swath across the northeastern part of Tract #23 and the southwestern
corner of Tract #22. Both tracts have ready access to the Pacific
Electric Railway. Both tracts are within easy walking distance of
North Hollywood High School and the business section. Both tracts
abut on North Hollywood Park. In these two tracts, particularly in Tract #23, population tended to cluster and multiple unit housing arose to meet the demand.

Tract #21 to the northwest of this core area and Tract #24 to the southeast, both being peripheral to the center of settlement, registered the next highest densities in 1930. These two areas were logical centers for future settlement.

Excluding the mountainous section of Tract #25, the density of this part of North Hollywood compared favorably with Tracts #21 and #24. Settlement in this tract, during the decade, was confined largely to the lowland area north of Ventura Boulevard and close to the boundaries of Tract #23. Such a location gave access to the center of town and also to Hollywood via Ventura Boulevard and Cahuenga Pass.

The densities for Tracts #19 and #20 were extremely low in 1930. This fact may be attributed in large measure to their marginal position with respect to settlement in North Hollywood in the twenties. Even though Tract #20 covered a relatively small area, its density remained quite low. Both of these areas were still the scene of agricultural occupancy and unattractive to intensive urban settlement.

(Plate I.)

By 1940 the density pattern had shifted somewhat. (Table 4.) Tract #25 underwent intensive settlement during this decade and, as a consequence, it was the most densely occupied area. This development was in keeping with its central location in the community. Also, Tract #22 expanded in population and increased in density for the same reason as prevailed in its neighbor to the south—superiority of location with respect to the core area.

<table>
<thead>
<tr>
<th>Census Tract</th>
<th>Area (Acres)</th>
<th>Population 1870</th>
<th>Density per Gross Acre</th>
<th>Population 1940</th>
<th>Density per Gross Acre</th>
<th>Population 1946</th>
<th>Density per Gross Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>2,340</td>
<td>1,698</td>
<td>72</td>
<td>2,032</td>
<td>1.2</td>
<td>7,114</td>
<td>2.8</td>
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<tr>
<td>20</td>
<td>720</td>
<td>648</td>
<td>30</td>
<td>2,077</td>
<td>2.9</td>
<td>5,750</td>
<td>5.2</td>
</tr>
<tr>
<td>21</td>
<td>2,456</td>
<td>2,696</td>
<td>1.1</td>
<td>7,925</td>
<td>3.2</td>
<td>10,833</td>
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</tr>
<tr>
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<td>613</td>
<td>2,338</td>
<td>3.8</td>
<td>5,596</td>
<td>5.9</td>
<td>5,295</td>
<td>8.6</td>
</tr>
<tr>
<td>23</td>
<td>305</td>
<td>2,741</td>
<td>3.1</td>
<td>5,762</td>
<td>6.5</td>
<td>8,212</td>
<td>9.2</td>
</tr>
<tr>
<td>24</td>
<td>951</td>
<td>1,857</td>
<td>1.0</td>
<td>5,089</td>
<td>5.5</td>
<td>7,725</td>
<td>8.5</td>
</tr>
<tr>
<td>25(a)</td>
<td>5,255</td>
<td>3,211</td>
<td>3.6</td>
<td>11,532</td>
<td>2.2</td>
<td>16,585</td>
<td>3.1</td>
</tr>
</tbody>
</table>

(a) Los Angeles City Engineer's Office.
(b) Hanson and Beckett, op. cit., p. 67,74.
(c) 16th Census of the United States, op. cit., Table A-1, p.1.
(d) Special Census of Los Angeles City, op. cit., Table #2, p.4.
(e) Eliminating the mountainous area (72%) of Tract #25, the densities for this section are as follows: 1930, 1.45; 1940, 5.1; 1946, 3.5.

During this period, settlement in Tract #24 increased greatly and the density here nearly approached that prevailing in the core area—Tracts #22 and #23. (Map 6.) The density in Tract #24 surpassed that registered by these other two tracts, as this section of North Hollywood contained a large golf course, a small lake, and an occupancy pattern emphasizing the suburban estate. (Such differences in the types of occupancy are significant in the case of these three tracts, as the...
area for each tract is nearly equal.) The heavy concentration of multiple unit dwellings in the northern half of this tract accounted for the sharp increase in density registered by the area.

The density in Tract #25, excluding the mountains, attained a level comparable with Tracts #22, #23, and #24. In most respects this tract merely revealed a continuation of the general settlement pattern prevailing in the southern half of North Hollywood. In actuality, the density pattern decreased in intensity south and west from the core area in the northeast section of Tract #23. (Map 8 and Plates II and III.)

Tracts #21, #20, and #19 revealed a decreasing density of occupancy with distance from the core area. (Map 8.) Though there had been a nominal increase in population in each of these tracts during the 'thirties, it did not produce any startling changes in densities. These areas still remained peripheral to the core settlement of North Hollywood.

During and shortly after the close of World War II, population began to flow into North Hollywood, and the settlement pattern underwent considerable revision. Tracts #23, #22, #25, and #24, in that order, were the more densely settled areas of the community, but the percentagewise increases in density for these tracts were beginning to decline. (Table 4.) These relatively high densities merely reflected an occupancy pattern which had prevailed for a period of three decades.*

* The population density of North Hollywood is very low for an urban community, but it is in no way unique for this section of the country. Los Angeles has the lowest density of population found in any great city in the world. Rivalling Detroit and Philadelphia in population
The major shift in settlement occurred in the northern part of North Hollywood—Tracts #19, #20, and #21. With the decreasing availability of reasonably priced and desirably located properties in the southern half of the community, settlers turned to the vast stretches of vacant or agricultural land to the north. With government war-time housing and mass produced pre-fabricated housing after the war, this section of North Hollywood began to attract settlers in vast numbers and consequently the population density rose rapidly. (See Chapter IX.)

The Special Census of 1946 merely revealed the first stages of this tremendous development—a development far from completion at this date. As more and more vacant land in these tracts is converted to dwelling units, the density will continue to increase. The intensity of settlement will be an expression of the desire on the part of new inhabitants to settle in the North Hollywood area. It will require a few years for the occupancy of these tracts to rival the smaller and more compact ones to the south, but it would appear entirely possible that just such a development is now in progress.

In the mountainous section of Tract #25 a somewhat comparable "boom" in settlement occurred at the close of the war. Naturally, this development is limited in scope and restricted to wealthy settlers desiring a high degree of privacy and a superlative view. The density in this area will always remain quite low due to the rugged nature of the terrain, previously mentioned, as well as the emphasis on the estate type of settlement.

in 1940, Los Angeles had a density of six persons per gross acre on the average, as compared to Philadelphia's twenty-three and Detroit's eighteen. With a metropolitan area ranking third in population in 1940, Los Angeles ranked 29th in density, whereas Philadelphia ranked 3rd and Detroit 11th.
Thus the overall trend of settlement is now northward for those seeking relatively low density areas that still afford a little "elbow room" (Tracts #19, #20, and #21). For those desiring a location near the urban core, it means settlement in multiple housing units in areas of ever-increasing congestion and density of occupancy (Tracts #22, #23, #24, and the lowland part of #25).


During the short period of 1940-1946 the age distribution of population in North Hollywood underwent significant changes. The most noticeable change involved that segment of the population in the age group below five years. (Table 5.) Every census tract revealed a marked increase in the percentage of very young children to the total population. The most remarkable increase occurred in Tract #19—an increase of nearly six per cent over 1940. The sharp rise in the infant population of Tract #19 as well as Tract #21 was partly due to the significant increase in population in these areas during this six year period. (See Table 5.) This population increase was confined largely to those who had contracted war-time marriages and consequently had relatively young families. In Tracts #24 and #25 the increase in the infant age group was extremely small when compared with the census tracts to the north. This was due, in large measure, to an older population and a greater emphasis being placed on material welfare. Residents in these tracts tend to identify themselves with the superior economic group and are more inclined to devote their time, money, and energy to further improvement of their standard of living rather than to nurture of larger families. Nevertheless, the general rise in the birth rate throughout the nation during the 'forties was reflected in North Hollywood, as elsewhere, by an increase in the infant population.
TABLE 5. Percentage distribution of selected age groups by census tracts for the North Hollywood District, San Fernando Valley, Los Angeles, California, 1940 (a)—1946 (b).

<table>
<thead>
<tr>
<th>Age Groups</th>
<th>Tract #19 1940—1946</th>
<th>Tract #20 1940—1946</th>
<th>Tract #21 1940—1946</th>
<th>Tract #22 1940—1946</th>
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<td>7.8 12.5</td>
<td>7.3 12.6</td>
<td>7.6 11.7</td>
<td>8.2 11.1</td>
</tr>
<tr>
<td>5-14</td>
<td>17.8 16.6</td>
<td>13.8 15.0</td>
<td>15.0 15.0</td>
<td>15.9 14.2</td>
</tr>
<tr>
<td>15-24</td>
<td>14.6 12.5</td>
<td>12.5 10.0</td>
<td>14.3 10.7</td>
<td>16.3 12.7</td>
</tr>
<tr>
<td>25-44</td>
<td>34.5 37.5</td>
<td>41.0 39.4</td>
<td>39.0 39.4</td>
<td>32.8 36.3</td>
</tr>
<tr>
<td>45-64</td>
<td>19.6 15.8</td>
<td>20.2 21.9</td>
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<td>19.2 19.4</td>
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<tr>
<td>65+</td>
<td>5.4 4.1</td>
<td>5.4 4.9</td>
<td>4.5 4.4</td>
<td>5.5 6.5</td>
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<table>
<thead>
<tr>
<th>Age Groups</th>
<th>Tract #23 1940—1946</th>
<th>Tract #24 1940—1946</th>
<th>Tract #25 1940—1946</th>
<th>North Hollywood</th>
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<td>5-14</td>
<td>12.9 12.1</td>
<td>13.4 12.3</td>
<td>10.4 12.3</td>
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</tr>
<tr>
<td>15-24</td>
<td>14.8 10.2</td>
<td>11.0 10.0</td>
<td>10.9 9.0</td>
<td>13.5 10.7</td>
</tr>
<tr>
<td>25-44</td>
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<td>42.5 36.5</td>
<td>44.3 39.6</td>
<td>39.3 38.5</td>
</tr>
<tr>
<td>45-64</td>
<td>20.5 23.7</td>
<td>21.5 25.0</td>
<td>21.5 24.1</td>
<td>20.3 21.1</td>
</tr>
<tr>
<td>65+</td>
<td>5.7 6.1</td>
<td>5.0 5.5</td>
<td>5.4 5.7</td>
<td>5.4 5.2</td>
</tr>
</tbody>
</table>

(a) Hansen and Beckett, op. cit. p.68.
(b) Special Census of Los Angeles City, op. cit., Table #4, pp.12-14.

Even more significant than a rise in the proportion of infants to the total population of North Hollywood has been the sharp increase in the number of residents between the ages of 25 and 65 years. Allowing
for the exigencies of the war-time draft of young men in the Special Census of 1946, Tracts #19, #21, and #22 revealed an increase in the number of residents aged 25 to 44, whereas Tracts #20, #24, and #25 showed a decline in occupants of this age bracket. Significantly, though, these four census tracts revealed a general increase in the proportion of residents in the 45 to 64 year age group. Thus it would appear that a slightly younger population resided in Tracts #19, #21, and #22—a fact in keeping with the period of settlement and type of population occupying these areas. Tract #20 must be considered more or less marginal to both groups of tracts and represented a balance between the two extremes—a fact supported by its location and density of occupancy.

The population in Tracts #23, #24, and #25 revealed a further accentuation of its increasing age. These tracts were the scene of an earlier period of settlement by at least a decade and reflect a stability of occupancy normally associated with maturity. In addition, these tracts revealed increasing percentages of resident over 65 years of age—the retirement group. To some extent this situation was merely a reflection of the date of settlement, but not a small part of it must be attributed to the type of settler attracted to these tracts—retired, middle class or wealthy people.

Thus, it would appear that the northern part of North Hollywood is being settled by rather youthful residents (25 to 44 year group), whereas the southern section is now occupied by mature or aging citizens (45 to 65 or more years). In the next 25 years there will be a noticeable aging of population in these northern tracts plus an intensification of the aging process among those residing in the southern tracts. For the most part, the present residents of North Hollywood are home owners.
or rather home purchasers, who will not be inclined to pull up stakes
and move on. For these residents North Hollywood is literally and
figuratively the end of the road in regard to westward migration. This
is mecca—the fabulous land of milk and honey. Here they are; here
they intend to remain and grow old. What then is in store for their
multiplying offspring and the tens of thousands of new settlers destined
to arrive before these offspring attain maturity and claim the land as
their own?

29. **Racial Composition of North Hollywood: 1940.**

The "purity" of population in North Hollywood approached the
proverbial 99.44 per cent of Ivory soap fame—in fact Tract #23 revealed
a 99.4 per cent white population (excluding the Mexicans). (Table 6.)
Every census tract in this community had a white population of 96 per
cent or more. The one significant concentration of Negroes was found in
Tract #24 and obviously this was composed of "in residence" domestics.
In Tract #19 roughly three per cent of the population classified as
"Other" referred to Japanese truck farmers. Today, this group has
largely disappeared with the transformation of agricultural land into
residential lots. Elsewhere this classification generally referred to
an occasional Oriental or Filipino domestic.

North Hollywood as well as Los Angeles has only one minority
group of significant proportions—the Mexican.* This minority was

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* There is good reason to believe that this minority situation
with respect to race has been altered during the past decade. There has
been a very large influx of Negroes into Los Angeles, especially during
the war years. Some experts predict an increase from 4 per cent in the
1940 Census to more than 10 per cent in 1950—a very large numerical
increase considering the population growth of the past decade. This
would mean a Negro population on a par with that of Detroit and rapidly
approaching Philadelphia.
TABLE 6. Racial composition of the population by census tracts for the North Hollywood District, San Fernando Valley, Los Angeles, California, 1940.*

<table>
<thead>
<tr>
<th>Census Tract</th>
<th>White %</th>
<th>Negro %</th>
<th>Other %</th>
<th>Mexican** %</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>96.0</td>
<td>.4</td>
<td>2.8</td>
<td>.8</td>
</tr>
<tr>
<td>20</td>
<td>98.2</td>
<td>.2</td>
<td>.7</td>
<td>.9</td>
</tr>
<tr>
<td>21</td>
<td>97.6</td>
<td>.2</td>
<td>.9</td>
<td>1.5</td>
</tr>
<tr>
<td>22</td>
<td>96.1</td>
<td>.0</td>
<td>.6</td>
<td>3.5</td>
</tr>
<tr>
<td>23</td>
<td>99.4</td>
<td>.4</td>
<td>.15</td>
<td>.1</td>
</tr>
<tr>
<td>24</td>
<td>96.4</td>
<td>1.2</td>
<td>.3</td>
<td>.1</td>
</tr>
<tr>
<td>25</td>
<td>98.9</td>
<td>.6</td>
<td>.3</td>
<td>.2</td>
</tr>
</tbody>
</table>

* Hanson and Beckett, op. cit. pp. 118-120.

** The Mexican population was segregated from the total by means of a special tabulation of data for the Hanson and Beckett study of Los Angeles.

confined largely to Tract #22 in 1940, but there were additional clusters of settlement in Tracts #19, #20, and #21. (Table 6.) The Mexican settlement in Tract #22 had as its antecedent the construction and maintenance of the Southern Pacific and Pacific Electric Railroad lines in North Hollywood and the Valley. For several decades these Mexicans have resided close to the railroad tracks, which cut across the southern part of this tract, occupying only two or three blocks. Though the 1940 Census revealed no Negroes residing in this area, there appears to have been an influx of such settlers during the past few years. In Tracts #20 and #21, the Mexican population was located in the north and was employed on the Japanese operated truck farms or those
maintained by their compatriots. In Tract #19 the Mexican residents worked on the Southern Pacific tracks crossing through this area or in the truck gardens scattered over this section. It is only in Tract #22 that the presence of a Mexican population still continues to exert a deleterious influence on the settlement of such a highly desirable part of North Hollywood.


The distribution of foreign-born residents in North Hollywood for 1940 also revealed the concentration of Mexicans in Tracts #19 and #22. (Table 7.) Approximately one-third of the total foreign-born in Tract #22 were Mexican. It would be natural to expect the Mexican colony in this tract to attract like nationals to the area. In addition to the Mexican population, nearly ten per cent of the foreign-born in this tract were Italian. Common labor on the railroads and in the truck gardens would tend to draw members of this nationality to the tract. In Tract #19 the Italian born minority was only surpassed by those of English or Irish birth. This large Italian group plus the Mexican foreign-born in this tract were employed in much the same fashion as their compatriots in Tract #22.

Tracts #20, #21, #25, #24, and #25 revealed the predominance of a foreign-born population having an Anglo-Saxon cultural background. Nearly fifty per cent of the foreign-born in these tracts were the product of English breeding. In these tracts foreign-born settlers possessed very similar cultural antecedents, especially language, common to the migrating Americans. There were small percentages of Germans, Italians, and Russians (mostly of Jewish culture) intermingled with the larger group of English, Irish, and Canadians, but these were not proportionally significant in any particular tract.
TABLE 7. National origins of selected groups of foreign-born by census tracts for the North Hollywood District, San Fernando Valley, Los Angeles, California, 1940. (a) (Percentages of the total foreign-born.)

<table>
<thead>
<tr>
<th>Census Tract</th>
<th>Canada</th>
<th>England</th>
<th>Germany</th>
<th>Italy</th>
<th>Mexico</th>
<th>Russia</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>19</td>
<td>12.4</td>
<td>17.5</td>
<td>10.0</td>
<td>15.1</td>
<td>8.0</td>
<td>.1</td>
<td>36.9</td>
</tr>
<tr>
<td>20</td>
<td>21.6</td>
<td>26.2</td>
<td>11.3</td>
<td>7.5</td>
<td>.1</td>
<td>5.1</td>
<td>28.2</td>
</tr>
<tr>
<td>21</td>
<td>24.2</td>
<td>22.6</td>
<td>10.0</td>
<td>7.0</td>
<td>1.9</td>
<td>5.0</td>
<td>29.5</td>
</tr>
<tr>
<td>22</td>
<td>15.2</td>
<td>11.7</td>
<td>7.5</td>
<td>9.1</td>
<td>30.4</td>
<td>3.8</td>
<td>22.7</td>
</tr>
<tr>
<td>23</td>
<td>25.7</td>
<td>21.1</td>
<td>9.1</td>
<td>2.2</td>
<td>.1</td>
<td>4.1</td>
<td>37.7</td>
</tr>
<tr>
<td>24</td>
<td>24.8</td>
<td>24.4</td>
<td>8.4</td>
<td>4.1</td>
<td>.1</td>
<td>3.2</td>
<td>35.0</td>
</tr>
<tr>
<td>25</td>
<td>22.1</td>
<td>25.6</td>
<td>11.5</td>
<td>4.4</td>
<td>2.4</td>
<td>3.6</td>
<td>30.4</td>
</tr>
</tbody>
</table>

(a) 18th. Census of the United States, op. cit. Table A-3, pp. 48-50.
(b) Mainly consisting of northwestern Europeans.

Lumping the northwestern Europeans (English, Irish, and Germans) with the Canadians and "Other" group accounted for approximately 90 per cent of the foreign-born in Tracts #20, #21, #23, #24, and #25.*

In Tract #19, this percentage dropped to 77 per cent due to the large Italian and Mexican groups; in Tract #22, to 80 per cent. Thus the assimilation of any sizable group of residents of heterogeneous national origins and cultures has not been a problem in North Hollywood.

* The actual percentage of foreign-born to total population for each census tract in North Hollywood in 1940 was very small. The percentages were as follows: Tract #19—9.5%; Tract #20—9.5%; Tract #21—7.5%; Tract #22—10.0%; Tract #23—9.0%; Tract #24—9.0%; Tract #25—10.0%.
notwithstanding the extremely rapid increase in population during the past few decades.


The educational level of the population in North Hollywood revealed a distribution closely in accord with other aspects of the overall demographic picture. The tracts making the poorest showing in regard to years of schooling were #19 and #22. (Table 8.) Both of these tracts had rather large populations of Mexicans, Japanese, and Italians—these nationals were absorbed into the agricultural-industrial labor force at an early age and were therefore deprived of the advantage of advanced schooling. Nearly one-half of the adult population in these two tracts had received less than an eighth grade education. Approximately two per cent of the adult population in these two tracts had received no schooling and were virtually illiterate.

Tracts #25, #24, and #25 revealed an area of decidedly superior educational attainment quite in keeping with other demographic characteristics prevailing in these sections. (Table 8.) Approximately 12 per cent of the population had received one year or more of college training and the median school year completed for these three tracts exceeded 12 years or high school.* This relatively high level of education was a reflection of the type of residents occupying these areas—middle class or wealthy, executive, professional, or retired. Such settlers were most likely recipients of more than an average

* The relatively high educational level attained by the North Hollywood population in 1940 is by no means an exceptional state of affairs. Los Angeles led every major city in the nation in the 1940 Census with respect to population having more than a high school education. Over 16 per cent of the population of Los Angeles had one or more years of college as compared to 9 per cent in Detroit and 6 per cent in Philadelphia.
amount of education during their youth and were provided with an opportunity for further education denied those in need of work and without economic advantages.

TABLE 8. Educational levels of population over twenty-four years of age by census tracts for the North Hollywood District, San Fernando Valley, Los Angeles, California, 1940. * (In percentages.)

<table>
<thead>
<tr>
<th>Schooling</th>
<th>Tract #19</th>
<th>Tract #20</th>
<th>Tract #21</th>
<th>Tract #22</th>
<th>Tract #25</th>
<th>Tract #24</th>
<th>Tract #25</th>
</tr>
</thead>
<tbody>
<tr>
<td>No school</td>
<td>1.5</td>
<td>.4</td>
<td>.5</td>
<td>2.1</td>
<td>.3</td>
<td>.3</td>
<td>.4</td>
</tr>
<tr>
<td>4th. Grade or less</td>
<td>5.9</td>
<td>1.9</td>
<td>1.4</td>
<td>6.3</td>
<td>1.2</td>
<td>.9</td>
<td>1.5</td>
</tr>
<tr>
<td>8th. Grade or less</td>
<td>45.0</td>
<td>28.4</td>
<td>28.2</td>
<td>42.3</td>
<td>25.5</td>
<td>22.8</td>
<td>23.0</td>
</tr>
<tr>
<td>Hi-School or less</td>
<td>63.5</td>
<td>57.5</td>
<td>57.6</td>
<td>67.4</td>
<td>56.5</td>
<td>55.2</td>
<td>54.6</td>
</tr>
<tr>
<td>1 Yr. Col. or more</td>
<td>5.0</td>
<td>11.0</td>
<td>10.0</td>
<td>5.2</td>
<td>11.4</td>
<td>12.5</td>
<td>12.9</td>
</tr>
<tr>
<td>Median Sch. Year</td>
<td>9.6</td>
<td>12.1</td>
<td>11.9</td>
<td>9.9</td>
<td>12.1</td>
<td>12.2</td>
<td>12.2</td>
</tr>
</tbody>
</table>

* 18th Census of the United States, op. cit., Table 1-5, pp. 48-50. Hanson and Beckett, op. cit. p. 95.

It is to be expected that the vast influx of settlers into Tract #19 will reveal a completely altered picture regarding educational attainment in the 1950 Census. The common field laborers have been forced to abandon the area and the few remaining railroad workers will be submerged in a throng of new settlers. Tract #19 will likely bear a close resemblance in educational attainment to that prevailing in Tract #20 or #22. It is very doubtful that Tract #22 will record a similar
improvement. The Mexican and Negro populations are expanding in this tract, the size of the tract is limited, and the availability of land attractive to "white" settlers is most restricted. It is entirely conceivable that Tracts #23, #24, and #25 will even exceed the high educational level established in 1940. The population that has engulfed North Hollywood during the past decade has had access to unparalleled educational opportunities—largess of a beneficient and paternalistic government. In addition, areas of superior settlement attract individuals possessing similar interest, abilities, and attainments to those already on the scene. In North Hollywood such tracts afford an opportunity for the establishment of new settlers, but only for a short period of time—there being little vacant land still available.

32. Summary: A Historico-Geographic Sequent.

Though approximately 70 per cent of North Hollywood consists of a flat, relatively featureless plain, the spread of settlement and growth of population has been conditioned by certain geographic and historical factors. North Hollywood was founded on the site of the original Lankershim Rancho, which settlement, in turn, attracted the cross-Valley route of the Southern Pacific Railroad. Development of the community along this right-of-way plus the availability of this trackage for passenger as well as freight transit attracted the Pacific Electric Railway. The shortest route from Hollywood led through Cahuenga Pass, thence due north along Vineland Avenue to the cross-Valley Southern Pacific trackage, and through North Hollywood to the west. (Map 4.) With the establishment of these two major transit lines in the pre-automotive age, settlement in North Hollywood logically tended to cluster along these routes in Tracts #22, #23, and #24.
Advent of the automotive age did not destroy the initial pattern of settlement, but it promoted a more decentralized type of occupancy than would have been possible otherwise. Lankershim Boulevard, the great diagonal traffic artery, became the commercial core of North Hollywood, especially the section passing through Tracts #21 and #25—the area of population concentration. Settlement spread out from this triangular core area by means of a north-south and east-west grid of subsidiary highways. By means of this same highway system, settlement fanned out from the Cahuenga Pass debouchment into Tracts #25 and #26.

Of still greater significance, these historical-geographic factors played a decisive role in determining the type of settler and occupancy found in North Hollywood. Tract #22, focal point of the transit lines, attracted Mexican and Italian railroad workers as well as industrial establishments. Tracts #19, #20, and #21 attracted Mexicans, Japanese, and Italians for work in the truck gardens, on the railroads, and in a few scattered industries. Sheer distance from the geographic heart of North Hollywood sufficed to promote this type of settlement in these tracts. Proximity to the center of town, development of a country club, creation of a small artificial lake where once there had been a swamp, drew a quite different type of settler to Tract #24. Ruggedness of terrain with spectacular view sites for residences plus geographic proximity to a vital pass route to the Hollywood urban center dominated the settlement and type of occupancy that developed in Tract #25. Both geography, in the sense of areal configuration, and history, in the sense of a time sequence, produced decidedly different types of settlers and occupancy in the southern and northern tracts, near the core area and at a distance, in one decade and another.
It is obvious that population growth and settlement, even on a featureless plain, may under no circumstances be regarded as a simple process. Such areas reveal very complex patterns of occupancy, which are conditioned by the operation of a whole series of intricate historico-geographic factors. It would be impossible to assign a simple, forthright explanation of population growth and consequent types of settlement in North Hollywood—an area appearing to all intents and purposes utterly bereft of any differentiating characteristics. Nevertheless, such historico-geographic factors have been present and have continued to play a silent, though pervasive and persuasive role in the tremendous events of the past decade—the rapid movement toward intensive urban settlement and a drastic alteration in the type of land use in nearly every section of North Hollywood.
CHAPTER VIII

FLOODS AND FLOOD CONTROL

Topography and climate have ever been conspiring agents responsible for devastating floods periodically occurring in the San Fernando Valley. At the point of convergence for all Valley drainage, North Hollywood has been particularly vulnerable and has suffered severe flood damage on several occasions. Without an elaborate and costly system of flood control projects, this rapidly expanding urban settlement will continue to be threatened with fearful loss of life and immense property damage. A repetition of past floods would partially sweep away or inundate several hundred blocks of urban settlement in North Hollywood. Mastery of this ever-present menace has been made imperative by the apparently uncontrollable urban growth occurring throughout the Valley.

38. Floods and the Physical Milieu.

Before considering the varied types of urban land use and their patterns of development in North Hollywood, it is advisable that the recurrent floods and the task of flood control be examined in relation to urban growth. Rapid and uncontrollable spread of urban settlement has aggravated the flood menace and has complicated the problem of flood control. The persistent flood menace aggravates the problems attending a rapid and uncontrolled spread of urban settlement, and this, in turn, has seriously complicated as well as increased the urgency of flood control.

The very nature of Valley floods and the consequent development of an elaborate flood control program is intricately tied in with all those aspects of the physical landscape which give a meaningful expression to the environment of this area—morphology, climate, and natural vegetation. (See Chapters I, II, and III.) In view of these basic physical inter-relationships and their direct bearing on the hydrology of the Valley, it is important that in the following discussion of floods and flood control the physical milieu be kept in mind.
It is a well-founded axiom of climatology that the smaller the amount of annual precipitation the greater the degree of variability in the amount likely to occur in any given year or group of years. Geographers and others have found this "law" of inestimable importance when conducting studies of sub-humid regions, e.g., the Great Plains. It becomes still more significant when employed in the investigation of semi-arid or arid regions. In these regions not only is precipitation extremely variable as to quantity from year to year, but the duration and intensity of a given storm is highly unpredictable.

The San Fernando Valley is marginal with respect to the sub-humid—semi-arid climatic boundary. (See Chapter II.) Thus it is subject to extremely variable amounts of annual precipitation as well as violent, unpredictable storms of cloudburst proportions and intensities. The nature of the rainfall plus the topography and natural vegetation found in the Valley have all conspired to create floods of varying magnitudes during the 180 years of recorded history and the thousands of years prior to human occupancy.

34. Brief History of Floods.

That many damaging floods have occurred in the San Fernando Valley in former years is beyond question, but unfortunately very little is known as to their magnitude or destructiveness. * Available trustworthy

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* It must be kept in mind that the above discussion of floods presents only one side of the story. Droughts, too, have been quite frequent in occurrence. The years of deficient moisture having the greatest significance occurred between 1870 and 1900, whereas floods have continued to be a serious menace. The significance of some of these droughts has been discussed in connection with a review of the historical development of settlement in the Valley. (See Chapters V and VI.)
evidence indicates that most of them were sufficiently severe to cause widespread damage, inconvenience, and, not infrequently, loss of life. Records of these early floods have been found in many old documents, court hearings, early publications, news letters, and verbal accounts of eyewitnesses.

Father Juan Crespi was the first European missionary-explorer to record a flood on the Los Angeles River. This was in January, 1770. There are fragmentary accounts of floods occurring in 1771-1772, 1775-1776, 1778-1780, and 1811. In 1815, a flood of sufficient magnitude occurred to alter completely the course of the Los Angeles River within the area of the present-day city. The river shifted its outlet from San Pedro Bay on the east to Santa Monica Bay on the west, sweeping across the whole width of the Los Angeles Plain—approximately twenty-five miles. (See Frontispiece or Map 2.) In 1822 there was another severe flood, which covered all the lowlands and attained greater heights than any previously known flood. The flood of 1825 resulted in the lower course of the Los Angeles River shifting back to the San Pedro outlet. Though there were floods in 1832, 1842, 1852, and 1860, no extensive accounts of these inundations are available.

The flood of 1862-1865 is generally considered by most competent authorities to have been the greatest ever to occur in this area. Almost the entire drainage basin and flood plain of the Los Angeles River was submerged. (51) The site of the present-day city was one vast lake. Following a minor flood five years later, there was a respite for twenty-two years.

In the flood of 1884, the southern part of the San Fernando Valley was inundated from Chatsworth on the west to Burbank on the east. (Map 7.) The Southern Pacific Railroad tracks were washed out
at several points in the Valley. During the next two years there were additional floods of minor intensity. These floods were followed in 1889 by one that destroyed vital railroad bridges and washed out large sections of track on the Southern Pacific and Santa Fe routes, which completely isolated the city from overland connections to the north and east. Two years later there was another minor flood.

In 1914 there was an extremely destructive flood. With an intensification of urban development and consequent increase in real property values, the menace of floods became far more serious. Construction of buildings and development of more compact settlement along the river and washes tended to increase the danger from floods.

The flood of 1916 was responsible for awakening the city and county to the need for an extensive flood control program. (52) Aside from a brief flash flood in La Cañada Valley in 1934, there was no major flood menace until 1938.

35. Flood of March, 1938.

The disastrous flood of March, 1938, paralyzed the whole San Fernando Valley and brought nearly all activity to a complete halt in Southern California. This flood is so typical and exerted such a profound influence on the course of subsequent urbanization in the Valley, especially in North Hollywood, that it merits more than passing mention. By far the most scientific and accurate study of this flood is contained in the so-called Trosnell report, which was compiled as a Water Supply Paper for the United States Geological Survey of the Department of the Interior. (53)

Between May 31, and December 8, 1937—a period of 191 days—the Los Angeles Weather Bureau reported a mere trace of rain. The
precipitation totals for December, 1957, and January, 1958, were near normal expectancy for those months, but the total for February was considerably above normal. By the end of February, flood control dams in the San Gabriel Mountains were approaching capacity and discharging excess water down the washes in order to maintain a slight storage reserve. (Map 7.) The ground everywhere was near complete saturation and conditions were ideal for rapid, excessive runoff should heavy, protracted rains occur.

Operation of a set of complex physical factors, completely beyond the control of man, resulted in the western San Gabriel Mountains being the center of the March, 1958, storm. A minor focus of rainfall intensity also occurred in the Santa Susana-Simi Hills area. (Map 7.) But it was the upper slopes of the western section of the San Gabriel Range that bore the brunt of this storm, and the tremendous runoff from these slopes accounted for the major flood which descended on the Valley.

Though rainfall intensities of greater magnitude had been recorded during previous storms (January, 1954), the twenty-four hour intensity of the March, 1958, storm shattered existing records over a far more extensive area. On March 2, 1958, a rainfall intensity of 4.8 inches per hour was recorded in the Verdugo Mountains. (Obviously such an intense rate of precipitation did not persist for any great length of time.) In the San Gabriel Mountains a few gauges, not washed away by the force of the deluge, recorded intensities of two inches per hour during several hours.

Between February 27, and March 3, 1958, it is estimated that 25 to 32 inches of rain poured down on the southern and western-facing slopes of the San Gabriel Range. (Map 7.) Precipitation increased
with elevation at the rate of approximately three inches per thousand feet. During this storm the mean areal precipitation for the San Gabriel Mountains (556 square miles) was 24 inches; for the Verdugo Mountains (26 square miles), 13 inches; for the San Fernando Valley (200 square miles), 11 inches. (54)

Exhaustive compilation of available data pertaining to the February-March storm as well as those occurring in previous years has revealed the fact that many prior storms resulted in greater precipitation and, in some instances, greater intensities than the one occurring in 1958. Yet, the 1958 storm caused tens of millions of dollars in property damage and the loss of a great many lives. The major responsibility for this apparent anomaly must be attributed, in large measure, to rapid urban development and an inadequate system of flood control with respect to this significant shift in the occupancy pattern. Such a state of affairs may be considered as a collective lack of responsibility—failure on the part of citizens to face the facts relating to the physical milieu and failure on the part of civic leaders adequately to present the facts.

Though several flood control dams were built in the San Gabriel Mountains after the 1916 flood, the youthful, V-shaped topography prevailing here resulted in narrow, high dams having a limited storage capacity relative to the cost of construction. (Map 7.) By the end of February, 1958, these dams were filled nearly to capacity and were discharging water temporarily impounded from previous rains. With the onslaught of the March storm and consequent heavy runoff from thoroughly saturated ground, there was no recourse other than throwing open all discharge gates as water threatened to spill over the dam crests.
Fig. 30. Los Angeles River at flood crest on March 2, 1938. Few people now living in the Valley have seen the Los Angeles River in full flood. This photo was taken east of Universal City and near the bend of the river around the Santa Monica Mountains. Note the width of the river and the extreme undercutting of the bank.

Fig. 31. Los Angeles River two days after the flood. The river has subsided, but a sheet of water still stands over an area stretching far beyond the normal channel. Note the undercutting of the bank as well as the sheer nature of the bank. Several small structures are about to fall into the river in the mid-ground of the photo. In the background are the Santa Monica Mountains. Photo taken looking east from Universal City.
Fig. 50

(Illustration filed with the original and first copy.)

Fig. 51

(Illustration filed with the original and first copy.)

Photos courtesy of U.S.F.D.
Water began to surge down Big Tujunga, Little Tujunga, and Pacoima washes. (Map 7.) On reaching the Valley floor, the pent-up water rapidly spread out through old distributaries and overwhelmed every obstacle to its southward movement. Minor cloudburst conditions prevailing in the Santa Susana-Simi Hills area in the western part of the Valley turned the upper course of the Los Angeles River into a seething torrent.

At Van Nuys Boulevard, three miles west of the junction of the West Branch of Tujunga Wash with the Los Angeles River, the discharge rate exceeded 11,000 cubic feet per second (80,000 gallons). At Universal City and Lankershim Boulevard, after the rampaging West and Middle Branches of Tujunga Wash had added their discharges, the Los Angeles River was flowing at a peak rate of 27,000 cubic feet per second (275,000 gallons).* (Fig. 50.) At the headwaters of Pacoima Wash, just below the dam, the discharge rate was 8500 cubic feet per second (60,000 gallons), and it was slightly higher at Tujunga Wash near the town of San Fernando. (Map 7.) When the rampaging waters of Pacoima and Tujunga washes joined forces slightly north of North Hollywood, the area between the West and Middle Branches of Tujunga Wash was subjected to a maximum flow approximating 17,000 cubic feet per second (125,000 gallons) during March 2, 1958.

North Hollywood was literally trapped between the West and Middle Branches of Tujunga Wash. (Map 7.) As the flood waters spun down these "dry" channels, tossing debris gouged away large sections

* By way of an interesting comparison, the total daily consumption of water in Los Angeles City in 1946 was 550 million gallons. On March 2, 1958, the Los Angeles River at Universal City would have supplied this quantity of water in approximately 15 minutes.
of the banks and houses toppled into the torrent. (Fig. 22.) Unscrupulous real estate promoters, who had purchased, cheap, non-agricultural land in or near these washes, were largely responsible for selling homes in such areas to unsuspecting newcomers or gullible long-time residents. Naturally, the newly arrived migrant and prospective settler was completely unaware of the vast destructive power of flash floods or cloudburst storms sweeping down these dry, sandy, harmless-appearing river channels. Not only were homes swept away near the banks of the West and Middle Branches of Tujunga Wash, but property, real and personal, simply vanished beneath the surging waters. In some instances, foundations were undermined or homes damaged by three to six feet of silt, water-logged, and subjected to rot. (Figs. 33-35.)

The slightest obstruction to the free flow of these flood waters resulted in the creation of a temporary debris dam. Rapidly flowing water would be backed up and a new route of flow sought as a means of circumventing the obstruction. A pipeline and steel cable across the Middle Branch of Tujunga Wash, in the northwest section of North Hollywood, diverted the flood waters from the channel. The flow moved southward, thereby inundating many blocks of residential property, before swinging back into the old channel. Every highway bridge across the Middle Branch, except the one at Chandler Boulevard, was swept away. An area between the Middle Branch of Tujunga Wash and the Los Angeles River was completely surrounded by flood waters, becoming to all intents and purposes an island. (Map 7.)

Below the junction of the West Branch of Tujunga Wash with the Los Angeles River, damage was severe. The pounding action of flood-borne debris undermined the reinforced concrete channel of the
Aerial View of the March, 1938, Flood along the Middle Branch of Tujunga Wash

By the afternoon of March 2, 1938, flood waters were racing down the Middle Branch of Tujunga Wash and through the heart of North Hollywood. This view clearly shows the severity of the bank cutting along the wash. The flow of water is toward the top of the photograph or southward toward the Los Angeles River. The lefthand section of the photo depicts North Hollywood Park. Many fine homes along Westpark Drive were threatened by the rampaging flood waters. Note the houses about to tumble into the wash just above Magnolia Boulevard. The fact that this wash and its twin to the west could not be confined to the "normal" banks resulted in heavy property damage in North Hollywood. Nevertheless, residents of this area should not have been permitted to build homes on the edge of these banks—certainly not along natural stream courses in a semi-arid climate such as prevails in North Hollywood.
(Illustration filed with the original and first copy.)
river and ripped out all revetment. (Fig. 36.) Surging water tore gaping holes in the channel and widened many sections of the river. Highway bridges extending across the river from Ventura Boulevard either were undermined beyond use or else ripped away, except for one at Laurel Canyon Boulevard. (Figs. 37-38.) Dwellings close to the river banks were seriously undermined, and in some places considerable silt damage occurred. East of Lankershim Boulevard, the combined runoff of the whole San Fernando Valley watershed moved down the Los Angeles River. Sections of Toluca Lake Estates, Lakeside Country Club, and Universal City, all of which abut on the river, were washed away. (Plate I.)

Though several sections of North Hollywood managed to escape serious flood damage, especially east of the Middle Branch of Tujunga Wash, property damage in this community alone exceeded one million dollars. (Map 7.) The community remained virtually paralyzed for several weeks and its growth was seriously retarded for some years. Little accurate information has ever been made available regarding loss of life directly attributable to this holocaust. There can be little doubt, though, that some residents of North Hollywood lost their lives in this catastrophe. Still others died from shock and exposure incident to the flood and prolong period of rehabilitation. Though widespread damage occurred throughout the Valley, the hardest hit, by far, was North Hollywood—the most densely settled section and focal point of a converging drainage system seeking a narrowly restricted outlet. (Map 7.)

36. Flood Control Developments.

Following the disastrous flood of 1916, the Los Angeles Flood
Fig. 35. Personal property damage in North Hollywood due to the flood. These automobiles floated down one of the many temporary channels formed by the West Branch of Tujunga Wash. Note the piles of mud and silt around the homes in the background. Photo taken in the vicinity of Oxnard Street and Laurel Canyon Boulevard near the present-day site of Victory-Vanowen Park.

Fig. 34. A residential street converted to a river channel. The Middle Branch of Tujunga Wash broke out of its channel in the vicinity of North Hollywood Park and traveled down the old channels plus any other available routes. This residential street became one of the temporary distributaries. Photo taken looking north from Riverside Drive near Tujunga Avenue.
Plat® 15

Fig. 55

(Illustration filed with the original and first copy.)

Fig. 54

(Illustration filed with the original and first copy.)

Photos courtesy of U.S.E.D.
Fig. 55. Flood damage along the Middle Branch of Tujunga Wash. The front sections of lots along the wash were swept away by the flood waters. The house on the right barely retained its front portico. It is interesting to note that the house on the left is in the process of construction. The new residents have a house, but no lot. Note, also, the steep banks and debris still sluggishly floating in the channel. Within a matter of 44 hours, the flood waters have subsided to a very great extent.

Fig. 56. Flood control protection on the Los Angeles River. Portions of the Los Angeles River channel in the Valley were surfaced with "gunite"—a layer of wire mesh coated over with cement applied by air gun. These surfaced banks were intended to speed the flow of flood waters down the channel without excessive undercutting of the banks. Unfortunately, the flood waters gouged beneath these surfaced banks and warped them out of position. In addition, debris floating down the river pounded to pieces these flimsy walls. Photo taken looking eastward and downstream from Whitsett Avenue.
Control District was created for the purpose of constructing an integrated, county-wide system of flood control. Intermittent streams, formerly free to meander over debris cones covering extensive areas of the upper slopes of the Valley, were constricted to narrowly defined channels. This policy was, in large measure, dictated by the ever-encroaching, land-hungry real estate promoters as well as by the cost of purchasing improved residential land elsewhere. As a consequence, much of the flood run-off from the surrounding mountains formerly absorbed by these porous debris cones—now many hundred of feet thick with the accumulation of flood deposits during thousands of years, began to move rapidly through concrete storm drains by-passing the absorptive cones and Valley floor. Under such conditions these artificial channels have often been taxed beyond capacity by the concentrated flows resulting from floods.

In addition to the problems presented by these flood control channels, the increasing density of population, directly attributable to urbanization, has resulted in comparatively large areas of the Valley being utilized for paved highways, sidewalks, garages, homes, and other forms of impervious surface covering. It is estimated by flood engineers that a single dwelling unit on an average size lot reduces the moisture absorption capacity of the land by roughly 25 per cent; street paving increases this figure to 35 per cent. Multiple dwellings result in 55 per cent imperviousness; and some industrial or commercial uses may easily boost this figure to 90 per cent. (55) Thus the destructive-ness of flooding in this area has increased regardless of the nature of the storms.

The magnitude of the March, 1938, flood aroused the residents of Southern California to renewed action respecting flood control measures.
Fig. 55

(Illustration filed with the original and first copy.)

Fig. 56

(Illustration filed with the original and first copy.)

Photos courtesy of U.S.E.D.
The citizens of San Fernando Valley were not the only victims of this disaster, but they were a vociferous minority demanding an adequate system of flood control on the upper course of the Los Angeles River. Further urban development of North Hollywood could not take place safely without first curbing this flood menace.

It was obvious that an adequate and integrated system of flood control for Southern California was beyond the scope of local authorities, who were subject to a maze of conflicting jurisdictions and petty jealousies. It was also beyond the financial resources of Los Angeles City or County. The Corps of Engineers of the United States Army was placed in charge of the project and a vast engineering-administrative organization created for the purpose of planning and constructing a flood control system.

The Los Angeles County Flood Control District and other local authorities turned over their projects to this new organization. Though these local authorities have assisted the Corps of Engineers in the construction of a vast flood control system, the United States government is paying the major share of the costs.* Some conception of the cost of this project in the San Fernando Valley alone may be gleaned from the accompanying table. (Table 9.)

The salient aspects of this flood control project, as applicable to the San Fernando Valley, have been incorporated in the flood control

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* It is interesting to note that urbanization of North Hollywood, the San Fernando Valley, and other parts of Los Angeles is being made feasible by the expenditure of vast sums of money derived from all the taxpayers of the nation. This project may easily total 500 million dollars before its completion. To what extent does the urbanization of one area in the United States justify the expenditure of such a large sum of the general tax funds?
Fig. 57. Vital transportation arteries cut by the flood. Vineland Avenue, on the left, and the Pacific Electric Railway bridge, on the right, were washed out by the force of the flood sweeping down the Middle Branch of Tujunga Wash. This wash passes through the heart of North Hollywood and joins the Los Angeles River about five blocks to left of this photo. Debris piling up around these two bridges resulted in the gouging of the banks and undermining of the highway and railroad trestle. Photo looking south toward Ventura Boulevard and the Santa Monica Mountains.

Fig. 58. Los Angeles River undermining of Ventura Boulevard. The river cut into the banks near the Boulevard to such an extent that only one automobile at a time could traverse this section of the highway. Note the fact that this major east-west route is restricted by the Santa Monica Mountains as well as the Los Angeles River bed. Photo looking east from Colfax Avenue.
Fig. 57

(Illustration filed with the original and first copy.)

Fig. 58

(Illustration filed with the original and first copy.)
TABLE 9. Estimated expenditures for flood control projects in the San Fernando Valley.*

<table>
<thead>
<tr>
<th>Los Angeles River Basin</th>
<th>Federal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hansen Dam &amp; Flood Control Basin</td>
<td>$11,258,094</td>
<td>$11,258,094</td>
</tr>
<tr>
<td>Sepulveda Dam &amp; Flood Control Basin</td>
<td>6,621,094</td>
<td>6,621,094</td>
</tr>
<tr>
<td>Los Angeles Channel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owensmouth Ave. to Lenkarschim Blvd.</td>
<td>18,791,000</td>
<td>20,764,000</td>
</tr>
<tr>
<td>Lenkarschim Blvd. to Niagara St.</td>
<td>2,896,130</td>
<td>2,896,130</td>
</tr>
<tr>
<td>Lopez Dam &amp; Debris Basin</td>
<td>1,480,000</td>
<td>1,480,000</td>
</tr>
<tr>
<td>Lopez Canyon Diversion</td>
<td>705,000</td>
<td>705,000</td>
</tr>
<tr>
<td>Pacoima Wash Channel</td>
<td>10,025,000</td>
<td>11,075,000</td>
</tr>
<tr>
<td>Burbank-Western Channel</td>
<td>6,055,000</td>
<td>6,055,000</td>
</tr>
<tr>
<td></td>
<td>$57,619,318</td>
<td>$81,451,018**</td>
</tr>
</tbody>
</table>

*Adapted from the U. S. Corps of Engineers, Report upon the Improvement of Rivers and Harbors in the Los Angeles, California District—1949 (Washington, D.C.: 1949.).

**Revised estimate in 1949 places the total cost of contracted and proposed flood control projects in the San Fernando Valley at $72,500,000.

(map. (Map 7.) The first projects, which were completed in 1941, involved the construction of Hansen and Sepulveda flood control dams. The 150 square mile drainage area of the Big and Little Tujunga Rivers has been made tributary to Hansen Flood Control Basin. By the construction of a 9000 foot long, earth-filled dam, nearly 100 feet high, a vast storage area has been created in the northeast section of the Valley.
An area of approximately 1100 acres behind this dam has been acquired by the Federal government for temporary storage of any potentially dangerous flood waters released by the Tujunga dams in the San Gabriel Mountains.

Approximately six miles west of the junction of Lankershim and Ventura Boulevards, the United States Corps of Engineers has constructed the Sepulveda Flood Control Basin. This basin was formed by building a 16,000 foot long, earth-filled dam, 60 feet above the Los Angeles River bed, which has a capacity of 16,000 acre feet. An area varying in size from 1100 to 2200 acres behind this dam has been set aside for potential temporary storage of flood waters. (It is interesting to note that if this storage area should ever be utilized to capacity, the town of Encino would be virtually submerged!)

Several debris basins are planned for many canyon outlets throughout the Valley. On the Pacoima River, just below the present dam, the Lopez Debris Basin will be constructed in connection with the Corps of Engineers' project. Many other check dams and debris basins must await local appropriations and, therefore, may never be constructed.

To improve the operating efficiency of these flood control dams, an extensive system of concrete-lined channels is being constructed in the Valley. (Map 7.) The Los Angeles River channel is being straightened and lined with concrete from one end of the Valley to the other. (Figs. 39-42.) This channel, varying in width and design, will continue down to the ocean at San Pedro Bay. The West Branch of Tujunga Wash is being improved and channeled from the Los Angeles River confluence northeastward to Hansen Dam. (Figs. 43-46.) Another channel will be constructed from Lopez Debris Basin, on the Pacoima Wash, connecting with the Tujunga Channel north of North Hollywood. The run-off from
Fig. 59. Los Angeles River flood control channel at Lankershim Boulevard. The concrete channel at this point is 150 x 18 feet. This view taken looking to the east. The eastern section of the Santa Monica Mountains in the background. On the right, Universal Studio. On the left, the Toluca Estates and Lakeside Country Club. Compare with Fig. 96.

Fig. 40. Los Angeles River flood control channel at Lankershim Boulevard. This view is similar to the one above, except that it looks westward. In the far distance is the Vineland Avenue bridge and Pacific Electric trestle washed out in the flood of 1938. (See Fig. 37.) The small inner channel is roughly five feet wide and one foot deep with a flow of approximately six inches. This inner channel controls the drainage flow into the river bed during most of the year. Maximum flood flow would occur at this point and eastward.

Fig. 41. Los Angeles River flood control channel looking east from Colfax Avenue. Note the curving nature of the channel and the wide sweep of the course. The channel has been constructed in a manner permitting rapid movement of great quantities of water. Colfax Avenue is just east of the junction of the West Branch of the Tujunga Wash channel with the Los Angeles River channel.

Fig. 42. Temporary end of the Los Angeles River flood control channel. The contract for work on the channel west of Whitsett Avenue was not being executed at the time of photography. Beyond the channel is the Los Angeles River ends all flood control protection. Note the steep-sided banks and narrow stream bed. There has been a period of five years of sub-normal precipitation and low runoff.
the south and western slopes of the Verdugo Mountains will also be collected before any damage can occur in the North Hollywood-Burbank area. No channel project is contemplated for the Middle Branch of Tujunga Wash, which passes through the heart of North Hollywood, as the improved channel to the west has been designed to carry off all flood waters.*

37. **Significance of Flood Control.**

This flood control system is the outgrowth of careful study of climatic records for the region. It is based upon the maximum cloudburst and wet season conditions known to have occurred within a given fifty year period. It might be assumed that the flood control system, now under construction in the San Fernando Valley, is more than adequate to cope with all foreseeable flood menace regardless of the degree of future urbanization. Yet, first-hand knowledge of floods in the past and the highly unpredictable nature of run-off cautions one to be most circumspect in making such assumptions. Urbanization in the Valley has been promoted on the basis of no more major flood catastrophes or widespread property damage in future years. Such a blanket assurance may not hold up in the years to come; it might not even be a valid assumption regarding next year or the next five years.

The Corps of Engineers freely concede the possibility of a flood exceeding the limits of this newly created system, especially

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* Abandoned channels, such as the one in North Hollywood, will eventually be converted into parkland. Vast areas behind Hansen and Sepulveda dams have been leased to the City of Los Angeles for recreational purposes, but with the proviso that such areas may be flooded by the Federal government whenever it is necessary for the protection of the Valley.
Fig. 42. Flood control channel on the West Branch of Tujunga Wash. Construction of this channel has reached Magnolia Boulevard. The highway bridge in the background is Magnolia Boulevard. This channel is 70 feet wide and 18 feet deep. Photo taken looking south towards the Los Angeles River.

Fig. 44. Construction of the West Branch of the Tujunga Wash flood control channel. To secure a firm foundation for the concrete channel, the wash is being deepened and widened. Some conception of this task may be derived from the size of the automobiles and workers in the foreground. Photo taken looking north from Victory Boulevard.

Fig. 45. Bridging the West Branch of Tujunga Wash. One of the great expenses connected with the construction of these flood control channels involves the building of a great many highway bridges. At Chandler Boulevard a double bridge is required: one for the highway in the foreground and another for the Pacific Electric streetcar in the background. Photo taken looking north from the Chandler Boulevard detour.

Fig. 46. Vital junction of the flood control system in the Valley. At this point, the channels of the West Branch of Tujunga Wash and the Los Angeles River converge. Both channels are 70 feet wide and 18 feet deep above this point and 120 feet wide and 18 feet deep below it. Note the automobile traveling along the channel floor. On the right, Republic Motion Picture Studio. In the background, the Santa Monica Mountains. Photo taken looking eastward, down channel.
after a series of wet years. To construct a flood control system capable of meeting any and all conceivable contingencies would be prohibitive in cost and require vast areas for dams, reservoirs, channels, etc. The more land removed from the Valley acreage available for settlement, the less available for urban speculation.

Obviously, floods and the development of a system of flood control have been major problems in the Valley for many decades, especially in the North Hollywood area. Some solution, if only a tentative one from the long-range point-of-view, was imperative in order to permit continuation of urban development in this community. The North Hollywood of March, 1938, and the one of March, 1949, differ so greatly that mere words hardly suffice to convey the extent of these changes. (Plates I and II; Chapters IX and X.) If the vast surge of urban expansion, now running its course during a period of prolonged drought, had occurred without any provision for flood control, the probable fate of such intensified urban development would be fearful to contemplate. Only a very small percentage of the present residents of the Valley, especially those in North Hollywood, were living here in 1938. New settlers from more humid climes have not experienced, as yet, the awesome spectacle of water on the move in a semi-arid land. Flood control development has been as vital to Valley urban growth as water supply was to Valley urban-suburban growth in earlier decades. (See Chapter VI.)
Concomitant with the tremendous population growth in North Hollywood and the San Fernando Valley has been the rapid expansion of residential construction. Over 50 percent of the total area of North Hollywood already has been converted to residential occupancy—mainly of a single dwelling unit type. A study of the 1940 census tract data for North Hollywood relative to various housing characteristics, such as owner-tenant occupancy, age of dwelling unit, type of residence, exterior finish, and sub-standard facilities, revealed the salient socio-geographic aspects of this important attribute of the community. On the basis of these sociological data plus the information afforded by two land use maps of North Hollywood, indicative of pre-and post-World War II developments, the residential aspects of occupancy were investigated from a geographic point of view.

28. Land Use: General Characteristics.

In this chapter and the succeeding one, development of the land use patterns of North Hollywood will be investigated and correlated with the somewhat more generalized data relative to land use development in the San Fernando Valley as a whole. Unquestionably the predominant type of land use in North Hollywood is residential—a type of land use now spreading throughout the Valley. Within the past decade and a half in North Hollywood, residential occupancy has largely supplanted agricultural and horticultural forms of land use. This may be readily and easily comprehended by means of a careful comparison and appraisal of the land use patterns revealed by Plates I and II. The most significant factors relative to this rapid shift in land use from agriculture to urban residential settlement will be discussed in this chapter.

In Chapter X the investigation will be concerned with the changing patterns of land use relating to commercial, industrial, and
civic developments in North Hollywood and, in less detail, the Valley. The "shoestring" development of commercial enterprises of a service type is directly related to the urbanized residential pattern of land use typical of this region. Lack of a healthy industrial development and restriction of such land use to a few scattered localities, also, may be regarded as a result of the predominance of an urbanized residential pattern of land use. Civic types of land use, too, must be considered as a direct response to urgent demands made on the municipal government by an urbanized society accustomed to a great variety of public services.

The well-nigh overwhelming rapidity of these changes in the land use patterns in North Hollywood and the Valley has seriously aggravated the problem of providing an adequate, comprehensive land use plan. To gain a perspective regarding land use planning in these areas, it will be necessary to give some attention to the land use plan recently adopted by the City of Los Angeles as well as land use development in the Valley antedating this zoning ordinance.


In 1945 a new and comprehensive zoning ordinance was adopted by the City of Los Angeles. Prior to the approval of this ordinance, there were no zoning regulations pertaining to the San Fernando Valley, except in the North Hollywood-Van Nuys area. It was most fortunate that these areas were at least partially covered by such regulations during 1930-1945, but even more fortunate was the zoning of the remainder of the Valley on the eve of the vast post-war population migration into this area. (56)

The zoning plan for the Valley has obviously provided for an intensive urban settlement of the southeastern section—the Van Nuys—
North Hollywood area. (Map 8.) Even in 1945, this section of the Valley had advanced so far toward urban occupancy that little land was available for either two-acre rural or suburban types of settlement. Scattered throughout the remainder of the Valley there were small urban nuclei—Woodland Hills, Reseda, Canoga Park, Northridge, Pacoima, etc. Areas immediately adjacent to these urban cores have been set aside for suburban or two-acre rural agricultural occupancy. The peripheral white areas, which have been zoned for five-acre agricultural use, are actually mountainous for the most part and limited in value for such purposes. The white areas within the Valley either denote flood control and water supply reservoirs or independent municipal enclaves. (Map 8.) In reality the Valley has virtually been zoned as one vast urban area, if for no other reason than the fact that suburban and two acre agricultural land may be readily re-zoned for urban occupancy. Thus the whole Valley is likely to witness the steady westward encroachment of the North Hollywood type of settlement—each small community eventually coalescing with the urban area now dominant in the southeastern sector. The rapidity with which the type of occupancy in North Hollywood has shifted from rural to urban is merely indicative of the ease with which this change may be accomplished elsewhere in the Valley, especially in view of the tremendous migration now underway.

40. Land Use in the Valley: 1944.

San Fernando Valley was characterized by a predominantly agricultural land use in 1944. (Map 9.) The western half of the Valley was still the stronghold of farming with an occasional small urban community—the irregularly shaped white areas. Scattered throughout this farming zone were extensive orchards—citrus and olive
in the north and walnut in the west and south. The large expanse of land devoted to general farming, stretching from Encino on the east to Canoga Park on the west, was largely utilized for production of alfalfa and many irrigable grains. Livestock raising was extremely restricted and generally involved breeding of saddle and race horses, or goats. Viticulture had largely disappeared from the Valley by this late date.

Except for the distinctly discernable flood control and water storage reservoirs and the mountainous peripheral areas, the remainder of the Valley (white areas) was devoted to non-agricultural, urbanized land use. (Map 9.) The significance of this type of land use in the North Hollywood area was clearly evident by 1944. All agricultural production had been eliminated from the heart of the community. (See Chapter VI.) Agriculture, mainly the truck garden variety, was confined to an area north of the Southern Pacific Railroad route passing through the center of town. Even this minuscule agricultural area was restricted to the eastern, extreme northern, and western sections. Areas devoted to tree crops were, for the most part, non-productive at this date. In fact much agricultural land was merely so designated by virtue of classification, while in reality it stood idle or was used only occasionally. Urban land use had already gained a firm grip on North Hollywood. Subsequent population movement into the area simply accentuated the urban land use occupancy by removing the remaining vestiges of a former agricultural period of settlement.

41. Land Subdivisions in the Valley: 1890-1944.

Subdividing land generally denotes a more intensive type of land use and such was the case in San Fernando Valley, both prior and subsequent to 1920. The historical process of subdividing in this
SAN FERNANDO VALLEY
CITY OF LOS ANGELES
area has been a fundamental aspect of the evolution toward an urban land use. By differentiating subdivision activity into a pre- and post-1920 period, the significance of this historical development and the rapid acceleration of the process during the past few decades may be clearly grasped from the accompanying land subdivision map. (Map 10.)

The solid black areas of this map represent small community settlements established prior to 1920. (Map 10.) By this date, there were only seven such areas in the Valley—North Hollywood, Van Nuys, Reseda, Canoga Park, Northridge, Pacoima, and Sunland-Tujunga. Of particular significance was the location of the North Hollywood subdivision in this early period. Reflecting the historical development of the community, subdivided land stretched along the Southern Pacific tracks and extended slightly north-south of this vital transit artery. (See Chapter VI.) North Hollywood, like all other embryonic communities of this period, was a small, distinct nucleus of settlement with very little subdivided land.

Between 1920 and 1944, the land subdivision aspect of the Valley underwent a radical change—a change still in progress. In the western half of the Valley subdividing has been fragmentary and usually closely associated with the pre-1920 nuclei of settlement. (Map 10.) Agriculture has long held command of land use in this section and subdividing for townlot dwellings has been somewhat limited under such conditions. (Map 10.) The one notable development of residential occupancy in this section has been the Woodland Hills settlement in the distant southwest. In the southeast subdivisions have grown by leaps and bounds. By the close of this twenty-four year period, North Hollywood had assumed the size and characteristics associated with the contemporary community. Here subdividing occurred
SAN FERNANDO VALLEY
CITY OF LOS ANGELES
in every direction from the 1920 core area, although differing considerably in time, extent, and direction. (See Chapter VI.) Thus the 1920-1944 subdivision pattern that developed in North Hollywood may very well constitute a preview of future events in other community centers of the Valley—Van Nuys and Encino apparently are destined to follow suit immediately.

42. Land Ownership in the Valley: 1944.

Nearly all the subdivided land in San Fernando Valley in 1944 consisted of parcels of less than 20,000 square feet—slightly smaller than one-half acre. (Map 11.) Obviously such tiny holdings could not be utilized profitably for farming or a rural type occupancy. In most instances these parcels did not approach the maximum of 20,000 square feet or approximately four average size dwelling lots. Hence these areas generally denoted a town-lot holding and an urban type of occupancy.

The concentration of these relatively small parcels of land in the North Hollywood area was to be expected. (Map 11.) With a vast influx of settlers seeking homes, the residential town-lot became the accepted standard unit of property. In contrast to an earlier era, land was no longer purchased in blocks of two to ten or twenty-five to one hundred acres in North Hollywood. (See Chapter VI.) In most instances unearned increment had rendered the cost of such acreage prohibitive for the average settler and those able to afford such expenditures for home sites went elsewhere in the Valley—areas more rustic in atmosphere and offering greater privacy. Thus North Hollywood was largely subdivided into town-lot size holdings within a twenty-four year period. Actually the process of subdividing this rural-suburban community into
one consisting of urban town-lots did not require two and a half decades——
it was accomplished at an ever-accelerating pace between 1938 and the
present.


This period of approximately a decade marked a virtual
revolution in land use in North Hollywood. (Plates I and II.)* Vacant

* Plates I and II are the most significant maps pertaining to
the land use phases of this study, and thus merit some comment with
respect to their construction, source of data, and purpose.

The Land Use Map for 1938 is based upon very detailed (one
inch to 250 feet) cadastral maps prepared from reports of the Real
Property Survey of Los Angeles. (Plate I.) This Survey was conducted
by the Works Progress Administration during the period, 1938-1939.
The North Hollywood section of the city was one of the last to be con-
vassed. It was necessary to generalize and adapt data from these
extremely detailed Survey maps (more than 150 distinct land use items)
in order to construct Plate I in a manner permitting comparative
analysis of broad categories of land use. These data were plotted on
a pre-war, revised and corrected base map obtained from the Los Angeles
City Engineer’s Office.

The Land Use Map for 1949 is based upon the author’s personal
field survey of North Hollywood, which was conducted during June and
July, 1949. (Plate II.) This survey entailed a block by block canvass
of North Hollywood on foot, rather than the usual haphazard and cursory
investigation of land use from a speeding automobile. (Not infrequently
the failure of many urban land use studies stems from a superficial
knowledge of an area, which is derived from the study of maps prepared
by others for decidedly different purposes, or from a hasty, slipshod
survey by the researcher.) These data were then generalized and plotted
on a thoroughly revised and corrected post-war base map (one inch to
1000 feet) obtained from the above mentioned source.

In order to present effectively the salient aspects of land
use in North Hollywood, the following categories were established for
purposes of mapping:

**Single Dwelling Unit**—Any structure occupying a lot by
itself and utilized as a place of residence by one or more persons.

**Multiple Dwelling Unit**—Any structure or structures occupying
one or more lots and utilized as a place of residence by several indi-
viduals, each of whom maintains a separate household. (This category
was determined in the field solely by the physical appearance of a
structure and in no instance was the Census Bureau’s classification of
a “household” utilized.)
areas and agricultural land, especially dead orchards and truck gardens, were rapidly converted to residential land use—acres upon acres of single dwelling units. During this very short span of time residential

Ranchito—Any single dwelling unit occupying an oversize lot (one-half acre to ten acres) and characterized by the usual accoutrements of an estate.

Commercial—Any establishment maintaining a supply of goods or offering a service to the general public in return for a specified remuneration.

Industrial—Any establishment processing raw materials or semi-finished items into finished products suitable for use in further manufacturing or consumption by the ultimate consumer.

Agriculture—Any land that is utilized during some period of the year for the production of crops, either for human or animal consumption.

Park—Any area, public or private, affording recreation or relaxation in more or less natural surroundings.

Orchard—Any land that is utilized for the growing of fruit or nut crops, whether in active production or merely standing idle.

Rash—Any area covered with dry, sandy, sterile river bottom typical of semi-arid lands.

Vacant—Any land standing idle and devoid of evidence of former use.

Thus within the limits of a cartographic presentation, which necessitated a 50 per cent reduction in size from the originals, these two maps constitute a valid, generalized representation of the overall patterns of land use in North Hollywood for 1939 and 1949. Such maps are intended merely to depict the major aspects of land use, denote the general distributional patterns of such usages, and portray in a comparative manner those significant alterations of land use induced by the processes of urbanization occurring during the past decade. Under no circumstances are these maps to be regarded as accurate lot by lot cadastral surveys of North Hollywood.

In order to orient the reader with regard to the census tracts found in North Hollywood, a semi-transparent overlay map has been included. Plate III (Census Tract Key for North Hollywood) may be utilized most advantageously when super-imposed upon Plate II.
land use increased from approximately 20 per cent to nearly 55 per cent of the total area. (Table 10.) Agriculturally productive land, including areas devoted to tree crops, declined by roughly 12 per cent. The


<table>
<thead>
<tr>
<th>Land-use</th>
<th>1957 - 1958 (a)</th>
<th>1948 - 1949 (b)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Acres</td>
<td>Per cent</td>
</tr>
<tr>
<td>Residence</td>
<td>2,444</td>
<td>19.0</td>
</tr>
<tr>
<td>Commerce</td>
<td>123</td>
<td>1.0</td>
</tr>
<tr>
<td>Industry</td>
<td>216</td>
<td>1.5</td>
</tr>
<tr>
<td>Tree Crops</td>
<td>457</td>
<td>3.5</td>
</tr>
<tr>
<td>Other Agric.</td>
<td>1,585</td>
<td>12.0</td>
</tr>
<tr>
<td>Recreation</td>
<td>141</td>
<td>1.0</td>
</tr>
<tr>
<td>Schools &amp; Inst.</td>
<td>53</td>
<td>.5</td>
</tr>
<tr>
<td>Vacant lots</td>
<td>1,921</td>
<td>15.0</td>
</tr>
<tr>
<td>Hill Land</td>
<td>3,696</td>
<td>28.0</td>
</tr>
<tr>
<td>Wasteland</td>
<td>505</td>
<td>4.0</td>
</tr>
<tr>
<td>Streets, etc.</td>
<td>1,821</td>
<td>14.5</td>
</tr>
<tr>
<td>Total</td>
<td>12,912</td>
<td>100.0</td>
</tr>
</tbody>
</table>

(a) Real Property Survey of Los Angeles, Regional Planning Commission, Los Angeles County. Unpublished data.

(b) Compiled by the author from preliminary unpublished tabulations of a land use survey of the San Fernando Valley being conducted by the Los Angeles City Dept. of Water and Power, Hydrographic Division, and the U. S. Dept. of Agriculture,
percentage of vacant lots also declined by nearly 12 per cent—even
in 1938 orchard land was mostly non-productive. By 1949 only one poor
specimen of a commercial orchard remained in North Hollywood as a
reminder of past glories of the "Home of the Peach". With large-
scale subdividing of land after World War II, several mass production
housing corporations uprooted these worthless, disease-infested,
rotting orchards by the score. At the same time valuable truck lands
were removed from agricultural production by this insatiable demand
for residential town lots.* Obviously the magnitude of residential
occupance and the overwhelming predominance of this type of land use
in North Hollywood merits a detailed investigation. (Plate II.)

44. Owner and Tenant Occupancy in North Hollywood 1940.

Geography plays a part in owner-tenant occupancy of dwelling
units in North Hollywood as well as throughout the Valley and Los Angeles.
An abundance of land has always been an outstanding attribute of the
physical make-up of Los Angeles—the metropolitan city having the lowest
density of occupancy and the largest area of any in the world. Conse-

* Under provisions of the original zoning ordinance, as
applied to North Hollywood in 1931, nearly all the vacant or agri-
cultural land was zoned for R1 or single dwelling residential use.
In anticipation of a vast increase in population during the subsequent
decades, more than adequate provision was made for residential land
use. In addition to the vast acreages set aside for R1 residential
use, there was a considerable expansion of R2, S, and 4 multiple
dwelling categories. In view of subsequent events, these zoning
provisions appear to indicate unusual foresight and planning, but, on
the other hand, it might have been far wiser on the part of zoning
officials to have placed such land in an unclassified category, or
in such classification as "industry". When the comprehensive zoning
law was put into effect in 1945, all of North Hollywood should have
been re-zoned, at least as far as it was feasible to do so, instead
of remaining subject to the more or less antiquated provisions of an
outmoded conception of urban zoning.
quently, emphasis has been placed upon single unit detached housing on an individual town-lot. Such type of occupancy is not conducive to tenancy as the income to be derived from a small residence on an average size lot would hardly justify the investment. Thus spaciousness and low density of residential occupancy do not favor the landlord-tenant economy, but rather home ownership.

In North Hollywood, which developed as part rural and part suburban settlement, this general trend toward owner-occupancy of residential property was well-developed in 1940.* (Table II.) Every census tract in this community, except #22, revealed more than 50 percent of all dwellings as occupied by the owner. In Tract #22, the relatively large percentage of tenants reflected a population of non-owning Mexicans, who were unable to purchase homes—even the ramshackle hovels available to them. In addition, this tract, being a part of the geographic heart of North Hollywood, tended to emphasize multiple dwelling units and tenant occupancy. In many instances these income properties were owned by the Southern Pacific Railroad or the Roman Catholic Church.

* The housing data compiled in connection with the 1940 Census has been mapped on a block by block basis for each census tract in Los Angeles. This publication of the Census Bureau, which appears to have been sadly neglected by students of urban geography and sociology, is titled, Housing Analytical Maps by Block Statistics, Los Angeles, Calif. (Washington, D. C.: U. S. Census Bureau, U. S. Dept. of Commerce and New York City WPA War Services). The atlas consists of a series of analytical maps of housing data—owner-tenant, age of dwelling, year built, mortgage status, average rent, exterior finish, sub-standard facilities, etc. An atlas of this type has been prepared for each of the major cities in the United States. The one for Los Angeles proved to be an invaluable aid in visualising the block statistical data for North Hollywood. Unfortunately, the publication of these atlases has been limited due to the cost of reproduction by the cheapest of methods. Copies are available for consultation at the Census Bureau and Congressional Library in Washington, D. C. As a rule, the public library of each city has a copy of the atlas covering its area.
TABLE XI. Owner and tenant occupancy of dwelling units by census tracts for the North Hollywood District, San Fernando Valley, Los Angeles, California, 1940.*

<table>
<thead>
<tr>
<th>Census Tract</th>
<th>Total Dwelling Units</th>
<th>Owner-Occupied Number Percent</th>
<th>Tenant-Occupied Number Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>792</td>
<td>494 (63.2)</td>
<td>287 (35.8)</td>
</tr>
<tr>
<td>20</td>
<td>630</td>
<td>511 (79.6)</td>
<td>151 (20.4)</td>
</tr>
<tr>
<td>21</td>
<td>2,595</td>
<td>1,700 (67.0)</td>
<td>727 (28.0)</td>
</tr>
<tr>
<td>22</td>
<td>1,139</td>
<td>539 (47.6)</td>
<td>547 (47.4)</td>
</tr>
<tr>
<td>23</td>
<td>1,997</td>
<td>1,134 (57.9)</td>
<td>763 (40.1)</td>
</tr>
<tr>
<td>24</td>
<td>1,672</td>
<td>1,144 (70.5)</td>
<td>423 (25.7)</td>
</tr>
<tr>
<td>25</td>
<td>4,218</td>
<td>2,840 (73.1)</td>
<td>1,044 (26.9)</td>
</tr>
</tbody>
</table>


The 40 per cent tenantry prevailing in Tract #25 at this time was also due, in large measure, to geographical location. Within the past decade, there has been a significant expansion of multiple dwelling units in this tract in response to the desire of an urbanized population to live near the center of town. (Plate II.) This trend is very likely to continue in the future and perhaps extend into Tract #22, regardless of the present antipathy toward the area.

Tract #19 represented a transitional stage between the relatively high percentage of tenantry in Tracts #22 and #23 and the low percentage of tenantry in Tracts #20, #21, #24, and #25. (Table 11.) In large measure the tenant-occupied dwellings in this area reflected agricultural land use by non-citizen, non-property owning Japanese. Also, the Mexican and Italian railroad section hands rented
quarters from the Southern Pacific. Some areas, especially close to Lankershim Boulevard, were utilized for auto trailer courts and motels—both being highly commercialized forms of multiple dwelling units of the tenantry type. During the past decade the tenant-owner occupancy in this tract has undergone considerable change along with land use. The mass housing projects, nearly all of which represent single dwelling units, have been sold to individuals and constitute a major addition to the owner-occupancy aspect of the tract. (Plate II.)

The high percentage of owner-occupied dwellings in Tract #20 (nearly 80 per cent) was due to the date as well as the type of settlement. (Table II.) Dwellings were concentrated in the southern portion of this tract and represented a westward continuation of settlement along the railroad-interurban tracks. The northern half of this tract was mainly devoted to agricultural land use prior to World War II, and was sparsely settled by Japanese and Mexican tenants. (Plate I.) Since the war this area has been extensively occupied by single dwellings, except for the concentration of multiple units near the interurban line and in close proximity to the high school. (Plate II.) Occupance of the northern part of the tract is restricted by the large wash area and park zone.

Excluding Tract #25, the largest number of dwelling units to be found in North Hollywood in 1940 was in Tract #21. The tenant-occupied percentage in this tract (30 per cent) was neither as low as in Tract #20 nor as high as in Tract #22. (Table II.) It more or less represented a fairly healthy balance between two extremes of residential occupancy—a balance, in turn, reflecting the attenuated configuration of the tract. In its northern portion, this tract was largely agricultural in type of land use and tenant occupied. (Plate I.) In its
southern portion, it was virtually contiguous with the urban core area of North Hollywood and owner-occupied—population not yet justifying multiple unit construction. By 1949 agricultural land use had been displaced, in large measure, by single dwelling units in the north. Proximity of the southern portion of this tract to Lankershim Boulevard, the park, and high school promoted a more intensive type of urban settlement, with multiple dwelling units predominating. (Plate II.) Still, it is unlikely that present-day widespread construction of both types of housing can be construed as a significant shift in the proportions of tenant-occupied or owner-occupied dwelling units.

Tracts #24 and #25 were quite similar with respect to their percentages of owner-or tenant-occupied dwelling units in 1940. (Table II.) These two tracts resemble each other in regard to time and type of settlement. Both areas became predominantly owner-occupied zones during the 'thirties. Geographical proximity to the heart of North Hollywood, along Lankershim Boulevard, in the north and the country club-golf links in the south caused Tract #24 to become most attractive to permanent home owning residents. (Plate I.) Accessibility to Cahuenga Pass and the urban center of Hollywood resulted in Tract #25, especially near Ventura Boulevard, becoming very attractive to permanent residents. With the intensification of urban residential occupancy during the past decade, multiple dwelling units have greatly increased in Tract #24, particularly along the major highways close to the Toluca Estates and also near Lankershim Boulevard. (Plate II.) In Tract #25 multiple dwelling units have increased to some extent, but largely as a tourist commercialized venture with motels strung along Ventura Boulevard. In all likelihood the percentage of tenant-occupied dwelling units in Tract #24 has increased considerably during the past
decade, but not in Tract #25, as the area available for single dwelling construction has been greater here.

45. Age of Dwelling Units in North Hollywood: 1940.

Only two areas in North Hollywood were the scene of extensive housing construction during the boom period of the 'twenties—Tracts #19 and #22. (Table 12.) Nearly 60 per cent of the housing in Tract #22 was constructed during this decade. Much of this construction was confined to the extreme southwestern and urban portion of the tract—an area bounded by the Pacific Electric Railway tracks on the north and east, by North Hollywood Park on the west, and by Magnolia Boulevard on the south. (Plate I.) In the following decade, 55 per cent of the housing was constructed, but at a sufficiently early date to result in an overall median age of 1927 for all housing. During the past decade there has been a slow increase in the number of housing units, but nothing comparable to other tracts. (Plate II.) No doubt there has been sufficient building of this type to push the median age of dwelling units into the 'thirties, but in general this area will continue to be characterized by older housing than elsewhere in North Hollywood.

Slightly more than 50 per cent of the total dwelling units in Tract #19 were constructed in the 'twenties, according to the 1940 data. (Table 12.) The most clearly defined areas of settlement, during this period, were in the extreme southern section or "panhandle" near the Pacific Electric tracks and along Lenkarshein Boulevard in the north-central area. (Plate I.) Nearly all remaining portions of the tract were devoted to orchard or truck crops at this time and not the scene of any extensive residential construction. In the following decade, the 'thirties, approximately 40 per cent of the housing
TABLE 12. Age of dwelling units by census tracts for the North Hollywood District, San Fernando Valley, Los Angeles, California, 1940.* (In percentages.)

<table>
<thead>
<tr>
<th>Census Tract</th>
<th>1890 or before</th>
<th>1900-1919</th>
<th>1920-1929</th>
<th>1930-1940</th>
<th>Median Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>.3</td>
<td>5.8</td>
<td>52.5</td>
<td>41.4</td>
<td>1928</td>
</tr>
<tr>
<td>20</td>
<td>.3</td>
<td>5.3</td>
<td>21.7</td>
<td>72.7</td>
<td>1933</td>
</tr>
<tr>
<td>21</td>
<td>.1</td>
<td>4.2</td>
<td>27.5</td>
<td>68.4</td>
<td>1933</td>
</tr>
<tr>
<td>22</td>
<td>.6</td>
<td>5.2</td>
<td>59.1</td>
<td>55.1</td>
<td>1927</td>
</tr>
<tr>
<td>23</td>
<td>.2</td>
<td>2.7</td>
<td>36.5</td>
<td>60.9</td>
<td>1932</td>
</tr>
<tr>
<td>24</td>
<td>.1</td>
<td>1.5</td>
<td>27.6</td>
<td>71.0</td>
<td>1933</td>
</tr>
<tr>
<td>25</td>
<td>.1</td>
<td>2.9</td>
<td>20.0</td>
<td>77.0</td>
<td>1934</td>
</tr>
</tbody>
</table>


construction occurred. In large measure this building represented a continuation of the housing development in the two areas settled during the previous decade. As a consequence, the median age for dwellings in this tract was only one year advanced beyond that prevailing in Tract #22—1928. But events in the past decade, especially since 1945, have completely altered this situation. (Plate II.) There has been an enormous expansion in the number of single dwelling units constructed in the "panhandle" of Tract #19 as well as some extension of residential development near Lankershim Boulevard. As these dwelling units represent construction within the past five years, the median age of housing in this part of North Hollywood has very likely increased by not less than a decade.
Considerable housing construction occurred in Tract #28 during the 'twenties. (Table 12.) Much of this 35 per cent was concentrated in the northeastern portion of the tract in the North Hollywood core area—a section bounded by the Pacific Electric tracks on the east, Magnolia Boulevard on the north, the Park on the west, and Camarillo Street on the south. (Plate I.) In the following decade there was an intensification of residential settlement spreading southward and westward. Over 80 per cent of the housing was built during the 'thirties and the median age of all dwelling units was 1932.

The past decade has witnessed considerable residential construction in Tract #23, but not on a scale comparable to that occurring in the more open tracts to the north. There has been a greater tendency in this core area to shift from single to multiple dwelling units, and considerable new construction or alteration of housing along these lines has occurred. (Plate II.) Though the median age of housing has advanced as a consequence of building during the past decade, the extent of this shift will not equal that occurring in Tract #19.

Tracts #24 and #25 rather closely resembled Tracts #21 and #20 with respect to age of dwelling units in 1940. (Table 12.) In the 'twenties, only 27 per cent of Tract #24 and 20 per cent of Tract #25 was occupied by residential structures. The slightly larger percentage found in Tract #24 reflected its proximity to the heart of North Hollywood as compared with Tract #25. Residential building in Tract #25 was confined to the southeast section near Lankershim Boulevard and the debouchment of Cahuenga Pass. (Plate I.)

During the decade of the 'thirties, over 70 per cent of the dwellings in Tract #24 and nearly 80 per cent of those in Tract #25
were constructed. The Toluca Estates, in the southern part of Tract #24, were settled during this period and additional urbanites were crowding into the northern section. In Tract #25 residential construction fanned out along Ventura Boulevard and toward the northwest. A limited amount of housing construction occurred in the mountains immediately adjacent to Ventura Boulevard. By the close of this decade the median ages of the dwelling units in these two tracts were 1933 and 1934 respectively.

The past decade has not been marked by any noticeable change in the nature of the housing construction occurring in these two tracts, though there has been a rapid occupancy of the vacant areas. (Plate II.) Extensive construction of multiple units has occurred in Tract #24 as vacant land has largely disappeared or been purchased for speculative purposes. In Tract #25 there has been widespread construction of single dwelling units throughout the area—even in the mountains. In both tracts, the median age of dwelling units has advanced considerably beyond 1934.


Two geographic factors have accounted for the widespread adoption of the one-family detached residence in North Hollywood as well as throughout Southern California: an abundance of land and a mild climate. The individual house was early adopted as the standard dwelling unit, and even the multiple units were constructed to resemble individual homes. With a vast expanse of land, a relatively small population, a prolific development of dispersed settlements, and a highway system sustaining mobile diffusion of occupancy, it was expedient to construct tens of thousands of individual, unattached residences.
TABLE 13. Types of residential structures by census tracts for the North Hollywood District, San Fernando Valley, Los Angeles, California, 1940.* (In percentages)

<table>
<thead>
<tr>
<th>Type of Dwelling Unit</th>
<th>Tract #19</th>
<th>Tract #20</th>
<th>Tract #21</th>
<th>Tract #22</th>
<th>Tract #23</th>
<th>Tract #24</th>
<th>Tract #25</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Family detached</td>
<td>93.2</td>
<td>97.2</td>
<td>32.4</td>
<td>86.4</td>
<td>80.1</td>
<td>92.6</td>
<td>89.1</td>
</tr>
<tr>
<td>1-Family attached &amp; 2-Family</td>
<td>2.4</td>
<td>1.5</td>
<td>1.0</td>
<td>2.6</td>
<td>4.5</td>
<td>2.5</td>
<td>2.0</td>
</tr>
<tr>
<td>3-4 Family</td>
<td>.4</td>
<td>.4</td>
<td>1.0</td>
<td>2.6</td>
<td>4.5</td>
<td>2.5</td>
<td>2.0</td>
</tr>
<tr>
<td>1-4 Family with Business</td>
<td>.6</td>
<td>.6</td>
<td>.5</td>
<td>2.9</td>
<td>.9</td>
<td>5.0</td>
<td>2.0</td>
</tr>
<tr>
<td>5-19 Family</td>
<td>.6</td>
<td>0.0</td>
<td>.6</td>
<td>0.0</td>
<td>3.2</td>
<td>1.4</td>
<td>1.8</td>
</tr>
<tr>
<td>20-Family &amp; over</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>.7</td>
<td>.4</td>
<td>.7</td>
<td>1.3</td>
<td>1.0</td>
<td>.2</td>
<td>.7</td>
</tr>
</tbody>
</table>


The mild climate did not necessitate elaborate protective measures normally associated with housing in areas subject to rigorous winters. There was no demand nor need to build block upon block of row houses, each attached to the other in order to reduce the cost of construction and the fuel bills. Instead, the emphasis was placed upon outdoor areas surrounding each house with an abundance of lawn and garden space. It was only natural that this type of housing should find maximum expression in an originally suburban area such as North Hollywood. (Plates 23, 24, 26, 28.)
The types of residential structures prevailing in this community in 1940 reflected such a geographic and historic development of settlement. Tract #25, located in the very heart of North Hollywood, had the lowest percentage of one-family detached residences (80 per cent) and the highest percentage in nearly every multiple dwelling unit category. (Table 13.) With an ever-increasing concentration of population in this community and the desire for residences close to the business center, it was only logical that the northeastern part of this tract developed extensive multiple dwellings. (Plate I.) During the past decade this process has been greatly accelerated in response to the needs of a rapidly expanding urbanized population. (Plate II.) Most noticeable has been the increase in three and four, or six and eight unit dwellings. These multiple dwelling units are no longer constructed in the form of small individual houses on a large lot, as was the practice in the 'twenties and 'thirties. (See Section 49 on housing styles in this chapter.)

In most respects Tract #22 emulated Tract #25 due largely to similarities in historic and geographic backgrounds. The intensity of multiple dwelling construction did not match that found in Tract #25, as this area has never been regarded favorably as a residential district for urbanites. (Table 13.) The prevailing tendency in this tract has been toward multiple households in single-family detached or two-family residences (overcrowding) rather than construction of multiple dwelling units. Though Tract #22 has largely been developed as an area of single detached dwelling occupancy during the past decade, the increase in population and general appearance of the blighted section indicates an intensification of the process of doubling-up and over-crowding of habitations. (Plate II.)
Tracts #19, #20, and #21, in the northern part of North Hollywood, were decidedly areas of one-family detached dwellings in 1940. (Table 15.) This type of residential land use was to be expected in an area considerably removed from the geographic center of settlement, devoted to agriculture, and still endowed with a superabundance of vacant land suitable for housing. (Plate I.) The rapid residential development of these areas, during the past decade, has not altered the basic type of housing structure built by the new settlers. (Plate II.) These tracts remain the stronghold of one-family detached dwellings and have simply increased the intensity of this type of residential land use.

In Tracts #24 and #25 there was, also, an overwhelming predominance of one-family detached residences in 1940. (Table 15.) The small, though significant, percentage of "one to four-family with business" type of structure in Tract #24 was partly due to a demand for multiple dwelling units in commercial areas, i.e. along the major highways and close to the shopping center of North Hollywood. (Plate I.) In Tract #25 multiple residences were largely confined to Ventura Boulevard and were strictly commercial ventures—motels, auto courts, and trailer camps. These dwelling units catered to transient population traveling along this major arterial highway.

During the past decade the percentage of multiple dwelling units in Tract #24 has increased, even though there has been a large increase in one-family detached housing at the same time. (Plate II.) This tract has been marked by an intensification of urban residential occupancy in response to a rapid increase in population—a population accustomed to an urban type of life, a limited area in close proximity to the shopping center and Cahuenga Pass, and a prestige factor associated
with the Toluca Lake Estates. In Tract #25 both single and multiple residential occupancy have increased, but the emphasis has largely been placed upon the construction of single-family detached housing. Though settlement in this tract has been most intensive during the past decade, an abundance of land has permitted continuance of the single dwelling type of construction.


There have been several geographic and historic factors responsible for the distinctive types of exterior finish utilized in the construction of dwellings in North Hollywood as well as throughout Southern California.* In brief, these may be characterized as follows: (1) an extremely mild climate, which precluded the necessity for rugged, all-weather construction; (2) an abundant supply of readily obtainable and highly durable lumber from northern California and the Pacific Northwest; (3) the availability of enormous supplies of sand and gravel from pits excavated in the alluvial fans of San Fernando Valley; (4) the speculative nature of much building activity within recent decades and a consequent lack of permanency; (5) the popularity of a modified Spanish-Mission type of architecture in which wood frame and stucco were substituted for adobe brick; (6) the ever-present danger of earthquakes and an avoidance of too rigid construction; (7) the insidious persuasiveness of social conformity.

*By way of comparison, it is worth noting that in 1940 57 per cent of the housing in Los Angeles consisted of stucco construction, whereas Detroit and Philadelphia each had less than 1.5 per cent stucco. Los Angeles had 1.0 per cent brick, Detroit—35 per cent, and Philadelphia—94 per cent. Los Angeles and Detroit had 60 per cent wood construction each, and Philadelphia—2 per cent.
Prevalence of wood exterior finish in Tracts #19 and #22, in 1940, reflected an early period of settlement and residential construction. (Table 14.) Both tracts had a median age of dwelling units in the 'twenties. In this period residential structures usually were built of wood—the typical wood-frame house to be found in most sections of the country. During the 'thirties construction shifted to stucco, but there was only a limited amount of it. The recent prefabricated mass housing construction in Tract #19 has been largely stucco or a combination of stucco and wood. (Figs. 72-74.) In Tract #22 housing built during the 'forties has been confined mostly to stucco, but not of the prefabricated mass production type.

Tracts #20, #21, and #23 were roughly thirty per cent wood finish in house types in 1940. (Table 14.) Extensive residential construction in these areas did not occur until the 'thirties, and stucco had become the prevailing type of exterior finish by this date. During the past decade stucco construction has continued to predominate, though there has been a considerable admixture of wood or part wood with the change in architectural styles.

In Tract #24 stucco finish was employed almost to the exclusion of other materials—over 80 per cent. (Table 14.) This tract was largely settled during the late 'thirties, and stucco was then utilized for nearly all types of construction. Though this tract harbored the Toluca Estates, those pretentious homes were usually constructed of stucco or wood-stucco combinations. The 16 per cent wood finish type of housing was concentrated in the northern section of this tract—the area of older residences. (Plate I.) The past decade has witnessed continuation of an emphasis on stucco finish,
TABLE 14. Exterior finish of dwelling units by census tracts for the North Hollywood District, San Fernando Valley, Los Angeles, California, 1940.* (In percentages.)

<table>
<thead>
<tr>
<th>Census Tract</th>
<th>Wood</th>
<th>Brick</th>
<th>Stucco</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>55.1</td>
<td>.9</td>
<td>42.7</td>
<td>2.3</td>
</tr>
<tr>
<td>20</td>
<td>55.1</td>
<td>.7</td>
<td>65.8</td>
<td>1.3</td>
</tr>
<tr>
<td>21</td>
<td>28.6</td>
<td>.4</td>
<td>69.0</td>
<td>1.1</td>
</tr>
<tr>
<td>22</td>
<td>66.7</td>
<td>.2</td>
<td>32.8</td>
<td>.4</td>
</tr>
<tr>
<td>23</td>
<td>30.5</td>
<td>.5</td>
<td>66.9</td>
<td>.3</td>
</tr>
<tr>
<td>24</td>
<td>16.0</td>
<td>2.3</td>
<td>81.3</td>
<td>.5</td>
</tr>
<tr>
<td>25</td>
<td>22.1</td>
<td>.7</td>
<td>53.7</td>
<td>25.5</td>
</tr>
</tbody>
</table>


but there has been a revival of wood finish in certain types of housing.

Geographic and historic factors naturally would seem to place Tract #25 in the same bracket as its neighbor—Tract #24, but this has not occurred. (Table 14.) There was considerably more wood finish in this tract in 1940. Only slightly more than 50 per cent of the residences had stucco finish. By far the most significant category was the undefined "other"—nearly 25 per cent of the total. Tract #25 was the most recent area of residential settlement, and the one most likely to attract individuals desiring the unusual or bizarre in housing. People building in the mountainous sections of this tract could well afford to satisfy their individualistic whims, and exterior finishes might utilize combinations of stone, wood, stucco, glass or
any other material striking a passing fancy. During the past decade, the lowland section of this tract has continued to employ stucco and wood exterior finish, whereas in the mountains residential structures have persisted in giving vent to esoteric and exotic expressions of individualism.

48. **Sub-standard Dwellings in North Hollywood: 1940.**

A large element of subjectivity in determining the need for major repairs of a dwelling unit has made such census figures suspect. Though 18 per cent of the housing in Tract #19 may have been badly in need of repairs in the 'thirties, a still greater percentage of dwellings in Tract #22 were in a like state—not a mere one per cent. (Table 15.) With the extensive housing developments in Tract #19 since the close of the war, this situation has been materially improved. The probable extent of the actual numerical decline in housing needing repair in this tract may not be very great, as new construction has confused the picture. In Tract #22 the blighted area has persisted to the present time and the need for improved housing has still to be adequately handled. (Figs. 47-50.) Elsewhere in North Hollywood there appeared very little need for major residential repairs in 1940. Today, the need has not increased, as residential property is relatively new, well-maintained by the owner-resident, and realty values carefully guarded.

The lack of adequate sanitary facilities for an urban type residential occupancy, also, was most evident in Tracts #19 and #22 in 1940. (Table 15.) This situation has probably been corrected more satisfactorily in Tract #19 than in Tract #22. Owners of overcrowded, dilapidated housing in an area of ever-increasing minority population are not moved to improve such property as long as it continues to
Fig. 47. The old Catholic Church of North Hollywood. This church is located amid the blighted and squalid Mexican settlement near the heart of the community. It bears slight resemblance to the imposing structures forming San Fernando Mission some twenty miles to the northwest. See Figs. 25-26.

Figs. 48-50. A residential slum in the heart of North Hollywood. These ramshackle houses are typical of the blighted area in Tract #22. Such shanties are mainly occupied by the Mexican residents of North Hollywood, and represent a fairly well-established quarter. Lankershim Boulevard and the commercial hub of North Hollywood lies within two to three blocks of these tumble-down hovels. In a more inclement land, these structures would be untenable for human beings, but this does not alter the fact that they are the dwellings of a depressed group. Are other areas of North Hollywood destined to blight, though at present extolled as desirable home sites?
provide a steady income. Elsewhere this type of sub-standard dwelling was not a serious problem due to the relative newness of the housing. The rather large percentage of housing included in this category in Tract #25 was a reflection of numerous mountain shacks or cabins not readily accessible to a water supply. Most sub-standard dwellings of this type have disappeared not only from the mountains, but from most sections of North Hollywood within the past decade.

**TABLE 15.** Sub-standard dwelling units by census tracts for the North Hollywood District, San Fernando Valley, Los Angeles, California, 1940. (a) (In percentages.)

<table>
<thead>
<tr>
<th>Census Tract</th>
<th>Needing Major Repair (a)</th>
<th>Lacking (b)</th>
<th>Without Running Water</th>
<th>Without Central Heating</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>18.5</td>
<td>10.2</td>
<td>3.4</td>
<td>74.0</td>
</tr>
<tr>
<td>20</td>
<td>4.1</td>
<td>3.1</td>
<td>1.0</td>
<td>84.5</td>
</tr>
<tr>
<td>21</td>
<td>1.1</td>
<td>3.0</td>
<td>1.0</td>
<td>82.2</td>
</tr>
<tr>
<td>22</td>
<td>1.4</td>
<td>3.2</td>
<td>1.4</td>
<td>91.2</td>
</tr>
<tr>
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<td>2.5</td>
<td>1.9</td>
<td>.3</td>
<td>74.7</td>
</tr>
<tr>
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<td>3.2</td>
<td>.2</td>
<td>42.0</td>
</tr>
<tr>
<td>25</td>
<td>2.1</td>
<td>2.4</td>
<td>.5</td>
<td>44.6</td>
</tr>
</tbody>
</table>

(a) 16th. Census of the United States, op. cit., p.125; Hanson and Beckett, op.cit., pp.189, 188.

(b) Lacking private bath and/or private flush toilet.

A very small percentage of housing in this community lacked running water in 1940. (Table 15.) Both Tracts #19 and #22 were sub-standard in this respect to a greater degree than other portions of the town. Actually an urban zone of settlement readily accessible to
a vast water supply system, such as North Hollywood represents, should reveal a complete absence of housing lacking this elementary necessity of life. With the extensive improvements and developments of the 'forties, this aspect of sub-standard housing has been considerably improved throughout the community.

In a climate as mild as that prevailing in North Hollywood, there is no need for central heating facilities, but some form of temperature control is required during the winter months. (See Chapter II.) Though central heating equipment was largely limited to the superior residences in Tracts #24 and #25 in 1940, nearly all homes utilized heaters fueled by natural gas. (Table 15.) In a few instances wood was used for heating, but generally as a mere ornamental and nostalgic supplement to gas. During the past few years the gas and oil types of thermostatically controlled floor furnaces have been installed in homes throughout this area. In the post-war house one of these two types of central heating has been incorporated into the basic design. There has been a growing recognition of the need for a more adequate type of central heating in the house, especially one possessing automatic features.

49. Housing Styles in North Hollywood.

The types of residential architecture prevailing in North Hollywood reflect a response to historic and climatic factors. Within the past thirty years, several distinctive styles of housing have been accepted and then rejected—Mission, Monterey, California bungalow, Spanish, and Rancho. (57) Each of these styles has its merits and demerits, but none of them has fully met the requirements of town-lot urban living in this region.
The Mission style, representing an adaptation to a semi-arid climate, employed massive adobe brick walls, heavy timbers, expansive porches, and extensive interior courts or patio gardens. Such buildings were well-insulated against the heat of summer and also conserved the heat of open fireplaces in winter. In summer these buildings were cool within and the quiet garden enclosures permitted relaxation. With a renewal of interest in the history of San Fernando Mission, this architectural style was adapted to housing and became very popular in the Valley. Many homes in Tracts #23, #24, and #25 bear a superficial resemblance to the Mission, but such structures are not made of adobe, do not have thick walls, heavy timbers are lacking, nor do they possess expansive porches and interior patios. (Figs. 42, 43, 50-54.) All that really remains of this highly specialized type of construction is observable in the outward appearance of these rather commonplace and typical homes.

The Monterey type of house was originally developed by the early Spanish colonists, especially in the capital city of that era—Monterey, California. Unlike most other houses in this region, it was a two-story structure built of wood or adobe. The most distinctive feature in the architectural styling of this house was a double porch running the full length of the house front with an outside staircase leading to the upper level. To a few settlers in North Hollywood, this type of house made an appeal—perhaps due to its rather quaint design, rustic appearance, and resemblance to the more customary two-story wood frame house found in other parts of the country. Few examples of it are to be found today, and most of these represent an adaptation to multiple dwelling units. (Figs. 55, 56.) With a small lot, this
The so-called Spanish Colonial home that came of the exposition, (Panama-California Exposition of 1915 at San Diego) with its walls of white stucco and roof of red tile, was a model easily imitated by commercial contractors. It had the merit of looking a little more like the environment than the models they had been using for so many years. Furthermore, it was called Spanish and could be related, therefore, to the Mission background, and it was simply constructed.

C. McWilliams
Southern California Country

Figs. 51-54. The Spanish style stucco house. There are literally acres and acres of these pseudo-Spanish styled homes in North Hollywood. This was the dominant architectural motif of the 'thirties. The walls are usually dazzling white, the roof constructed of red tile, no basement or attic. Iron grill work is a common decorative feature. Note the Moorish tower motif in the house in Fig. 52. The archway of the Mission prevails in Fig. 53. In the lower photo, one sees an automatic sprinkling system in operation. The limited rainfall, even during the rainy winter season, necessitates the constant application of water in order to maintain a greensward.

Note the extensive landscaping around each home. These properties are well-kept and typical of residences found in Tracts #23, #24, and #25, especially in the somewhat "older" sections.
type of two story construction with an outside stairway provides the maximum efficient use of floor space. Development of this style of architecture would be impossible in an area having a more rigorous climate, where an outside, unprotected stairway would be regarded as both dangerous and utterly incongruous.

The so-called California bungalow involved the adaptation of a house type widely distributed in Southeast Asia to the needs of Southern California residents. It consists of a one story, squat, ugly structure of wood frame, plaster and stucco with a wide, overhanging roof and an expensive porch. (Figs. 61, 62.) Though not particularly attractive, the California bungalow was extensively built during the real estate boom of the 'twenties. In North Hollywood it is most prevalent in the older areas of settlement—in those parts of Tracts #12, #23, and #24 close to the center of town and scattered over those sections of Tracts #19, #20, and #21 occupied at an early date. (Plate I.) Even though the California bungalow has long been regarded as an architectural eye-sore, it did represent a response to climate in that the wide, overhanging, V-shaped roof and large porch tended to insulate the house from the heat of the summer sun.

The Spanish type of house was a stylistic adaptation of the thick-walled, adobe structure with red tiled roof common to Spanish Colonial America and the Mediterranean coast lands of Spain. The use of archways and ornamental ironwork reflect the strong Moorish influence on Spanish design. Though originally constructed of adobe, the pseudo-Spanish house in North Hollywood is built of stucco on a wood frame and has the typical red tile roof. (Figs. 51-54.) During the 'thirties this Spanish style of architecture became very popular in all areas of settlement. As this was a period of intensive settlement
of suburbanites in North Hollywood, the pseudo-Spanish type of home has virtually dominated the landscape. Tracts #23, #24, and #25 consist of block upon block of these Spanish styled stucco houses with their red tiled roofs. (Plate II.) The stucco walls run the gamut of colors from dazzling and glaring white to pastels of pink, blue, and green. Though the original Spanish adobe house with its interior patio was an excellent adaptation to the climate, the pseudo-Spanish house in North Hollywood is by no means its equal.* These Spanish style houses lack the thick insulating walls, the deep cellars, the cool, quiet patios with flowers and sparkling fountains, the interior arrangement of rooms, and double story, durable construction which characterized the true Spanish house. A climatic response that was entirely feasible in semi-arid North Hollywood was set aside in response to zoning laws based on the dictates of an Anglo-Saxon culture, reflecting humid, mid-latitude climatic conditions.

The tremendous housing boom of the past decade in North Hollywood has been marked by a radical departure from the Spanish style of architecture. The most popular type of residence today consists of the modified California ranch house. In style, this structure resembles the low, rambling one story house of the rancho period. (See Chapter V.) The contemporary ranch house is constructed of wood and has a rough redwood exterior finish treated with linseed oil and then shellacked—never painted. (Figs. 65-66.) The roof is usually

* The stucco construction of today is far superior to that used in the 'twenties and 'thirties. It is durable, dry, well-insulated, and certainly adapted to the environment. In addition, it is relatively cheap and quickly applied to a wood frame. Its upkeep is nominal.
Figs. 55-56. Monterey style housing. This apartment house of twelve units represents an adaptation of the old Monterey type of house. In place of adobe brick walls, the contractor employed re-inforced concrete blocks. The heavy timbers supporting a massive tile roof have been replaced by steel beams, but the interior finish still utilizes timbered beams for the ceilings. The outside upper porch and stairway are typical of the Monterey house. The builder of this multiple dwelling specializes in the Monterey style of house and the appearance is authentic.

Figs. 57-58. The "court" type of multiple dwelling unit is no longer being built on an extensive scale. Fig. 57 reveals four separate dwellings and across the walk are four more units of an identical type. At the far end of the court, there is a double unit—some courts have four such units, two upper and two lower. Fig. 58 shows the back of three units in this court. The vacant lot has been partly converted into a children's playground. Each unit has a separate clothesline as well as separate exit. These four or five room houses are separated from one another by six to eight feet.
low pitched, overhanging, and constructed of thick single. The exterior landscaping is rustic. The interior consists of one or two bedrooms, a living-room-dining-room combination, ultra-modern compact kitchen and bath, thermostatically controlled central heating by gas or oil floor furnace, hardwood floors, cedar-lined closets and perhaps a den or garage, but no basement or attic. Translucent walls of glass brick or very large view-windows admit a maximum amount of light and sunshine. Frequently a decorative cinder-block wall or rustic wood fence fronts the house. Along the sides and rear of the house, a wall of sufficient height to afford privacy is usually to be found. Outdoor living is assured by a maximum use of the back and side yards. There may be a greensward, tennis or badminton court, small swimming pool, lawn chairs, table, built-in brick barbecue pit and picnic table—all in the prevailing rustic motif. (Figs. 63-66, 85.) In every way these ranch type houses represent a response to a mild climate, outdoor living, and a desire to incorporate the environment into the house.

The ranch house, being the most recent type of residential construction, is found quite extensively in the more recently built-up sections of Tracts #18, #20, and #21. The more pretentious style ranch houses are found in the mountainous sections of Tract #25. (Plate II.) In other tracts, which have been occupied for considerably longer periods and lack the abundance of room found in the northern and southern sections of North Hollywood, the ranch home occurs in scattered locations surrounded by California bungalows and acres of pseudo-Spanish structures.

There have been two phases in the development of multiple
Figs. 59-60. A Southern California style home—the ranchito. A beautiful six room house, bath and a half, and double garage. The lot is 109 x 420 feet, which is not large for the ranchito. At the back end of this property are such items as a barn and stable, grape arbor, fig, apricot, and peach trees. Note the terrace on the left of Fig. 60. This could be readily utilized as an outdoor dining space as the kitchen is only a few steps away. Though this property has been sadly neglected, it illustrates the ranchito type home and presents some of its possibilities. This home happens to be ideally situated with respect to Cahuenga Pass and the Freeway, thus affording ready access to North Hollywood or Hollywood.

"...the bungalow was based upon the house originally built by Englishmen for use in tropical countries. British officials had found the bungalow to be a reasonably comfortable home in a tropical environment and, being inexpensive, it appealed to them, for their residence in most cases, was temporary. It was precisely these qualities that appealed to newcomers in Southern California. A low, spacious airy house, the bungalow could be built by people of moderate means and informal tastes, who were not quite sure that they intended to remain in Southern California and therefore did not want to invest a considerable sum in a home."

C. McWilliams:
Southern California Country.

Figs. 61-62. Two examples of the California bungalow. Wooden frame, slanting roof, wide porch of stone and cement are typical features. These houses were in vogue during the real estate boom of the 'twenties and, therefore, are not widely distributed in North Hollywood.
housing units in North Hollywood: the court and the four-to eight-family flat. In the 'twenties and 'thirties multiple dwellings consisted of small, individual houses of wood or stucco, California bungalow or Spanish in style, and arranged on a large lot. These houses, usually four to ten in number, faced one another across an intervening central walk. (Figs. 57, 58.) Each house was a separate dwelling unit with a small porch and front yard, space for clothesline and disposal receptacles in the rear, and some shrubbery between neighbors. With a sufficiently large lot, proper spacing, and attractive landscaping, these multiple dwellings were infinitely superior to the row houses found in other cities. But again, the geographic factors of a mild climate and abundant land favored this type of multiple housing. These courts were never extensively built in North Hollywood as intensive development of the land for residential purposes has been of more recent occurrence, but a few such units are found in Tracts #21, #22, #23, and #24—always near the core area or close to the interurban line. (Plate I.)

In recent years, especially since the close of the war, multiple dwelling unit construction has abandoned the court design and adopted the two-story multiple dwelling of four to ten units. (Figs. 67-71.) The rising costs of construction and increasing land values in desirable locations have contributed to this radical change. These structures are nearly all built of stucco, though a few of the more pretentious ones resemble the newer ranch style by utilizing a wood finish. This type of multiple housing is most widely found in Tracts #25, #24, and #25—the areas of intensified, urban settlement, which are either in close proximity to the heart of North Hollywood or readily accessible to Hollywood via Cahuenga Pass. (Plate II.)
Fig. 63. The ranch house is the prevailing type of architecture. These homes are frequently deeply buried in shrubbery and can not be seen. This home would almost pass for a farm in some sections of the country, yet it occupies a town-lot.

Figs. 64-65. The above home has a very fine patio. The rustic motif prevails throughout this property. Note the elaborate barbecue pit in the background of Fig. 64. The various plants are arranged on tree stumps. The patio is delightfully cool in summer and forms an ideal rendezvous for guests and outdoor entertainments.

Fig. 66. This unpretentious ranch house gives some idea of the construction. Redwood is used for the walls and fence. As this home is quite new, there is very little landscaping visible at present. This type of house is almost as common today as the Spanish stucco or California bungalow was in former years. Note the lack of sidewalks—this is very common in North Hollywood. The elimination of a sidewalk supposedly creates a "rural" atmosphere. In actuality, it is a nuisance to the pedestrian, though there are few of these benighted animals roaming North Hollywood.
50. **Residential Land Use in 1949: A Socio-Geographic Sequent.**

In summary, the residential aspects of land use in North Hollywood have been an outgrowth of reactions to socio-geographic and historical factors prevailing in this region. Not every section of the community responded in a like manner nor did it evolve a type of residential land use similar to its neighbor. Though the 1949 land use map for North Hollywood reveals the overwhelming preponderance of residential occupancy, the nature of this land use differs markedly from place to place due to geographic location, time, rate and intensity of settlement as well as to type of settler. (Plate II.)

Tract #19 has been geographically and historically peripheral to North Hollywood settlement until recent years. Prior to 1945, the far northern section of this tract was devoted to agricultural production and consequently sparsely settled. Though there was an abundance of level land no way differing from that found in Tracts #13 or #24, this area was simply too far removed from the geographic heart of the nascent community. (Plate I.) Even the southern portion of the "penhandle" was strictly limited to rural settlers and the development of ranchito type estates.* (Figs. 59, 60.)

At the close of World War II, the demand for homes in North Hollywood increased tremendously. Mass production type housing demanded large areas of legally unencumbered land. The twenty, forty,

* Though the ranchito type of residence still manages to survive on the outskirts of this tract and some others, it represents a dying form of land use. Most of these ranchitos are owned by early settlers—those who occupied the land in the 1910-1930 era. Gradually these small acreages have been swallowed up by the moving tide of urban settlement. Within the next few years, the remaining ranchitos will likely disappear, too. High taxation, the expense of maintenance, and the steady encroachment of single dwelling town-lot residences will make it undesirable or unprofitable to retain even this semblance of the rural past.
and eighty acre sections of dead orchards or truck farms in the upper portion of the "panhandle" were readily purchased, and Tract #19 became the scene of unparalleled residential growth. (Figs. 72-74.) (Plate II.) Today, this tract represents the newer citizens of the community—lower middle class, young war veteran families, government financed prefabricated housing, confirmed urbanites with a determination to "keep up with the Joneses." Though considerable vacant land still remains in Tract #19, it consists of small, isolated parcels suitable for the construction of perhaps two to ten residences, or blighted areas adjacent to industrial or commercial developments.

In most respects Tract #20 closely resembles its neighbors to the east and west. (Plate I.) It, too, has been geographically and historically peripheral to the center of settlement in North Hollywood. In the pre-war years residential land use was mainly confined to the area near the Pacific Electric Railway tracks and southward. The northern section was either vacant, or thinly settled by urbanites or agriculturalists. To all intents and purposes, it was an area considered quite far removed from the mainstream of residential occupancy.

With the post-war increase in population and the consequent intensification of settlement, Tract #20 was rapidly occupied by single and multiple dwelling units. Multiple unit residences were built in the southern section of the tract, especially near the interurban line and within walking distance of the nearby high school. (Plate II.) In most instances such housing was constructed along the arterial highways in conformity to the zoning regulations. In the northern part of the tract, near Victory-Vanowen Park, single dwelling units were built in large numbers, but not on a scale comparable to
Figs. 67-68. Contemporary multiple housing assumes many forms and differs from that built in an earlier day. Fig. 67 represents a cheap, pseudo Monterey style of multiple unit construction found in Tract #22.

Fig. 69. An up-to-date, modern multiple dwelling unit typical of North Hollywood today.

Fig. 69. A small section of the 500 unit apartment type multiple dwelling development just finished in North Hollywood. This housing project covers several blocks near Tujunga Avenue and Vanowen Street. Only four apartments per unit. The fenced space in the foreground may be used for a garden or children's play area.

Fig. 70. Another large multiple dwelling unit project. This one is located along Burbank Boulevard, two blocks east of Coldwater Canyon Avenue.

Fig. 71. Close-up of typical multiple dwelling units under construction throughout North Hollywood today. Compare any of these structures with Figs. 67-68. Rising costs and increasing land values have altered the type of multiple housing developments.
the mass housing projects in Tract #19. In a few instances the ranchito type of residential occupancy has managed to survive in this section, though somewhat precariously in view of rising land values and the steady encroachment of single dwelling, town-lot residences.

A two stage pattern of settlement has resulted in an admixture of middle aged and young people, grown families and newly established families, and housing financed by government funds granted to the veterans of two wars. Tract #20 represents a cross-section of middle class residential occupancy in a relatively new area of intensive settlement. (58) (Figs. 77-80.) Only limited space remains for additional housing of a single unit type, but further intensification of settlement may be achieved by subdividing the ranchitos and increasing the number of multiple dwellings.

Tract #21 has been a transitional zone in the residential development of North Hollywood due to its shape and location. The southern portion of this tract has been virtually contiguous to the core settlement of the community. Residential occupancy of the area near the Pacific Electric Railway and the Park was merely an extension of similar occupancy to the east. (Plate I.) In the mid-section of this tract, along Lankershim Boulevard, there was a "shoestring" development of residential land use coupled with the typical urban-agricultural occupancy of the early period. In the northeastern section of the tract, extending into the "penhandle", settlement thinned out and land was largely devoted to truck crops. Thus residential settlement prior to the 'forties clearly revealed a gradation from the south to north—the further the distance from the urban center, the sparser the residential land use.
With a vast influx of population during the post-war years, there has been a noticeable increase in multiple dwelling units in the southern part of this tract near North Hollywood Park and the high school. (Plate II.) The area between Victory-Vanowen Park or the wash and Lankershim Boulevard, in the mid-section of this tract, has been rapidly occupied by block on block of single unit dwellings. Residential occupancy has also pushed eastward from Lankershim Boulevard as far as the power line—crowding out the truck farms. (Figs. 74, 76.) Extensive settlement near the Burbank-North Hollywood boundary occurred during the recent war in response to the need for housing near the Lockheed Aircraft plant.

Except for small areas suitable for the construction of a few single dwelling units or multiple type housing, Tract #21 has little additional land available for settlement. The few vacant areas in the northern part of this tract have been zoned for industrial or commercial use and are not desirable for dwellings. Thus, within a decade, the land use pattern in this area assumed the characteristic single dwelling type of residential occupancy. In the southern portion of this tract, the old and new generation of settlers intermingle—the older settlers in single dwellings, for the most part, and the newer settlers in multiple units. In the mid-zone, the newcomers far outnumber the older, rural settlers—the latter having virtually become an extinct group. In the far eastern zone, the settlers are partly new and partly old—a rural-urban admixture, but destined to become strictly urban. Both residences and residential occupancy reflect lower to middle, middle class settlers—the higher income group occupying the southern part of the tract in close proximity to the most desirable section of North Hollywood. (59)
Figs. 72-74. Acres and acres of mass production housing. Monotony in housing is not confined to the row house. These homes have a somewhat similar depressing affect on the viewer, especially after several score of blocks. There is a sameness to these box-like structures, regardless of the attempt to break the monotony by shifting the false chimney, the front porch, the use of fences, brick walls, and color variations. Note the five television antennas on the roofs of the houses in Fig. 73. This type of housing prevails in Tracts #19, #20, and #21.

Fig. 75. At the end of the street or the next block over from Fig. 73, a house of another architectural period may be seen. Though the style is in extremely poor taste for Southern California, the house has an individuality not to be found in contemporary construction. The period of housing construction can be easily determined by such shocking contrasts.

Fig. 76. Poor zoning regulations. This sight is not uncommon in North Hollywood. It may occur at the end of a fine residential street. This view was obtained at the far end of Fig. 72. The newness and rapidity of growth in the outlying portions of the community result in such an anomaly in housing. Such "farmland can not long survive in a growing residential area."
Residential land use in Tract #22 has dated from the very beginning of North Hollywood settlement. Part of the urban core area extended into the southwestern portion of this tract. Though settlement occurred rapidly near the Southern Pacific-Pacific Electric tracks, the area to the northeast was not occupied to any great extent—it was not as geographically advantageous for residential occupancy as areas to the south. (Plate I.) The influx of Mexican settlers during these formative years and the consequent failure to improve or maintain the residential property in this section further discouraged settlement. Under these conditions Tract #22 became an area of blight, overcrowding, and widespread tenantry by an economically depressed group.

During the past few years residential land use has increased in this tract as elsewhere in North Hollywood, but the type of occupancy has largely remained the same. Throughout the area, both the new and old residences are cheap in appearance and poor in quality of construction. (Plate II.) Even the multiple dwelling units built near the Burbank boundary represent the poorest type of government financed, war-time construction. Though agricultural and rural land use has largely disappeared, the residential occupancy that has displaced it could hardly be deemed an improvement. Geography, history, and social developments in this tract have conspired to give it an air of general blight, economic depression, and undesirability. Thus an excellent location with respect to the commercial center of North Hollywood and one ideal for urban multiple dwelling units has remained undeveloped as a consequence of past settlement and present tenants.

A large part of Tract #25 has constituted the urban core of North Hollywood, especially the area north of Riverside Drive. (Plate I.) Residential settlement along Lankershim Boulevard and Vineland
Avenue marked the first concentration of population in this community. By the close of the 'thirties, the section near to the commercial center was extensively occupied by single and multiple dwellings. Though there were remnants of orchards and considerable vacant land in the western part of this tract, the residential land use type of occupancy had wiped away nearly every vestige of suburban settlement.

During the decade of the 'forties residential land use absorbed the whole tract. (Plate II.) There was an intensification of this type of occupancy near the commercial core area—an expansion in the number and size of the multiple dwelling units. As a consequence, housing in this area is relatively new, well maintained, and likely to be more architecturally distinctive than in the areas of mass housing construction to the north. The residents represent a mixture of older, established, middle class settlers as well as young newcomers aspiring to a solid middle class status. The new settlers generally occupy multiple dwelling units near schools, the park, and the boulevard—lacking the economic resources required for the purchase of the occasional residences for sale in this section. Thus the initial impetus provided by the geographic factor of location and avoidance of an unfavorable type of minority occupancy of land use have markedly influenced the development of this tract. As a consequence, this section maintains its preeminent position in the settlement of North Hollywood and acts as the fulcrum of the community.

In Tract #24 residential land use has reflected a bifurcated type of settlement. In the early period of the development of North Hollywood, the northwestern section of this tract was settled by middle class residents seeking property near the Pacific Electric Railway and the business center on Lankershim Boulevard. At the same time, the
Fig. 77. This modest North Hollywood home has a swimming pool in the backyard to rival the more pretentious estates in the mountains and near Toluca Lake. Note the concrete block wall and excellent landscaping of the home.

Fig. 73. Beyond the swimming pool, the lady of the house has her wash line, and at the edge of the lot stands the incinerator—necessary adjunct of every home in Southern California. Note the limited amount of lawn space. The garage appears on the left.

Figs. 79-80. Within recent years, the cost of constructing a swimming pool has been brought within reach of the middle class family in this area. The pools are constructed on a mass production basis. This pool occupies most of the backyard and is the center of activity for the family. Under the awning is a picnic table and a portable, mobile barbecue pit can be wheeled from the garage. Lounging beach chairs surround the pool. Depths range from two feet to twelve. Four or five can swim about in comfort. The pool is constructed of blue tile and only color photography can do it justice. The wicker-wire fence, in place of a high concrete block wall, is a temporary arrangement, as most pools can not be seen from the street. This pool is available for use twelve months in the year and need not be drained during the winter.
southern part of this tract was attracting the "country club" set and
those desiring exclusive estates near a small lake. (Plate I.) During
the 'twenties and the 'thirties these two distinct types of residential
settlement occurred. Practically all trace of a rural period of
occupance disappeared from this area at an earlier date. Housing in
the north was characteristic of the middle class residents in North
Hollywood at this time—the unpretentious California bungalow or
psuedo-Spanish stucco. Housing in the south was quite similar in
design, but large, ornate, and surrounded by more spacious grounds—
a type of dwelling beyond the financial resources of the average
middle class resident. (Figs. 61-65.)

During the past decade these two distinct types of residential
land use have met near the middle of the tract—Riverside Drive. (Plate
II.) There are no more estates available near Toluca Lake, except
those infrequently put up for sale. Yet there are many settlers in
North Hollywood desirous of the prestige associated with residence in
this exclusive section. This factor has led to intensified settlement
along the arterial highways and an expansion of multiple dwelling units
to accommodate these settlers. This has resulted in an intensification
of the middle class occupancy in this tract by an extension of the area
in a vertical sense. Thus geographic factors have played a major role
in the residential land use development of Tract #24. By converting
an old slough or marsh area into a small artificial lake, creation of
a golf course and country club near the river, and careful designing
of lots in conformance with the topography, a none too attractive
section of this tract has been transformed into an area of exclusive
residential settlement. (Figs. 86-89.)
Figs. 81-85. Estate type housing. In the vicinity of Toluca Lake there is a very superior type of housing. These homes do not front on the lake, but represent exclusive and expensive estates maintained in this section. Note the great range in architectural styles: mid-western farm house, colonial mansion, modernistic, Southern plantation, and California ranch house.

Many of these homes as well as those found around the lake itself are the residences of motion picture and radio personalities. Others are occupied by retired executives of the business world.
The nature and extent of residential land use development in Tract #25 has been a consequence of two significant geographic factors: Cahuenga Pass and mountainous terrain. The early phase of settlement in this area represented a movement through the pass and occupancy of property along Ventura Boulevard. (Plate I.) Mountain residences were few and far between in this period, although some highland settlement had begun to creep into areas immediately adjacent to the pass. As most of the "early" settlement in this tract occurred during the "thirties, there was very little displacement of a rural or agricultural type of land use. Much of the lowland property had already been purchased for speculation in residential real estate ventures. These early settlers in the lowland section were mainly middle class and resembled those dwelling in adjacent tracts to the north. Housing was largely pseudo-Spanish stucco in style and construction, and moderate in size.

With the improvement of the Cahuenga Pass highway in the 'forties, settlers began to pour into North Hollywood. Proximity to Hollywood via the pass or mountain highways plus an abundance of desirable residential lots resulted in rapid settlement of the lowland area of Tract #25. (Plate II.) Simultaneously, settlement spread into the mountainous area south of Ventura Boulevard. Wealthy individuals seeking residences with spectacular views, locations possessing a high degree of accessibility to the metropolitan area, and sites affording a maximum of privacy within rugged terrain were responsible for promoting a remarkable development of residential land use in this area. (Figs. 1, 20, 22.) In the lowlands, housing was largely a continuation of the pseudo-Spanish stucco style with the addition of the redwood California ranch house type. In the mountains, housing styles ran the
Figs. 86-87. Toluca Lake Estates. These magnificent homes face on both street and lake. Though the lake is only some seven acres in extent and not suitable for bathing, the finest homes have clustered around it. Boating is permissible and nearly every home has a small dock. These homes are arranged in a spacious manner and afford the utmost privacy. Usually each home is cut off from its neighbors by high fences or heavy shrubbery. In many ways, this section is more exclusive than the surrounding mountains. Photos taken looking across the lake toward the north.

This "lake", which to a visitor from a more humid climate would appear to be little more than a poor excuse for a pond, clearly reveals the great attraction that any body of water has for residents in a semi-arid climate. Superior type housing is even attracted to sites near the large reservoirs of the Los Angeles water system.

Figs. 88-89. Toluca Lake looking westward from the extreme edge of the water body. On the left, Lakeside Country Club and on the right, the Toluca Estates. In Fig. 88 part of the retaining wall of one home can be seen in the lower right hand corner. The lake is maintained by water supplied from a pump. Pumping water into the lake has become necessary during recent years due to the lowering water table and long period of deficient rainfall. The lake is kept clean and in repair by a staff maintained for this purpose by the residents. Note the heavy vegetation surrounding the banks on all sides.
gamut from bizarre Inca temple to Norman mansard and from ultra-modern to mid-Victorian. In the lowland, lots and residences were modest in proportions; in the highland, extravagant and pretentious. The cost of construction in the lowland was average for the community; in the highland it was extremely high plus the additional expenses incurred during the initial development of such property (roads, sewerage, water, etc.) Settlers in the lowland were members of the intermediate group of the middle class, while those in the highland were upper middle class or upper class—wealthy, retired, or holders of key administrative or professional positions. Thus the geography of residential settlement in Tract #25 has been very sharply defined by the terrain.

Though each section of North Hollywood has responded in a more or less distinctive manner to the many socio-geographic and historic factors that have prevailed in this minuscule region, the overall land use development of the community has been preponderantly concerned with residential settlement. (Plate II.) In this respect North Hollywood truly lives up to the slogan of being "one of the bedrooms of Los Angeles." But such an emphasis on residential occupancy has seriously reduced the size and extent of areas suitable for industrial development. With a rapidly expanding population and consequently a vast extension of residential settlement, North Hollywood has greatly augmented its labor force while reducing its industrial potential. An economically healthy community of home owners must secure employment in industries and commercial establishments.
CHAPTER X

LAND USE: INDUSTRIAL, COMMERCIAL, AND CIVIC

Paucity of industrial development in North Hollywood and the San Fernando Valley has become a serious matter in view of the recent large increase in population. A deliberate policy of limited industrial zoning of land and widespread apathy, or outright opposition to this essential aspect of urban development has seriously retarded the healthy economic growth of such communities as North Hollywood. Due to an over-emphasis of the residential type of land use, North Hollywood has largely eliminated areas suitable for industrial development and the whole Valley appears to be following suit.

Commercial land use in this community has closely followed the historical evolution of settlement and land use. Though the principal shopping center of North Hollywood has been confined to Lankershim Boulevard, the rapid increase in population, the extension of residential settlement, and the availability of land zoned for the purpose has promoted "shoestring" development of commercial ventures along several arterial boulevards. Emphasis on nuclear shopping centers and widespread dependence on the automobile has largely defeated any attempt to establish neighborhood stores within convenient walking distance of residences. Commercial land use reflects a distinctive socio-geographic development in which the automobile dominates the thoughts and motivates the actions of the shopper.

The proper functioning of an urban community requires an elaborate and extensively integrated system of municipal agencies. With the tremendous increase in population during the past decade in North Hollywood and the Valley, the municipal government of Los Angeles has been hard-pressed to meet even the minimum needs of urban settlement. The vast area encompassed by the Valley, the scattered nature of its settlement, except in the North Hollywood sector, and the low density of population, even in such a highly urbanized area as North Hollywood, presents the city with manifold difficulties in its attempt to maintain adequate public services.

51. Industrial Development of the San Fernando Valley.

The nature of urban development in the San Fernando Valley has been such that population and residential growth has outstripped that of industry. Unfortunately, industrial development has never received much encouragement in the Valley at any time. The attitude of settlers in
the 'twenties and 'thirties was anything but cordial or conducive to industrialization. The Valley was a vast suburb devoted to ruralism and agricultural production. (See Chapter VI.) The rustic atmosphere was to be retained at all cost and the land protected from industrial pollution. This attitude is still all too prevalent among a great many residents in the Valley——both old and new. Only "smokeless" and "smogless" industries have been permitted access to this area——agricultural processing plants, motion picture studios, aircraft assembly plants, and a few other factories specializing in precision manufacturing or assembly work.

Typical of land use development of urban areas throughout the world, industry is strung along the railroad lines in the Valley. (Map 12.) Location of industrial sites in such fashion is a reflection of antiquated concepts of zoning inherited from the pre-automotive age.

(60) Under the present zoning provisions, industrial land is largely confined to the area east of the Sepulveda Flood Control Basin and scattered along the three cross-Valley routes of the Southern Pacific Railroad. (Map 12.) Within recent months, a large section of land zoned for industrial purposes in northeastern Van Nuys has been rezoned for development of a vast single dwelling housing project——an action destined to be repeated time after time in this area during the next few years. Another large section of industrially zoned land is occupied, at present, by the Metropolitan Airport between Van Nuys and Reseda. Today approximately five per cent of the Valley is zoned for industrial use. (61) Obviously, any appreciable increase in industrial acreage must be at the further expense of agriculture in the western half of the Valley and in competition with an ever-expanding residential development in this same area. (Maps 8 and 12.)
Unfortunately, the industrial-commercial map of the Valley fails to note a very important urban center of industry, which is geographically, though not legally, a part of this region. (Map 12.)

In Burbank, the Lockheed aircraft plants employ the largest number of workers of any Valley-located industry—about 15,000 employees. (Plate II.) In fact industrial development of Burbank, along the Southern Pacific Railroad routes, far surpasses all the rest of the Valley combined. Of an estimated 750 factories, employing 55,000 workers and having an annual payroll of $165 million in the Valley in 1946, Burbank had 400 plants, employed 33,000 workers, and dispersed $98 million in wages. (62) Burbank, as an independent, self-sustaining community in contrast to North Hollywood and other Valley communities supported by Los Angeles, had to promote its own industrial development by every means at its command or else succumb to the evils of economic parasitism.

Shortly after World War II, the Chevrolet Division of the General Motors Corporation built the largest automobile assembly plant in Southern California in the Valley. This plant is located in the northeastern section of Van Nuese near the Southern Pacific tracks—a location providing a large tract of industrial land, approximation to the geographical center of population, and affording abundant land suitable for employee housing centered in a new community development. (Panorama City). This plant is representative of the type of industry sorely needed in the Valley. Such assembly plants can be placed near residential centers without causing undue disturbance or annoyance, providing industrial areas are made available. Though involving very large capital expenditures, such concerns usually employ several thousand highly skilled workers—the type of labor found most abundantly in the Valley today.
While there is a handful of industrial plants employing a thousand or more workers each in the Valley, the vast majority of concerns are very small—employing from five to twenty-five workers. Machine shops, cabinet making, aircraft precision tooling, aviation maintenance, and agricultural processing plants employ the bulk of industrial laborers able to obtain employment within the Valley.

52. Industrial Development of North Hollywood.

For the most part, the general distribution of industry in this community closely resembles that prevailing elsewhere in the Valley. (Plate II.) Industrial zoning is confined to an extremely limited area on both sides of the Southern Pacific Railroad track in the north and near the Pacific Electric—Southern Pacific tracks in the center of town. The only other major industrial establishment in North Hollywood is the Republic Motion Picture Studio on Ventura Boulevard. (Fig. 101 and Plate II.) Intimately associated with these industries and in close proximity to North Hollywood are other motion picture studios—Universal in Universal City, Warner Brothers' First National, Columbia Pictures Ranch Studio, and Walt Disney Productions all in Burbank plus the Lockheed Aircraft plants. (Plate II.)

It is quite obvious that there has been little improvement in the industrial development of North Hollywood during the past decade. (Plates I and II.) Though the area devoted to industry nearly doubled on a percentage basis during this brief span of years, the actual number of plants and employees added to the local payroll was minuscule in comparison with the tremendous increase in population and labor-force potential. (Tables 3, 15.) This is due largely to the fact that people move into such communities in Southern California with little
first-hand knowledge of the opportunities for work—being attracted here by the climate and glamour, which have been exploited to the limit by the All Year Club, the Chamber of Commerce, and the motion picture industry. Thus the newcomer thinks of this land in terms of its being an advantageous place in which to live and not in terms of such mundane matters as securing work and a livelihood—at least, not at first. In addition, North Hollywood and the Valley as a whole is a fringe area with respect to the industrial and commercial districts of the metropolitan area, as these are found in the eastern or southern sections of the coastal plain.

In 1949 the North Hollywood Chamber of Commerce conducted a general survey of local industrial plants. In a published directory, it listed about two hundred plants employing 5400 workers and disbursing an annual payroll of approximately 20 million dollars.* (68) Among the more important industrial categories mentioned in this report were: airplane equipment, aircraft parts, automobile accessories, cabinet and millwork, ceramics, concrete blocks and shapes, die casting,

* For nearly a quarter century the quarrying of sand and gravel was a minor industry in North Hollywood. Gradually these open pits have been abandoned and in mid-1949 the last of the quarries shut down—the one located at Sherman Way and Laurel Canyon Boulevard. (Plate II.) These quarries required very few workers as most of the labor was performed by machines. Though the pit at Sherman Way was an important source of sand and fine gravel for construction purposes, it had become an eyesore and its operation a nuisance in a residential area. (Figs. 90-92.) The extraction of sand and gravel from the Tujunga alluvial fan has now been shifted to the even larger pits in the vicinity of Reseda (Sun Valley). Nevertheless, North Hollywood has been scarred by these huge pits. Eventually such areas will have to be filled-in and the land made available for types of land use befitting a residential area. Litigation concerning the operation of these gravel pits in a residential area emphasizes the complexity of land use in an area undergoing rapid change, as sand and gravel are very important natural resources vital to the building industry.
Figs. 90-95. Gravel pits in North Hollywood. Though the quarrying of sand and gravel building materials is no longer an industrial activity in North Hollywood, these deep gashes in the earth remain as eyesores. Fig. 90 is a view of the pit at Sherman Way and Laurel Canyon Boulevard looking east. Some size of the pit may be gained from the power shovel being moved out of the pit. Fig. 91 is a view looking toward the north wall of the pit with the power shovel visible in the mid-ground. Note the scrub vegetation growing at the bottom of the pit.

Fig. 92. Stratification of deposits in the gravel pit. This close view of the west wall of the pit shown in Figs. 91-92 reveals the banded nature of the deposits forming the vast Tujunga alluvial fan. Such deposition has been in progress for thousands of years. The depth of the pit at this point is approximately 65-75 feet.

Fig. 93. A long abandoned gravel pit. The small gravel pit at Sherman Way near Vinaland Avenue has long been abandoned, but, nevertheless, it constitutes an eyesore. This pit is very close to the new Sun Valley Junior High School. (Fig. 124.) Though blocked off by a high fence, the athletic field of the school abuts on the far side of the pit as seen in this photo. This is not an ideal arrangement. Note the vegetation growing in the pit and along its sides.
dolls, electrical equipment and motors, fencing, furniture, hardware, leather products, machine parts, metal products, motion pictures, oil tools, pens, plastic products, playground equipment, precision tools, rock and gravel consolidates, sewing machines, sheet metal products, sporting goods, store and studio fixtures, toys, trailers and trailer equipment, welding products, window blinds, women's apparel, and wood products. Such a list of "industries" can hardly be considered as furnishing a basis for the development of a sound industrial economy for local residents—at least not on the basis of existing small shops involving limited capital, a mere handful of workers, and producing trivial quantities of manufactured articles.* (Figs. 94, 97.)

To all intents and purposes, there are only four major industrial establishments in North Hollywood: Adel Precision Products, Bendix Aviation Corporation, Trumbull Electrical Manufacturing Company, and Republic Studio. (Figs. 95, 96, 98, 101.) Adel Products manufactures precision parts for aircraft assembly, and is directly dependent on orders obtained from Lockheed, Douglas, and North American aircraft companies. Bendix also makes some aviation equipment, but since the close of World War II it has been more active in production of automatic washing machines and similar electrical appliances. Trumbull manufactures electrical motors for industrial, aviation, and household use. These

* There is an excellent source of electrical power in North Hollywood and the Valley. A direct power line of 287,500 volts from the Hoover Dam hydro-electric project of the Los Angeles Department of Water and Power enters Receiving Station E located in North Hollywood—one of two such stations in Southern California. (Map 15 and Plate II.) In addition to this power source, Receiving Station E obtains power from the Owens Aqueduct hydro-electric system—a 110,000 volt line, which will soon be stepped-up to 250,000 volts upon completion of the Owens Gorge project. Thus this key transformer station is in a position to make available to North Hollywood and the Valley electrical power in any desired voltage and in sufficient quantity to support an extensive program of industrialization.
plants employ fewer than one thousand workers each, but more than five hundred. Republic Studio obviously produces motion pictures, and this plant employs between 1500 and 2500 workers, depending on production schedule. In addition, nearby Universal Studio, Warner Brothers' Studio, Lockheed Aircraft, and General Motors Chevrolet assembly plant maintain large payrolls.

53. Motion Picture Industry.*

In 1915 the motion picture industry began to move into the Valley in search of vast tracts of cheap land, clear skies, and varied natural settings. Shortly after completion of the Pacific Electric Railway interurban from Hollywood to North Hollywood via Cahuenga Pass, Universal Studio (the largest in the world at this time) moved into the Valley. Approximately 500 acres of the Providencia tract south of the Los Angeles River was purchased as a site for this rapidly expanding motion picture studio. (64) An independent incorporated city, which has been maintained as such to this day, was established in order to escape taxation as well as the legal problems likely to arise within the confines of Los Angeles, Burbank, or Lankershim (North Hollywood). (Plates I and II.) (See Chapter VI.) The rolling terrain of this tract provided excellent "locations" for "Western" movies and the Los Angeles River section was converted into a jungle setting. In addition, there were nearby snowcapped mountains, torrid deserts, and the wide-open spaces of the whole Valley. (Fig. 99.)

Fig. 94. Small-scale industry. In an area of rapid residential building, the concrete block industry thrives. There are many such small centers of production in the northern section of North Hollywood. Naturally most work is done out-of-doors the year-round and shapes are stored in the open. Such a plant employs a very small labor force. Photo taken looking east from Lankershim Boulevard along Sherman Way.

Fig. 95. Bendix plant. This is one of the larger industrial establishments in North Hollywood. It employs a sizable labor force and has been expanding its production facilities since World War II. Photo taken looking south from Sherman Way.

Fig. 96. Adel Precision Products plant. Another important industrial plant in North Hollywood. Actually this plant is located astride the North Hollywood-Burbank boundary line as Clybourn Avenue is not a through street. Photo taken looking north from Vanowen Street.

Fig. 97. A cluster of small industrial shops. Since the war there has been some construction of small industrial shops clustered together in one or two large buildings forming a square. Photo shows a section of one of these industrial centers near Sherman Way and Laurel Canyon Boulevard. There are approximately fifty small shops operating in this unit.

Fig. 98. Trumbull Electric. This is another of the "major" industrial establishments in North Hollywood. It is located near Vineland Avenue and Vanowen Street.

The outstanding characteristics of these plants is their one story, expansive buildings and the large space set aside to accommodate the automobiles of patrons and employees. Such plants tend to cover several acres of ground and are typical of industrial establishments throughout Southern California.
Within a short time, First National Studio (later known as Warner Brothers' First National) selected a site in Providencia tract north of the Los Angeles River and just a short distance northeast of Universal City. (Plate II.) This property was located in Burbank, although only two blocks from the Los Angeles City boundary at North Hollywood. The failure of North Hollywood to attract this vital industrial plant was due largely to apathy, high realty values, lack of conveniently accessible acreage, and inability to compete with Burbank in regard to favorable tax adjustment, etc.

Republic Studio emerged from the re-organization of a less successful company. Originally a small studio, it occupied a site along Ventura Boulevard near the juncture of the Los Angeles River and the Western Branch of Tujunga Wash. (Plate II.) Subsequent enlargement of this studio, now occupying an inadequate site due to the restrictions imposed by physical and cultural factors, reflected, in varying degree, the geographic inertia of location and the conservative nature of capital investment as well as proximity to a specialized labor force. (Fig. 101.)

Within recent years, R.K.O. Motion Picture Company has built a ranch studio near Encino—about five miles west of Republic Studio. Columbia Productions also constructed a ranch studio on property abutting the North Hollywood-Burbank boundary, but in Burbank. (Plate II.) Such studios are merely subsidiary to the major centers of production of these companies, which are located elsewhere in Los Angeles County. The ranch studio specializes in the production of "Western" motion pictures and maintains the equipment required for such an enterprise.

Thus North Hollywood was surrounded by five major motion picture studios within a period of fifteen years. Prior to the
tremendous expansion of population during the post-war period, this
community was increasingly dependent on the payrolls of these highly
specialized industrial concerns. Though the motion picture studios
still continue to employ approximately the same number of workers as
in past years, the relative significance of this industry has declined,
when compared to the total potential labor force now residing in North
Hollywood.

54. Aircraft Industry.

In 1929 an airport was established in Burbank near San Fernando
Road. An embryonic aircraft plant, eventually to be known the world-
ever as Lockheed, was established in the immediate vicinity of this
airport. An aircraft plant seeks as many as possible of these factors
with respect to its location: a vast expanse of cheap, flat land, a
reasonable rate of taxation on such large, relatively undeveloped areas,
a maximum number of days having suitable atmospheric conditions for test
flights, and a climate permitting large-scale plane assembly work out-
of-doors at all seasons of the year. The nascent Lockheed Aircraft
Company found that Burbank provided all these highly desired factors
and, in addition, was the location of a major airport. Thus a struggling
a ercraft company, employing a mere handful of workers and dependent on
airline or government contracts, was successfully established near North
Hollywood.

With the advent of World War II, Lockheed Aircraft Corporation
began to expand very rapidly. (65) The need for additional plane
assembly lines resulted in the construction of a second plant adjacent
to North Hollywood. (Plate II.) During the peak period of war
production, these plants employed more than 90,000 workers and produced
The main studio lots are walled towns, each with its principal thoroughfares, sidestreets, and alleys. On the lot people work together, live together, eat together. With from two to three thousand employees, each lot is a community in itself. Occupying thirty to forty acres of land, each lot has its own office buildings; its factories (the stages); its theaters and projection rooms; its laboratories, dressmaking shops, blacksmith shops, machine shops, wardrobes, restaurants, dressing rooms, lumber sheds; greenhouses; scene docks; electrical plant, garages; and planing mills. No one has ever precisely defined a motion picture lot. It is neither a factory nor yet a company town.

C. McWilliams:
Southern California Country

1. Sound stages
2. Administrative offices
3. Open air sets (A jumble of frontier towns, city streets, majestic palaces, airports, ocean liners, industrial plants, Southern plantations, etc.)
4. Reservoir (Studio maintains a fire fighting force.)
5. Hills behind the studio.
   (Photo taken looking east-southeast.)
6. Los Angeles River (Area marked by number now filled in for a parking lot.)
7. Lankershim Boulevard (Highway turning westward to pass under Cahuenga Pass Freeway within a half mile.)
8. Edge of a Toluca Estate.
   (Lakeside Country Club just behind this stable to the east.)
(Illustration filed with the original and first copy.)
tens of thousands of military planes. (Southern California manufactured approximately 35 per cent of all military planes built in the United States during World War II; Los Angeles County—27 per cent; Lockheed Aircraft Corporation—7 per cent.) At the same time many subsidiary producers sprang into being in close proximity to these Lockheed plants, especially along the northern route of the Southern Pacific Railroad through North Hollywood—Adel, Bendix, etc. With the termination of hostilities, production at Lockheed declined precipitously and the labor force was cut to approximately 12,000 employees by late 1947. (Although production of aircraft was greatly curtailed after the war, the percentage of total production concentrated in the Los Angeles area rose to approximately 50 per cent.) The subsidiary plants either closed down or diversified production.

Though a considerable number of North Hollywood residents work at Lockheed or in these subsidiary plants, the aircraft industry does not occupy as significant a place in the over-all employment potential in this community as does the motion picture industry. Nevertheless, the war-time expansion of the aircraft industry has left a residue of skilled, precision-trained workers in North Hollywood—laborers acquainted with the mass production techniques of modern industry.

55. Sources of Employment Outside the Valley.

The question naturally arises as to the number of employees in these various industrial plants actually living in the Valley, or, more specifically, in North Hollywood. There can be no completely satisfactory answer to this query. Available information relating to this subject is so spotty and generalized as to be nearly worthless.
In view of the limited industrial land use development in North Hollywood and the vast daily migration to places of employment outside the Valley, it is more than likely that only 10 per cent of the industrial labor pool finds employment in local industry. Careful periodic checks of unemployment compensation claim records reveal that over 55 per cent of the Valley relief recipients work outside the area. This figure, naturally, includes a large number of seasonal workers associated with agricultural processing plants and field labor. For such a highly urbanized area as North Hollywood, where the labor force is trained for industrial and commercial work, this figure would more nearly approach 80 per cent.* In addition to the 10 per cent able to obtain industrial employment in North Hollywood or the Valley, there is a possibility that another 10 per cent finds employment in local commercial enterprises.

There can be no denying the fact that tens of thousands must seek a livelihood outside the Valley every day. A few minutes spent gazing upon the Cahuenga Pass Freeway about eight o'clock in the morning or five o'clock in the evening affords convincing proof of this contention. (Figs. 127-129.) Automobiles flow along this super-highway at the rate of sixty to eighty per minute during these rush hours—cityward in the morning and Valleyward in the evening.

Another valuable source of evidence, pertaining to the place of employment of North Hollywood residents, is a tack map prepared by the Public Relations Department of the Kaiser Community Homes Corporation. This tack map reveals the distribution of employment for all persons moving into the Kaiser housing project in North Hollywood in 1946—

* This estimate was obtained from Mr. H. P. Jensen, Research Director, California Department of Employment, Van Nuys Regional Office. Further study of this very important subject is being conducted at this office, but on a far too limited scale.
**MAP 13**

Employment Addresses of Kaiser Home Purchasers
in the North Hollywood Tract.

Geographic distribution of employment:

<table>
<thead>
<tr>
<th>Area</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Los Angeles (Central Dist.)</td>
<td>34</td>
</tr>
<tr>
<td>Hollywood</td>
<td>25</td>
</tr>
<tr>
<td>Burbank</td>
<td>13</td>
</tr>
<tr>
<td>North Hollywood</td>
<td>7</td>
</tr>
<tr>
<td>Van Nuys</td>
<td>5</td>
</tr>
<tr>
<td>Beverly Hills</td>
<td>2</td>
</tr>
<tr>
<td>Glendale</td>
<td>2</td>
</tr>
<tr>
<td>Culver City</td>
<td>2</td>
</tr>
<tr>
<td>Scattered</td>
<td>12</td>
</tr>
</tbody>
</table>

(The major industrial section of Los Angeles extends from the town of Vernon—just below the large cluster of workers in downtown Los Angeles—southward and eastward. Very few residents gave employment addresses in this area.)
approximately 650 employed residents. (Map 13.)

There are two major foci of employment: the Central Business District in downtown Los Angeles (also the section housing many of the Federal, state, and municipal government offices) and the nearby "city within a city" of Hollywood.* Each of these centers accounted for roughly one-third of the total number of workers interviewed. Two minor clusters of employment in Burbank mark the sites of the Lockheed plants. The small cluster in northern Van Nuys indicates the site of the General Motors Chevrolet assembly plant. It is interesting to note that some workers living in North Hollywood travel to Long Beach, Wilmington, and Hawthorne for employment—a distance of fifty to sixty miles per round trip.

56. Commercial Land Use in the Valley.

Commercial development of San Fernando Valley has been confined mainly to small areas in the heart of the many communities scattered throughout the region. (Map 12.) These clusters of shops cater, more or less, to the immediate day-to-day needs of the local residents, but are seldom regarded as a source of merchandise beyond the prime necessities. Most of these establishments consist of markets, bakeries, shoe repair shops, restaurants, dry cleaners, laundries, drug stores, barber shops, beauty parlors, theatres, and variety stores. In most instances residents travel to nearby Hollywood or Los Angeles to purchase major items, such as clothing, household furnishings, and other articles.

* Examination of another tack map prepared by this same organization in 1949, involving a considerably larger number of informants residing in a housing project a few miles west of North Hollywood (Panorama City), revealed an employment distribution pattern very similar to the one found in North Hollywood in 1946. The two maps are virtually indistinguishable, except for the quantitative difference in the two surveys.
best selected from the large stocks of department stores or specialty shops catering to a mass market.

Naturally, the concentration of population in the southeastern section of the Valley has promoted more intensive commercial development of this area. There is a cluster of commercial establishments along Van Nuys and Victory Boulevards in Van Nuys, a ribbon-like development of commercial land use along Ventura Boulevard in the south, and an attenuated development along Lankershim Boulevard in North Hollywood. (Map 12.) These three commercial centers clearly reflect the historical evolution of settlement in this section of the Valley as well as a response to the location of arterial highways and major transportation routes. (See Chapters VIII and IX.)


The commercial growth of North Hollywood has been considerably more significant than the industrial. (Table 10.) Between 1920 and 1949, there was an increase of slightly more than three per cent or 420 acres in commercial land use. This period was marked by an extension of commercial occupancy along Lankershim Boulevard—hub of all commercial development in North Hollywood. (Plates I and II.) As a vital traffic artery connecting Los Angeles and Hollywood with San Fernando Road and thence northward to the San Joaquin Valley via Cahuenga and San Fernando Passes, this boulevard attracted local business establishments from the earliest days. Concentration of commercial enterprises along this highway created and promoted a linear pattern of commercial growth in North Hollywood. From a nucleus near Chandler Boulevard and the Pacific Electric Railroad station, various stores and shops began to spread northward and southward along Lankershim Boulevard. (Plate I.)
Fig. 100. Radio station transmitter in North Hollywood. The location of a transmission center in a heavily occupied residential area is not very sound zoning. To the right of this photo, there has been extensive housing development. Shortly, the whole area will be engulfed by residential land use. Photo taken looking north from Burbank Boulevard near Coldwater Canyon Avenue.

Fig. 101. Republic Motion Picture Studio. One of the smaller motion picture studios located on the north side of Ventura Boulevard near Colfax Avenue. Photo shows some of the sound stages with Ventura Boulevard in the foreground. The business area near the studio is referred to locally as Studio City.

Figs. 102-103. Truck gardens in North Hollywood. Agriculture is virtually a defunct type of land use in this area today. A few truck gardens hold out in the industrial sections near the northern tracks of the Southern Pacific Railroad. This farm is located along Sherman Way near Whitsett Avenue. There are approximately 20 acres under cultivation here. All cropping necessitates the use of irrigation water obtained from the Los Angeles Dept. of Water and Power. A winter crop of green onions and carrots are about to be harvested in Fig. 102. In Fig. 103, a crop of celery and carrots has recently been planted. This farm land is operated by Japanese under lease. Most small truck farms in this area are now operated by none too efficient Mexicans and Koreans. When the Japanese returned from the concentration camps after World War II, they fled to greener pastures—better land—unless they owned their own land and had not sold out under the pressure of war-induced hysteria.
Between 1853 and 1949, the area from Riverside Drive to Victory Boulevard has been lined nearly solid with all types of commercial enterprises. (Plate II.) Desirable property along Lankershim Boulevard, from Saticoy Street on the north to Ventura Boulevard on the south, is virtually unobtainable at any price. Within ten years, prices per front foot along this boulevard have increased from five to twenty times their former value due to the great demand for store sites geographically accessible to a rapidly expanding market.

High property values and lack of adequate sites along Lankershim Boulevard has promoted commercial expansion along other major thoroughfares, especially Magnolia Boulevard east of North Hollywood Park and along Vineland Avenue south of Chandler Boulevard. (Plate II; Fig. 108.) At Riverside Drive and Cahuenga Boulevard a small shopping center, catering to the Toluca Lake residents, has developed within recent years. Burbank Boulevard, east of Tujunga Avenue, has been taken over by commercial establishments supplying nearby residents. The very important traffic artery stretching along the southern side of the Valley—Ventura Boulevard—has been subverted to commercial ends.

Basically, the commercial land use pattern has been one of "shoestring" developments along major highways—a far from ideal type of commercial growth for an urban community. Scattered here and there, where zoning permits, are small nuclei of commercial land use, but in nearly every instance shopping necessitates the use of an automobile—even to obtain a loaf of bread or a quart of milk.

The types of commercial establishments found along Lankershim Boulevard do not differ markedly from those occupying the main streets of other towns of similar size and import throughout the nation.

Several stores in Los Angeles maintain branch outlets in North Hollywood—
a system of decentralized merchandising that is very popular and a virtual necessity in a sprawling metropolis. (Figs. 104-106.) Such branch stores cover a wide range of commodities: women's and men's apparel, drugs, candy, automobile accessories, gasoline stations, theatres, variety items, and foodstuffs.* Neither Sears, Roebuck nor Montgomery Ward have a store in this rapidly expanding marketing center, though the latter concern owns a large vacant tract on Lankershim Boulevard between Oxnard and Erwin Streets. (Plate II.)

None of the major department stores in Los Angeles has a branch in North Hollywood or the Valley, though they frequently have such outlets in other suburban cities. Marketing analyses indicate that this area is now overdue for such large-scale commercial development. Already the central portion of North Hollywood no longer offers acreages of sufficient size for the extensive parking facilities and buildings required by such a store. With an ever-westward movement of population, these stores might find it more profitable to locate elsewhere in the Valley, but locate here they must within a matter of a few years.

Scattered throughout North Hollywood, generally near the intersection of two major highways, are to be found small business centers. (Figs. 109, 110.) Frequently these consist of a series of shops incorporated in one large building. The major attraction is invariably a "super drive-in" market with ample off-street parking space for its motorized patrons. Next to the market may be found a

* Of more than passing interest, especially in view of the rapid expansion of urban settlement during the past decade, is the presence of approximately 275 real estate brokers, agents, or firms, and about 70 building contractors with offices in North Hollywood. Real estate offices are more common than the ubiquitous gasoline stations.
Fig. 104. Lankershim Boulevard commercial development. A view of Lankershim Boulevard looking west near Magnolia Boulevard. The bank and drug store are branches of companies operating from Los Angeles.

Fig. 105. A continuation of the Lankershim Boulevard commercial development. A view of the boulevard on the west side looking toward Weddington Street to the north. See's Candy Shop, Kirby's Shoes, and the Lerner shop represent Los Angeles companies and these are branch outlets.

Fig. 106. Lankershim Boulevard at Chandler. This view shows the east side of the boulevard looking south. These stores line the opposite side of the boulevard from those in Figs. 104-105. The drug store in the foreground marks the commercial nucleus of the town in the early days.

Fig. 107. Lankershim Boulevard as it appeared in past decades. This row of pepper trees marks a vacant stretch along Lankershim Boulevard between Oxnard Street and Victory Boulevard. Not so many years ago much of the boulevard was lined with similar trees.

Fig. 108. Magnolia Boulevard commercial development. View looking east along the south side of Magnolia from Lankershim Boulevard. Commercial development has begun to spread along such major cross streets. Both sides of this street as far as Vineland Avenue have been converted to commercial use.
string of small shops—women's apparel, drug store, five and ten, 
beauty parlor, dry cleaner and laundry, cocktail bar, and gasoline 
station. All of these stores are not to be found in every market 
center of this type, but different combinations prevail. Under such a 
system of motorized marketing, the neighborhood store and community 
center has little opportunity to function in a manner commonly associated 
with highly localized household merchandising. Thus in most residential 
sections of North Hollywood stores are too distant for convenient 
pedestrian shopping. (Plates I and II.) Even a journey to Lankershim 
Boulevard necessitates the use of an automobile as the populace has 
become habitually motorized.

Ventura Boulevard does not resemble these other commercial 
streets to any marked degree. (Plate II.) As part of the through 
route from Los Angeles to San Francisco via the coast highway, it has 
a considerable number of tourist motels and gasoline stations. The 
North Hollywood section is noted for its de luxe restaurants, supper 
clubs, and antique shops. (Figs. 114-116.) The section near Republic 
Studio, frequently referred to as Studio City, has several multiple 
dwelling units and a few shops catering to domestic needs. Basically, 
the boulevard has become a "shoestring" development of commercial 
enterprises, which do not depend in the least on local trade. By 
means of extensive zone variances granted during recent years, commercial 
establishments have completely destroyed Ventura Boulevard as a high-
upped, cross-Valley traffic artery.


It is obvious that the present industrial and commercial 
development of the Valley is totally inadequate to employ the ever-
expanding labor pool. Some understanding of the size and composition
of this labor force will throw light on the problem of providing
suitable employment for these workers within the Valley, thereby pro-
moting the socio-economic stability of such communities as North
Hollywood.

Unfortunately most of the available data is of pre-war
vintage, but, as previously mentioned, changes in statistical values
have been quantitative rather than qualitative. Age groupings have
changed very little among those old enough to seek work today. (See
Chapter VII.) The types of employment sought by new residents do not
differ materially from former years. It is true that some employables
in the Valley have become highly skilled precision workers due to the
nature of war-time employment, and there is an extremely valuable pool
of such workers in the North Hollywood-Burbank area, many of whom are
not so employed today. But even allowing for such war-induced skills,
the general labor force today does not differ markedly from that of
a decade ago.

In North Hollywood, nearly 30 per cent of the employed have
been engaged in professional, semi-professional or managerial positions.*
Clerical workers constitute 20 per cent of the labor force and crafts-
men-operators, an additional 30 per cent. On the basis of such an

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* The percentage distribution of employment by major occupation
categories in North Hollywood, according to the 1940 Census, was as
follows: professional—11.3; semi-professional—4.0; proprietor,
manager, etc.—13.7; clerical—20.7; craftsman—17.0; operative—13.1;
domestic—4.4; service—7.3; laborer—8.6; unreported—1.7.

Of the total labor force in North Hollywood in 1940, 80 per
cent received either wages or salary as employees and only 20 per cent
were classified as employers.
Fig. 109. A super-market center. This is one of many strategically located large-scale markets and shopping centers. Scott's Super-market is located near the corner of Vineland Avenue and along Victory Boulevard. In addition to the market, there is a paint store, dry cleaners, variety store, barber shop and beauty parlor, restaurant, and clothing store on the corner. The other corners counterclockwise from the clothing store are occupied by a real estate agent, and two different gasoline company stations. Photo taken looking south along Victory Boulevard.

Fig. 110. Continuation of the super-market center. Each of these markets must provide ample parking space for the highly mobilized clientele which patronizes them. The parking lot in this photo stretches around the market and shopping center, and provides two entrances or exits.

Fig. 111. A drive-in market in the heart of North Hollywood. This market is located at the northeast corner of Lankershim and Magnolia Boulevards. Patrons can drive their cars into the space behind the little hot-dog stand in the center of the parking space. Note a car entering on the right.

Fig. 112. A super-market chain store. This very large market located at Camarillo Street and Lankershim Boulevard is one unit in a chain operating out of Los Angeles. This market probably does more business than any other three or four markets in North Hollywood. On the left is a paved parking lot capable of accommodating from 50 to 70 automobiles.
occupational distribution, it would appear that the community is composed mostly of middle class workers. Local employment opportunities will have to parallel this occupational pattern or else offer extraordinary inducements to the employable residents. One such inducement is geographical: nearness to home and avoidance of a long, costly, nerve-racking drive to and from work each day. Within limits, this factor, in itself, may promote interest in changing employment and even acceptance of a reduced rate of pay. Yet, there is a limit to the number of jobs that can be made available in many of these occupational categories. This factor must be taken into consideration by those intent on providing more extensive local employment opportunities in North Hollywood and the Valley.

The occupational distribution for North Hollywood by census tracts closely resembles the population and housing developments in this area. (Table 16.) Tracts #19 and #22 have few professional or managerial type employees in residence, but large numbers of laborers, craftsmen, and operatives. Within the past decade, there has been a heavy influx of new residents into Tract #19, and the occupational composition of the population today would probably reveal a large percentage increase in the professional, semi-professional, and managerial groups. Such a shift in employment is not likely to be duplicated in Tract #22, as this section is still largely settled by laborers, craftsmen, and operatives. (See Chapter VIII.) Tracts #24 and #25 are definitely centers of professional and managerial workers of the higher income group. The large number of domestics in Tract #24 reflects the presence of servants and homes of wealth. Of the seven tracts constituting North Hollywood, Tract #21 more nearly approaches the typical percentage distribution of a balanced urban type occupational...
TABLE 16. Percentage distribution of employment and occupations by census tracts for the North Hollywood District, San Fernando Valley, Los Angeles, California, 1940.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Tract #19</th>
<th>Tract #20</th>
<th>Tract #21</th>
<th>Tract #22</th>
<th>Tract #25</th>
<th>Tract #24</th>
<th>Tract #25</th>
</tr>
</thead>
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<tr>
<td>Professional</td>
<td>5.7</td>
<td>13.2</td>
<td>10.8</td>
<td>5.2</td>
<td>12.0</td>
<td>15.0</td>
<td>17.7</td>
</tr>
<tr>
<td>Semi-professional</td>
<td>3.1</td>
<td>3.9</td>
<td>2.7</td>
<td>5.0</td>
<td>4.6</td>
<td>4.6</td>
<td>5.0</td>
</tr>
<tr>
<td>Proprietor, Manager, etc.</td>
<td>11.8</td>
<td>14.8</td>
<td>14.5</td>
<td>8.2</td>
<td>14.0</td>
<td>15.2</td>
<td>17.4</td>
</tr>
<tr>
<td>Clerical</td>
<td>9.1</td>
<td>24.0</td>
<td>21.6</td>
<td>16.5</td>
<td>27.0</td>
<td>23.3</td>
<td>23.5</td>
</tr>
<tr>
<td>Craftsman</td>
<td>25.0</td>
<td>14.6</td>
<td>17.0</td>
<td>23.0</td>
<td>14.5</td>
<td>13.3</td>
<td>10.8</td>
</tr>
<tr>
<td>Operative</td>
<td>17.8</td>
<td>10.5</td>
<td>14.6</td>
<td>18.0</td>
<td>11.8</td>
<td>10.5</td>
<td>9.1</td>
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<tr>
<td>Domestic</td>
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<td>4.0</td>
<td>3.6</td>
<td>5.6</td>
<td>4.5</td>
<td>3.9</td>
<td>5.4</td>
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<td>Service</td>
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<td>8.2</td>
<td>7.0</td>
<td>8.3</td>
<td>7.5</td>
<td>5.7</td>
<td>7.5</td>
</tr>
<tr>
<td>Laborer</td>
<td>14.7</td>
<td>5.9</td>
<td>5.7</td>
<td>12.0</td>
<td>3.8</td>
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<td>1.1</td>
<td>1.5</td>
<td>1.2</td>
<td>.5</td>
<td>1.1</td>
<td>.8</td>
</tr>
</tbody>
</table>


structure. It exemplifies both the weaknesses and strengths inherent in the urban populace and economy.

For the most part, North Hollywood presents a fairly balanced occupational structure when compared with the city as a whole, but not so balanced with respect to employability locally. It is decidedly top-heavy in regard to the number of professional, managerial, and
Fig. 113. Ventura Boulevard from the hillside. On the south side of Ventura Boulevard, the Santa Monica Mountains tend to restrict commercial development. Note the steep cliff excavated behind the house. Along such sections there is a conglomeration of old houses and commercial enterprises.

Fig. 114. Commercial development along Ventura Boulevard. Along the north side of the boulevard looking east from Whitsett Avenue: an exclusive restaurant, doctor and dentist offices, antique shop, men's furnishings, real estate agency, etc.

Fig. 115. Commercial development along Ventura Boulevard. Along the south side of the boulevard looking east toward Vineland Avenue: four large motels for tourists.

Fig. 116. Across the street from the motels pictured in Fig. 115 are two similar establishments. Note the width of the boulevard in this series of pictures, it can easily accommodate six lanes of traffic.
clerical workers. Today, it would be necessary to add an aristocracy of skilled or semi-skilled unionized labor to this list—craftsmen and operatives. Unfortunately for the overall well-being of the inhabitants, North Hollywood reflects an occupational structure closely resembling the national urban trend—larger and larger numbers of professional, clerical, and service workers. These occupations have long been associated with superior status, whereas frequently higher paying jobs at the craftsman-operate level have not been so regarded. Insistence on employment in these "status" occupations will militate against the effectiveness of any proposed solutions to the problem of local in-

Valley work as there is a definite limit to the number of such jobs.

59. Municipal Land Use in the Valley.

Although North Hollywood was an independent, incorporated community until 1923, there has been very little development of local government administration in this part of the Valley. Shortly after the incorporation of this vast area within Los Angeles City, Van Nuys was selected as the logical geographic center for establishment of a decentralized type of municipal administration in the Valley. As a consequence, most of the city departments of government are housed in this community, e.g., engineering and building, vital statistics and public health, public works, and justice. North Hollywood has only those municipal agencies necessary to the normal functioning of any small urban community—police and fire stations, post office, library, water and power units. Though a few of these agencies are dispersed throughout the community, there is a tendency for such functions to cluster near the center of town. Plans have been pending to make a small municipal administrative center in the vicinity of Tujunga Avenue.
and the Pacific Electric tracks along Chandler Boulevard, but very little has been accomplished to date. (Plate II.)

Rapid expansion of population and resultant increase in residential land use in the Valley, especially in the North Hollywood area, has posed serious problems for nearly every branch of municipal government. (67) Los Angeles has been rudely awakened to the fact that nearly 50 per cent of the city's total area is being settled at a prodigious rate by an enormous influx of urbanites from Eastern and Middle Western cities and towns. (Map 14.) This urban type of settlement necessitates the construction and maintenance of a vast network of roads, an expansion of fire and police protection and public utilities, the enlarging and building of additional libraries, schools, and parks plus all the other conveniences normally associated with urban living in the 20th century. Geographic factors associated with spatial configuration and size of area plus sociological factors relating to time, speed, and type of settlement have very serious bearing on the ultimate outcome of this hectic, helter-skelter, and virtually planless urban settlement of the Valley. Even at this early date North Hollywood exhibits the defects inherent in a too hasty and planless expansion of urban development.

80. Urban Public Works.

Though very little information pertaining to Valley developments, as segregated from the city as a whole, is available regarding public services, a few reports are issued by the Van Nuys municipal bureaus from time to time. One of the most significant recent reports covers the activities of the City Engineer's Office in the Valley. This department has charge of the design of all streets (except parkways),
Areal relation of the San Fernando Valley to other sections of Los Angeles City and non-city territory. (San Fernando Valley comprises 47 per cent of Los Angeles City.)
sanitary sewers, storm drains, and grading; preparation of assessment maps and ordinances for all improvement projects; maintenance of various record maps of utilities in the Valley; and the issuance of all types of construction permits as well as the enforcement of the municipal building code.

During the fiscal year 1948-1949, this division of the City Engineer's Office was responsible for the construction of 285 projects, involving 210 miles of streets, sewers, and storm drains plus the usual regulatory activities, including the checking of thousands of building permits. These projects cost the taxpayers of Los Angeles nearly $8 million and represented approximately three times the construction of the previous year. In addition, work was in progress on 114 projects and design begun on 150 others. The total work for this one year involved 322 projects, 720 miles of improvements, and over $20 million in expenditures. (68) Actually construction activities of the past few years merely represent a first phase of the urban expansion in the Valley, as expenditures will continue to increase during the next decade.

With an enormous expansion in population concentrated in the southeastern section of the Valley, a large proportion of this public construction took place in North Hollywood and Van Nuys. Though there has been extensive road building and surfacing in North Hollywood, many streets in the northern portion of the community remain unpaved. (Fig. 121.) It is utterly impossible for the City Engineer's Department to service every section of such a rapidly growing area plus similar areas throughout the city, but every effort is being made to keep abreast of the most pressing needs.

An area of ever-expanding urban settlement requires continual additions to the police and fire fighting forces. Police protection is now provided by a force of approximately 220 members, who operate from the central station at Van Nuys. The Valley is largely policed by radio patrol cars or motorcycles, but there is a steadily growing demand for foot patrolmen and a sub-station in North Hollywood. The growing traffic congestion in the southeastern part of the Valley has fostered a move for additional police protection in the highly urbanized districts. A police force of approximately 200 men will soon prove inadequate protection for an area of more than 200 square miles (the size of the City of Chicago) and a population of several hundred thousands. (69)

Equally important to the safety and welfare of Valley residents is adequate fire protection. Every new suburban tract of several hundred homes throws an added burden of fire protection on existing facilities. Within recent months, North Hollywood has been equipped with a new central fire station capable of accommodating a fire department battalion headquarters. (Fig. 120.) Additional stations are scattered throughout this community and elsewhere in the Valley. Though there is a growing need for additional fire stations as population increases, distance remains the major problem in fire fighting in the Valley and costly installations are necessary for the protection of a relatively small group of residents. Fire protection also extends into the mountains, and patrol stations are maintained throughout the Santa Monica Mountains as well as in other highland areas by the city, state, and Federal governments. (Plate II.) In very dry years brush fires in the Valley and on the mountain slopes may exceed one thousand in number, thereby
Fig. 117. Pacific Electric Station in North Hollywood. This antiquated station reflects the manner in which transportation by public carrier has been neglected. The station was built about 1915. The streetcar, also, reveals something of the outmoded equipment used by this company. These cars represent models more than thirty years old, though "modernized" within the past decade. The title "Southern Pacific" on the sign over the station is a clue to the present difficulties regarding railway rapid transit in the Valley. The S. P. is still interested in Valley freight routes, but not passengers.

Fig. 118. North Hollywood has a branch library as part of the city system. The Sidney Lanier Library is located in North Hollywood Park near Magnolia and Tujunga Boulevards. Though suitable for the community some ten to twenty years ago, it can not efficiently serve the much larger population of today. The reading rooms are far too small and stack space too limited. The Spanish style of architecture prevails as indicated by the tile roof, white walls simulating adobe brick, and the general long ranch house appearance. Compare with Figs. 26-27.

Fig. 119. Many churches have been built in North Hollywood since 1945. It is interesting to note that this new Lutheran church in Tract #19 follows the Spanish Mission style of architecture. See Fig. 25. There has been very heavy residential development in the vicinity of this church. Photo taken near Sherman Way and Tujunga Boulevard.

Fig. 120. North Hollywood has recently been provided with this new fire station headquarters. This station is equipped to accommodate a fire fighting battalion and its administrative offices. Such a major station has been sorely needed in this area of rapid population growth. The station is located at Tujunga and Chandler Boulevards in the heart of North Hollywood.

Fig. 121. Miles of unpaved and unsurfaced streets still prevail in North Hollywood. Today, all new subdivisions must provide paved streets and public utilities before any homes can be constructed. This has not always been the case, as there are many sections where homes have been built without paving. In other sections, there are paved roads and sidewalks, but no houses. Side by side there exist new subdivisions with paving, old subdivisions with paving and no further development, and old subdivisions without paving. Unpaved streets are scheduled for paving, but the City Engineer's Office can not service every area at once. This photo taken at Rose Street and Simeon Avenue looking east toward Lankershim Boulevard (automobile on the boulevard).
creating an added burden on the available fire fighting personnel and equipment. (70) (See Chapter III.)


Extensive residential construction makes a very heavy demand on water and power facilities, which, in the Southwest, are always intimately associated. North Hollywood and the Valley derives its water supply from the municipally owned Owens Valley Aqueduct, which empties into the San Fernando Reservoirs at the apex of the Valley. (Maps 7 and 15.) As completed in 1913 by the City of Los Angeles, this aqueduct extended 233 miles northeastward through the Owens Valley in the Sierra Nevada Mountains. Continued population growth, during the next twenty years, led to an expansion of this aqueduct system 100 miles northward to the Mono Basin watershed and Leavining River—a source of water extending north of San Francisco. (Map 15.)

Although Los Angeles is the major municipal shareholder in the Metropolitan Water District, which transports Colorado River water 242 miles to Lake Mathews Reservoir and thence distances varying from 60 to 100 miles to the sixteen member cities and areas of Southern California, North Hollywood and the Valley obtain and will continue to obtain all needed water supplies from the Owens-Mono source. (Map 15.) At present, Los Angeles secures 74 per cent of its total water supply from the Owens-Mono system, 22 per cent from the Los Angeles River and local wells, and only 4 per cent from the Colorado River. (71) Due to the abundant supply of water from the Owens-Mono project, the Valley will always secure sufficient water from the San Fernando Reservoirs, whereas Colorado River water will enter the Los Angeles distribution system at Eagle Rock, near Pasadena, and at Hollywood Reservoir in
the Santa Monica Mountains. (Maps 15 and 7.) Thus North Hollywood is serviced by a system of underground pipes and pumping stations, which closely resembles the distributive network installed for irrigation purposes three decades ago. (See Chapter VI.)

Parallel to this complex system of water distribution is one devoted to hydro-electric power transmission. (Map 15.) In 1917, Power Plant #1 was built in San Francisquito Canyon to supply electric energy to Los Angeles, and shortly thereafter Power Plant #2 was constructed seven miles to the south. These plants supplied hydro-electric power derived from the gravity flow of the Los Angeles Aqueduct. In 1938, Receiving Station E (a "step-down" transformer station) was placed in operation in North Hollywood, and a 110,000 volt transmission line entered this station from these two power generating centers via the San Fernando Power Plant, Switching, and Relay Station near the reservoirs. (Map 15; Plate II.) The rapid residential, commercial, and industrial growth of Los Angeles necessitated an expansion of electrical power resources. In 1936, the 286 mile Boulder Power Transmission System was completed, and in 1939, a 287,500 volt transmission line entered Receiving Station E from the Victorville Switching Station in the Mojave Desert. (Map 15.)

Today, the City of Los Angeles obtains approximately 65 per cent of its electrical energy from the Hoover Dam Hydro-electric Power Plant, 3 per cent from the Los Angeles Aqueduct Hydro-electric Plants, 2 per cent from the Owens Valley Plants, and 20 per cent from fuel oil operated steam generating plants. (72) At present, the Owens River Gorge transmission line is under construction north of Owens Lake, and it will bring an additional 250,000 volts of hydro-electric power into
Station E for voltage reduction and distribution. Thus, in the words of an official of the Los Angeles Department of Water and Power, "North Hollywood and the San Fernando Valley have virtually an unlimited supply of electrical power, which can be made available in any voltages or amounts desired."

Although statistics pertaining to the activities of the Los Angeles Department of Water and Power in the Valley are limited, the comparisons afforded by the following data are significant in that they throw some light on this aspect of urban development. In 1937, the average daily consumption of water in the San Fernando Valley was 80 million gallons and in 1947, 114 million gallons. In 1937, about 75 per cent of the water was used for irrigation purposes, but by 1947, this type of consumption had declined to less than 50 per cent. In the same period domestic use increased from 25 per cent to approximately 55 per cent. In 1937, there were 22,000 domestic water meters and in 1947, 60,000. Water meter installations have been averaging about 750 per month since 1946—10,500 new water services and meters, 311 fire hydrants, 113 miles of pipelines (60 per cent of the total for the city) were installed during 1949. (73) The figures for electric meters and installations closely parallel those for water, as both utilities are essential to an urban community. Such installations, in turn, necessitate a heavy investment in cables, transformers, transmission lines, water mains, and pumping stations. (Figs. 122, 128.)

In addition to these initial expenditures, such facilities require constant servicing, administrative personnel, and local offices scattered throughout the area. These multifarious operations of the Los Angeles Department of Water and Power require the services of more than 10,500
full-time employees and an annual expenditure of 72 million dollars.

63. **Recreational Land Use.**

Recreational facilities in the Valley have consistently fallen below the optimum standards for an urbanized population. Superintendent Jelte of the Los Angeles Department of Recreation and Playgrounds recommends a minimum of three acres per thousand population for active, participant recreation in the metropolitan area. (74) In the North Hollywood district the ratio is approximately 1.8 acres per 1000 people, but elsewhere in the Valley the ratio is even more unfavorable. Although the recreational facilities needed throughout the Valley today and in the near future could be obtained at a fraction of the costs as compared with other sections of the city, this favorable situation will not prevail for long, due to the very rapid occupation of the area by urban settlers and an increase in valuation of all land.

North Hollywood, with a population approaching 100,000, has approximately 185 acres set aside for public parks, but should have a minimum of 285 acres at present. (Plate II.) Inclusion of all school playgrounds would still fail to meet the minimum needs and falls far short of the ideal recreational land use for an urban community. This lack of adequate facilities is especially serious in view of the fact that population is still expanding in North Hollywood. The only possibility of increasing the area available for this type of land use would involve reclamation of all wash areas and then acquisition of private property, especially in the Santa Monica Mountains. Reclamation of the Middle Branch of Tujunga Wash is being achieved slowly (North Hollywood and Victory-Vanoven Parks), but this area will
Fig. 122. A municipal water works pumping station. Scattered throughout North Hollywood and the Valley are these pumping stations. They are silent or nearly silent reminders of the fact that the whole Valley is one vast storage basin for municipally owned water. Here and there, one may spot powerful Lone pumps forcing this water to the surface or along the intricate network of irrigation and urban water supply pipes.

Fig. 123. Receiving Station E in North Hollywood. This is a key sub-station in the Los Angeles City electric power grid. It receives a direct line from Hoover Dam Hydro-electric Power Station and the Owens Valley system. Here high power voltage is stepped-down and sent along to other stations in the Valley and parts of Los Angeles.

Fig. 124. Sun Valley Junior High School. The tremendous increase in population in Tracts 819 and 821 required speedy construction of a new junior high school. This school was built during early 1949, and was open for business in September of the same year. First semester enrollment exceeded the optimum for this school. This will be repeated many times in North Hollywood and throughout the Valley in years to come. To the left of the photo are rows upon rows of new residences, which testify to the need for this school and many more.

Fig. 125. The J. B. Monlux Grade School represents the new trend in educational plants in Southern California. These buildings—some nine in number—are easily constructed and can be readily moved or altered. The climate does not require elaborate two and three story schools with basements, heating plants, etc. The covered arcades may be used for passage from classroom to classroom during inclement weather. Classrooms receive a maximum of light and ventilation, and heating during winter is by individual gas operated floor furnaces. It is fortunate that such a simple type of construction is feasible in this area, as more elaborate structures add to the expense and such buildings lack flexibility.
never provide the necessary recreational facilities. (Plate II.)
North Hollywood has expanded much too rapidly and without careful
planning of land use for a balanced urban existence in which out-of-
doors, year around recreation plays a major role. Consequently, the
opportunity to acquire reasonably priced land in desirable locations
for recreational purposes is gone forever.

In addition to parks and playgrounds, the public library
must also be considered as a major adjunct to recreation in an urban
society.* Public library facilities throughout the Valley are woefully inadequate and do not begin to meet the rapidly growing demand
for reading material on the part of urbanites. There are three branch
libraries in this area: Van Nuys, Canoga Park, and North Hollywood.

Obviously, two of these branches service the heavy population concent-
tration in the southeastern section of the Valley. Just as in the case
of every other municipal service, the geographic factors of distance
and scattered population concentrations militate against the successful
operation of libraries. A system of bookmobiles has been installed to
reach some of the more rapidly growing sections of the Valley without
library facilities. This measure is merely a palliative and the city
is faced with the need for building an extensive system of libraries

* Churches also play an important role in providing recrea-
tion as well as religion in an urban community. Since the close of the
war, there have been many new churches built in North Hollywood, espe-
cially in areas of recent heavy settlement. (Fig. 119.) Typical of most
urban communities and the nation at large, Protestant denominations predominate. The largest concentration of Roman Catholics appear to be in
Tract #22—the Mexican settlement. The Episcopalian stronghold is in
the southern section of Tract #24—the well-to-do residents of Toluca
Lake environs. The presence of a similar church on Coldwater Canyon
Avenue in Tract #25 indicates another center of Episcopalians. Other
Protestant sects have churches scattered throughout the community.
in this area.

Demands on the Sidney Lanier Branch Public Library in North Hollywood Park far surpass its limited facilities. (Fig. 118.) Plans are now underway to convert this library into a regional branch stacked with 75,000 volumes, an adequate reference staff, and more spacious quarters. Such a library would be capable of meeting the more essential needs of a city of nearly 100,000 residents. (75)

64. Public Education Facilities.

Perhaps the most serious crisis in Valley municipal affairs during the post-World War II years has involved a valiant attempt to maintain adequate elementary educational facilities. The tremendous influx of newly established families and the spurt in the birth rate between 1946 and 1948 created a serious problem regarding maintenance of adequate grade school education. (See Chapters VII and IX.) The task of providing physical plant and sufficient numbers of trained teachers has taxed the resources of the Los Angeles Board of Education for more than four years. The problem has by no means been solved at the grade school level, and like a vast wave, these youngsters will move on to junior high school, high school, junior college and university during the next twenty years. Rapid urbanization of a vast area such as San Fernando Valley may not be regarded as an unmixed blessing—not when the educational facilities of the whole metropolitan area are overtaxed.

Enrollment in the grade schools of North Hollywood increased nearly 200 per cent between 1940 and 1949. About 60 per cent of this increase occurred between 1946 and 1948—a period of three years. To meet this increase, three new grade schools were built without delay.
These schools were located in the northern part of the community (Tracts #19 and #21), where the youthful population increase was concentrated. (Plate II.) The actual need in 1948, according to a survey conducted by the Los Angeles Board of Education, was for an additional eighty school rooms. Even such a vast expansion would fail to solve the problem, as school room shortages pre-date 1940. Schools in North Hollywood registered a 150 per cent increase in enrollment between 1930 and 1940, and construction failed to keep abreast of this demand for additional instruction space. (76) In view of the heavy demands made on the funds of the Board of Education throughout the Valley as well as in other rapidly expanding areas of Los Angeles, it is doubtful if North Hollywood will ever achieve adequate elementary school room facilities before the crisis shifts to the junior high school level. Nevertheless, this community has fared very well indeed when compared with other sections of the Valley, and has managed to give all students the minimum essentials of an elementary education.

65. Transportation Patterns.

Public transportation in the Valley began with the construction of the Pacific Electric Railway interurban line through Cahuenga Pass in 1913. This vital rail route was extended north to North Hollywood, * Junior high school facilities are being rapidly expanded in North Hollywood in anticipation of increased enrollments shortly. New junior high schools have been built in the northern part of the community to care for the large enrollments expected in Tracts #19 and #21. High school facilities may require enlarging within a few years, although North Hollywood High School, in the center of town, is quite large and has ample grounds for additional buildings.
thence westward to Van Nuys along the Southern Pacific right-of-way. Within a few years additional lines were constructed as far west as Canoga Park and northward to San Fernando. (Map 4.) Nearly all community centers in the Valley were linked by this interurban system before the close of the decade.

In the 'twenties and 'thirties, private automobile travel began to make serious inroads on the interurban passenger traffic. Little or no attempt was made to improve service or modernize equipment to meet the competition of private automobile transit. During the past thirty-five years, there has been a steady deterioration of all types of public transportation in the Valley. Gradually tracks of the Pacific Electric Railway have been abandoned and motor buses installed on the public supported highway system as an inadequate substitute. (Maps 4 and 16.) Within recent months Valley communities have been forced to band together in an effort to halt the wholesale abandonment of the remaining Pacific Electric trackage, i.e., the line extending from Hollywood via Cahuenga Pass to North Hollywood and thence out to Van Nuys. The removal of this last remaining rail line, which links these two highly urbanized communities with Hollywood and Los Angeles, would mean a complete conversion of all Valley transportation to road-hogging and clogging buses on the highways and freeways.

At the present time North Hollywood is serviced by an antiquated, slow-moving streetcar line and inadequate bus lines operated by the Pacific Electric Company—a subsidiary of the Southern Pacific Railroad. The streetcars operate on a twenty minute schedule during the day and require approximately one hour to complete the tortuous trip into Los Angeles and fifteen minutes to Hollywood via Cahuenga Pass. There is a bus line operating along Lankershim Boulevard from
Saticoy Street on the north to Universal City on the south, but service is limited to two buses per hour. Another bus line from Hollywood travels along Cahuenga Pass Freeway and out Ventura Boulevard to the communities west of North Hollywood as far as Woodland Hills. (Map 16.) Service on this line is generally at twenty minute intervals, but not all buses travel to the western end of the Valley. From downtown Los Angeles, there is a bus line to Van Nuys and the General Motors Chevrolet assembly plant. This route enters North Hollywood on Riverside Drive, turns on Lankershim Boulevard to Oxnard Street, over to Whitsett Street, north to Victory Boulevard, thence west to Van Nuys Boulevard in Van Nuys. (Map 16.) This line also operates on a twenty minute schedule and requires forty-five minutes to reach North Hollywood from downtown Los Angeles. All these bus routes are maintained by the Pacific Electric Company, which has an exclusive franchise for San Fernando Valley service, except in the independent community of Burbank.

It is obvious that most sections of North Hollywood are not serviced by buses or street cars within reasonable walking distances. The service that has been provided is both slow and relatively expensive. The schedules being maintained by these transportation routes are totally inadequate for an urban community of nearly 100,000 inhabitants, many of whom must travel to daily employment in Hollywood or Los Angeles. (Map 12.)

Within the past few years, there has been increasing agitation on the part of residents in the Valley as well as elsewhere in the metropolitan area of Los Angeles for the construction of a rapid transit system. It has become increasingly apparent that an elaborate
and costly system of freeways for private automobile and public bus transportation will not meet the ever-growing need for rapid transit. Buses slow down traffic and the high-speed freeways become clogged-ways. Thus a cycle develops: more freeways, more automobiles and buses, and more congestion; more freeways, more automobiles and buses, and more congestion, ad infinitum, ad nauseam. (77)

The Automobile Club of Southern California estimates that there is one automobile for every one and a half residents in the Valley—the highest ratio of its kind in the nation. Approximately 400,000 people travel in and out of the Valley each day. By far the largest share of these commuters must make the trip by private automobile, if they are ever to reach their respective destinations within a reasonable time—an estimated 175,000 cars moving in and out of this area each day. Topography limits such travel to a few major arteries—Ventura Boulevard-Cahuenga Pass Freeway, Riverside Drive, Laurel Canyon, Coldwater Canyon, and Sepulveda Boulevards. (Map 1.) Of all these routes, the Cahuenga Pass Freeway is the most direct to Hollywood and Los Angeles, and the vast bulk of the Valley-oriented traffic moves over this stretch of super-highway. (Figs. 126-129.) Within the past decade this route has been transformed into a high-speed freeway with over- and under-passes and turnoffs. It can accommodate traffic on eight to twelve lanes plus an allowance for center space occupied by a standard gauge, double tracked interurban railway—the Pacific Electric.

In recent months unofficial traffic counts reveal that more than 77,000 automobiles per hour move along the Cahuenga Pass Freeway during peak hours. In the morning there is a mass egress from the Valley and in the evening, a mass ingress. (Figs. 127-129.) Eventually
Fig. 126. Cahuenga Pass Freeway. This is one of the finest stretches of highway to be found in the United States. The overpass is Mulholland Drive, which traverses the length of the Santa Monica Mountains on the right. The two, three-lane roads in the center section traverse the pass. The side roads handle turn-off traffic. The automobiles in the foreground are travelling up-grade.

Note the wide park area in the midground. In the far background are the buildings of the fabulous mecca—Hollywood. Compare with Fig. 1.

Figs. 127–128. Traffic on the Cahuenga Pass Freeway. Fig. 127 looking south toward Hollywood from the Mulholland Drive Overpass in the above photo. This photo taken at 5:00 P.M. with cars streaming Valley-ward at the rate of 100 per minute. Note the interurban Pacific Electric streetcar laboriously hauling itself up-grade toward North Hollywood.

Fig. 128 looking north toward the crest of Cahuenga Pass from the Mulholland Drive Overpass. This photo taken a few minutes later than the one on the left. Note the relatively light traffic flowing southward toward Hollywood at this hour—approximately 40 cars per minute. During the early morning hours this traffic flow is reversed.
this small stretch of super-highway will form part of the Hollywood Freeway—a high-speed traffic artery leading into downtown Los Angeles. Just what will happen to Valley traffic then remains to be seen, but it may very well demonstrate that freeways can not be built large enough nor fast enough to keep abreast of the ever-growing horde of automobiles.

The proposal to criss-cross the Valley with such a system of highways during the next ten to twenty years seems to be a most dubious solution of the transportation problem. (Note the double line roads designating "parkways" superimposed on Map 12.) If the vast majority of Valley residents must continue journeying into Hollywood or downtown Los Angeles each day for employment, construction of this elaborate and expensive network of high-speed highways will not markedly improve the transit situation. If adequate parking facilities and ease of travel are not forthcoming after completion of the Hollywood Freeway, the problem of commuting from the Valley to Hollywood and Los Angeles will not have been solved.

Though a rapid transit system of some type, either mono-rail suspended above ground or subways under congested areas, appears to be the logical solution to this ever-growing dilemma, the matter is not so simple. (76) Geographic and socio-historic factors influencing the settlement of North Hollywood, the Valley, and all metropolitan Los Angeles prevent the adoption of a financially sound and integrated system of rapid transit. Compared to urban centers such as New York, Chicago, Philadelphia, and Boston, low density of settlement and, hence, low revenue per passenger mile makes such an enterprise commercially hazardous and probably impossible, except as a money-losing, costly civic undertaking. Population is so highly decentralized and
spread so thin, even in the most intensively urbanized sections, such as North Hollywood, that an elaborate system of high-speed transit could only be maintained by supplementary financing from the general tax fund. Revenue derived from passenger fares hardly would suffice to cover operating expenses of such an attenuated system of rapid transit, due to the relatively long haul per passenger and the low rates that would be expected to prevail on a public common carrier. This, in turn, would necessitate writing-off the entire initial investment for rights-of-way, construction, equipment, etc. No responsible municipal agency has attempted to estimate these initial capital expenditures for even a limited rapid transit system. Thus the geography of a unique type of urban settlement presents North Hollywood, the Valley, and metropolitan Los Angeles with a virtually unsolvable dilemma regarding public transportation and establishment of an efficient rapid transit system.

66. **Summary: A Socio-Geographic Sequent.**

Industrial land use in North Hollywood conforms to the classic pattern of the geographic distribution of urban functions. Early industrial development clustered around the Southern Pacific-Pacific Electric Railroad tracks near the center of town. (Plate I.) With expansion of settlement and limitation of areas zoned for industrial land use in the heart of the community, industrial establishments sprang up along the Southern Pacific Railroad route traversing the northern section of town. (Plate II.) The only remaining areas of relatively large size zoned for industrial use are found along this railroad. Unfortunately for the healthy economic development of a self-sustaining community, North Hollywood has expanded its residential land use so
Fig. 129. Late afternoon traffic streaming along Cahuenga Pass Freeway. At times the flow of traffic during rush hours reaches a point that endangers life and limb. The Freeway is now accommodating a far heavier traffic at peak hours than warranted. The use of this road by trucks and busses frequently creates traffic congestion, as portrayed. Photo looking south from the Mulholland Drive Overpass.

Fig. 130. An underpass on Lankershim Boulevard. This is the only highway passing through North Hollywood from north to south that has a safe passage across the heavily used Southern Pacific Railroad tracks. Many of the highways through town merely reach the railroad tracks and stop. A few others have surface passage across the railway tracks. Heavy traffic on these highways and the safety of residents must eventually lead to the construction of additional costly underpasses.

Fig. 131. Northern section of the Cahuenga Pass Freeway. Photo of the Freeway north of the Barham Boulevard Overpass. In the foreground is Lankershim Boulevard, which has just skirted Universal Studio to the right and continues under the Freeway for about two blocks into the Santa Monica Mountains. The Freeway joins Ventura Boulevard in the background. Photo taken from a hillside in Universal City.

Fig. 132. Cahuenga Pass Freeway approaching the pass through the mountains. A view of the Freeway looking south toward the pass crest. In the background, Barham Boulevard Overpass. On the right, Cahuenga Boulevard and its small commercial development. Note how the Freeway and boulevard diverge after leaving the constriction of the pass. Prior to the Freeway, Cahuenga Boulevard was the main traffic artery through this pass. On the extreme right, the Santa Monica Mountains. Photo taken from the hills at Universal City looking south toward Hollywood.
rapidly that very little land suitable for industrial development remains unoccupied.

Commercial land use closely followed the historic pattern of settlement in North Hollywood. Lankershim Boulevard and the Pacific Electric tracks early became the cross-roads where two streams of traffic converged. At this point, the first commercial ventures took root and an embryonic basis for this type of land use was firmly established in North Hollywood. With the passing decades, commercial enterprises pushed southward along Lankershim Boulevard to meet the needs of an expanding population in this area. Eventually the southern portion of this arterial highway was almost completely occupied by business houses as far south as Universal City. (Plate II.) With the expansion of settlement northward, commercial development along this portion of Lankershim Boulevard answered the needs of local residents here. With the east-west movement of settlement, commercial development began to edge out along the major highways, wherever zoning provisions and market conditions warranted the venture. But the rapidity of residential settlement soon surpassed the rate of commercial development and, as a consequence, the neighborhood store lost out to the "drive-in super-market" commercial land use complex. The automobile replaced the human foot as the means of locomotion to the shopping center—a center located at the intersection of two major highways, where an abundance of commercially zoned land was available.

Rapidity of urban residential settlement, geographic distribution of settlement, social composition of settlement, and low density of settlement have all played important roles in the municipal development of North Hollywood. The geographic off-center location of this
community resulted in Van Nuys becoming the focal point of municipal administration in the Valley. The very rapid settlement of North Hollywood has thrown a heavy burden on police and fire fighting personnel and equipment assigned to the Valley. The insatiable demand for residential property has constricted local recreational facilities to two small parks and a few school playgrounds. The post-World War II influx of veteran settlers and their youthful offspring has placed a tremendous burden on the local educational system—a burden destined to remain for at least a generation. A great spurt in population, a low density of settlement, and a completely antiquated system of public transportation has posed a serious problem in regard to the economic well-being of nearly every family in North Hollywood. With limited industrial and commercial employment obtainable locally, the vast majority of bread-winners must commute to Hollywood or Los Angeles. Automobiles merely add to the fearful congestion now prevailing in employment centers, and public transportation facilities are totally inadequate for the task confronting them. Yet, low density of settlement in the urban areas plus long hauls per passenger render a rapid transit system economically infeasible. The geography of a unique type of urban settlement presents North Hollywood, the Valley, and metropolitan Los Angeles with a virtually unsolvable dilemma in regard to public transportation. Thus the City of Los Angeles, meaning the tax payer, is being rudely awakened to the staggering costs of a too rapid and planless urban settlement of an area embracing nearly one-half of the city’s incorporated territory.
67. **A Need for Planning?**

In a recent study prepared under auspices of the John Randolph and Dora Haynes Foundation of Los Angeles, Messrs. Earl Hanson and Paul Beckett wrote as follows regarding the urban development of San Fernando Valley:

The great San Fernando Valley appears to offer an unparalleled opportunity for long-range planning. Much of it is as yet unspoiled by the hand of man. Its ultimate expansion into a great center of suburban population seems assured. If, through lack of adequate planning and control, the Valley when fully developed is simply one more haphazard conglomeration of residential communities, strip business developments, industrial concentrations, and agricultural areas, a great opportunity for constructive, effective, broad-gauge planning will have been irrevocably lost. The seeds of future blight are already planted in many sections of the Valley—shack houses, converted garages, low-grade strip developments, straggling subdivisions, jumbled land use. It is the responsibility of local planners to see that these seeds are not allowed to germinate and come to fruition. (79)

Though this statement appeared just five years ago, changes have occurred with such startling rapidity as to exceed the capacities and resources of municipal planners as well as other government officials who desired the orderly development of settlement in North Hollywood and the Valley.

The San Fernando Valley may have offered unparalleled opportunities for long-range planning in 1944; such is not the case today. In 1945 a detailed plan for the orderly development of the Valley was promulgated by responsible city officials as part of the new zoning ordinance covering Los Angeles. Today this plan appears hopelessly outmodeled by the post-war influx of migrants. At present the Valley is in a condition of socio-economic confusion that foreshadows disaster, though subject in theory, if not practice, to a
carefully prepared plan of land use and settlement adopted barely five years ago—a plan of settlement which neglected to take into account basic sociological and geographical factors pertinent to occupancy of this region. Perhaps detailed planning of an urban development is not always an unmixed blessing, especially when it is the work of urban planners who ignore geographic factors and blindly defy a veritable hurricane of opposing physical and cultural circumstances.

Too much planning, or basically incorrect planning may be far more damaging to a society than no planning at all. This is becoming increasingly apparent in Los Angeles, where highly elaborate plans fail to keep abreast of facts. (80) How is the faulty planning pertaining to the Valley to be corrected? Who will undertake the administration and enforcement of a new plan? How will a debt-ridden, financially chaotic municipal government pay for such an undertaking? These questions are not simply of academic interest, but actually touch the very heart of the matter—the practical problems of urban development in the metropolitan region of Los Angeles.

In order better to understand some of these problems, it is necessary to examine briefly a few of the fundamental trends likely to be manifested by the continuation of a rampaging urban development of this area and the conclusions to be drawn with respect to them. These trends arise from the sociological and geographical factors investigated during the course of this study; they represent nothing new or mysterious; they have been apparent to the discerning student for decades, but they have not been studied from the point of view of human geography.
68. Continuation of Population Growth.

At present there are no visible signs of a tapering off of the tremendous post-World War II population growth of Los Angeles. A continuation of this mass migration of people from other sections of the nation and the world will exert ever-mounting pressure on the present pattern of urban residential land use in the Valley—a pattern characterized by low density of occupancy, single dwelling units, and rapid expansion over an area of 200 square miles. These new settlers as well as many old ones, who feel overcrowded by the influx of tens of thousands of additional residents each year, will turn to the relatively uninhabited western reaches of the San Fernando Valley for home sites.

In a recent official publication of the Los Angeles municipal government, it has been estimated that the population of the San Fernando Valley will slightly exceed one million and North Hollywood, 300,000 by 1970. (81) It is unfortunate that this report has been based upon a faulty premise long since discarded by most demographic statisticians—the simple projection method. In this report the rates of population increase between 1940 and 1948, obtainable from official census tract counts, were merely projected onward to 1970. Even the most optimistically short-sighted population booster would hesitate to claim a continuation of the rate of population growth prevailing during war-time. Granting the rather remote possibility of such phenomenal population growth during the next twenty years, this report apparently neglects to take into account the facts pertaining to the present and potential land use in North Hollywood and the Valley.

Today there is virtually no vacant land in North Hollywood. (Plate II.) True, there are many scattered residential lots in the
lowlands and restricted areas in the mountains suitable for housing, but few sections, except those nominally zoned for industrial use, afford the abundance of land necessary for a sizable increase in the number of single dwelling residences. Yet, the planning report estimates a population of 300,000 for this community by 1970. At present the population probably totals 100,000. It might be feasible to increase this population by another 50,000 inhabitants without unduly disturbing the present residential land use scheme.

It is entirely possible that geographical proximity to the Hollywood-Los Angeles urban nuclei, given an improved transportation system, would promote a population increase of considerable magnitude during the next two decades. Though this population increase would probably be less than 200,000, it, nevertheless, would be large enough to result in a veritable revolution in residential land use. A considerable area, especially in the "core land" section of Tracts #21, #22, #23, and #24, would have to be re-zoned for large-scale multiple dwellings to accommodate the additional settlers. These structures would be built primarily along the major highways, particularly Riverside Drive, Magnolia, Chandler, Burbank, Laurel Canyon, and Cahuenga Boulevards as well as Vineland, Forman, Tujunga, and Colfax Avenues, close to the geographic heart of North Hollywood. Such a large-scale conversion of one type of residential land use to another seems most unlikely to occur, especially in view of the popularity and traditional emphasis on the single dwelling unit per town lot throughout this region.

The Valley still contains a large area not utilized by an intensive residential type of occupancy, but it is questionable if
this relatively unoccupied western section affords sufficient acreage for several hundred thousand additional settlers. (Map 8.) Assuming the Valley consists of 200 square miles or approximately 128,000 acres, and allowing for an over-all population density of eight persons per gross acre (average density for North Hollywood in 1949) plus land use sixty per cent residential (a figure comparable to the lowland section of North Hollywood in 1948), this region could then accommodate about 615,000 inhabitants—not the one million envisioned by the population planning report. Obviously such a scheme of land use would be economically and socially unsound, as it would transform the Valley into one vast North Hollywood—1948 model. Thus it would appear most unwise to base population predictions for areas such as North Hollywood or the San Fernando Valley on extraordinary war-time developments occurring in a period of nation-wide societal upheaval. It appears equally unwise to flout the physical and cultural facts regarding present and potential land use in these areas, especially in the preparation of an official publication to be used extensively by municipal administrators vitally concerned with all phases of urban planning.

Another vital geographic factor, which has bearing on the rate of population growth of North Hollywood and the Valley as well as the whole Los Angeles metropolitan region, is the problem of securing an adequate water supply. In a semi-arid climate, such as prevails in Southern California, this is a problem of grave and continuing concern. Today every available fresh water resource within a thousand miles of the metropolitan region has already been tapped—Owens Valley and the Mono Basin watersheds extending 358 miles north-northeastward; the Colorado River Basin some 500 miles
to the east; all local surface and sub-surface supplies. (Map 15.)
Assuming that California (actually Southern California) obtains a
favorable decision regarding its contested claim to a stipulated share
of Colorado River water, it is reliably estimated by Department of
Water and Power officials that Los Angeles would attain capacity
consumption from all available sources within twenty-five years should
the present rate of population growth continue.

During the past few years several proposals have been sug­
gested to remedy this situation, but for the most part the geographic
and economic aspects of the problem are ignored. The frequently
mentioned proposal for tapping the water resources of the Columbia
River in Oregon usually ignores the legal obstacles and sectional
interests as well as the geographical obstacles that engineers would
encounter in the construction of an aqueduct and transporting water
over a thousand miles to Los Angeles. Another proposal, envisioning
the distillation of sea water for augmenting the urban supply, neglects
to consider the tremendous costs involved in such an enterprise—the
expense of distillation of salt water and pumping from sea level.
Present cost of water delivered to Los Angeles, according to the
Department of Water and Power, is approximately $28 dollars per acre
foot, and the cheapest known method of distillation would cost about
450 dollars per acre foot plus the virtually prohibitive cost of
pumping the water some 500 to 1000 feet above sea level to the
distribution system. (At present, the water distribution system is
operated initially by gravity feed from the San Fernando Reservoirs
to the north of North Hollywood in the Valley. Maps 7, 15.) The
keenest engineering minds concerned with this vital problem do not
foresee the availability of abundant cheap power, which might make such schemes feasible within the near future. (82) Thus it would appear that an adequate water supply for an ever-expanding population is a virtual impossibility. Due to a combination of socio-geographic factors, the day may soon arrive when water threatens to become the most expensive commodity in metropolitan Los Angeles, instead of being one of the cheapest, and every conceivable measure will be required to shut off the influx of population—perhaps a real blessing in disguise.

69. **Residential Development and Blight.**

Within the past decade, the single unit residential type of land use has attained its maximum development in North Hollywood. (Plate II.) Few areas remain that are suitable for housing construction and most of these consist of scattered lots, which will eventually be occupied by the typical single unit dwellings conforming to zoning regulations as well as tradition. In the extreme northern portion of Tract #1, a few truck gardens of sufficient size remain to permit the construction of mass housing. Although some land in this section has been zoned for industrial use and a few industries have been established, it is likely that much of this area will prove too expensive for industrial sites and will attract residential development. The construction of additional mass housing projects in other areas would generally involve the purchase of land now occupied by dwellings, such as the few remaining ranchitos, and the building of revenue producing multiple units in order to secure an adequate return on the initial heavy investment.

Shortly after close of World War II, large-scale mass housing
projects were built in the "panhandle" of Tract #19. (Plate II.)

Prices were high, materials none too good, and every effort made to
skimp on the construction of these pre-fabricated houses. In a
relatively short time the poor construction of these homes will
necessitate extensive and expensive repairs, or else result in a
serious deterioration of property values. In the event of an economic
"recession" leading to the inevitable mortgage foreclosures by the
Federal government, every effort will be made to rent these houses or
find new buyers at greatly reduced prices. Once owner-occupancy
declines and tenantry increases, such property will plummet in value.

With the possibility of multiple dwelling units eventually crowding
the Mexican-Negro population from Tract #22, a new depressed and
blighted settlement may quickly develop in the mass housing section
of Tract #19.

Government sponsorship of equality in housing opportunities,
cheap rent or purchase price, and general deterioration of the pre-
fabricated housing in Tract #19 may well mean a new zone of residential
slum within twenty-five years. In addition, housing constructed in
the industrial section of Tract #19 will likely be cheap, multiple
units bringing high income and attracting low income renters—Mexicans,
Negroes, and general laborers. Within a few years another area of
urban blight may extend along the railroad tracks to the north
comparable to that now found in the south, but the socio-economic
causes will remain much the same, and the area of blight will be much
larger than now prevailing in Tract #22.

Elsewhere in North Hollywood post-war residential con-
struction has been somewhat better and largely of an individualized
type—homes built according to personal specifications or from a
selection of models. Housing in Tracts #24 and #25 will continue superior in type to that found in other sections. This is due, in part, to building restrictions and covenants, type of settlers, and the physical obstacles associated with construction of streets, providing of utilities, and erection of buildings on a mountainous terrain.

By far the most serious problems in regard to housing and those which are likely to promote development of sub-standard conditions prevail in the areas recently settled by members of the lower middle class income group—the northern portions of Tracts #19, #20, #21, and #22. These areas will require constant surveillance and rigid maintenance of minimum housing standards during the next few decades, if housing blight is to be curbed and consequent loss of desirable settlers is to be avoided. These areas have been settled very rapidly, the housing is none too good, and the income group is limited in its resources. Urban blight is far too costly in every way to be permitted a foothold in any community.

70. Industrial and Commercial Developments.

Failure to promote the industrial development of North Hollywood may be regarded as an invitation to social and economic adversity. The rapid residential settlement of the past decade has been undertaken without thought to the employment opportunities or economic well-being of these thousands of new settlers.* Actually this emphasis

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* A distinction must be made between the settlers of the 'twenties and early 'thirties, and those of the late 'thirties and 'forties. The former group generally brought in some capital and promoted entrepreneurial activities. The latter group largely lacks capital, and its members are immediately dependent on a job of some type or government unemployment compensation until work can be found somewhere in the metropolitan area.
on residential land use precluded exploitation of the one significant natural resource of the area—a highly fertile soil. Today, land has become so valuable that housing threatens to engulf the remaining limited areas zoned for industrial use along the Southern Pacific Railroad tracks. (Plate II.) Unfortunately, provisions made for industrial land use in the 'thirties and general opposition to industrial development in former decades have left North Hollywood a highly urbanized community with a well-trained and skilled labor force, but one that is completely dependent on employment elsewhere in the metropolitan area as the Valley affords no solution to this problem.

With the rapid spread of urban residential settlement throughout the Valley, the possibility of promoting extensive industrial development in the area adjacent to North Hollywood also grows more remote with each passing month. The only economically valuable resource in the Valley is the fertile soil, and every effort is being made to cover it with greensward or concrete, as has already occurred on an extensive scale in the North Hollywood development. The Valley is completely enclosed by mountains, with a small semi-arid valley to the northwest and sterile deserts to the north and northeast. (Map 2.)

* One of the serious problems arising from the widespread urban occupancy of the San Fernando Valley lies in the removal of another large area of fertile and highly productive agricultural land from cropping. The Los Angeles metropolitan region is definitely limited as to the amount of available agricultural land due to the topography. (See Frontispiece and Map 2.) As tens of thousands of acres of agriculturally productive land are converted to residential occupancy, foodstuffs for an ever-expanding population must be shipped into the region from distant points—Imperial Valley, San Joaquin Valley, Arizona, New Mexico, Texas, Utah. An over-expansion of urbanism, such as now occurring in the San Fernando Valley and elsewhere in Southern California, may prove extremely costly in the long run. Fertile soil is a most precious legacy of nature and hardly merits the indiscriminate application of a coat of cement or asphalt.
The Valley is isolated from the central manufacturing district in downtown Los Angeles. In addition, the tremendous expansion of residential settlement has increased values within the very limited areas zoned for industrial occupancy as to preclude such use. The owners of industrial acreage fully expect to convert such real estate to residential use, thereby reaping handsome profits. The Valley does indeed offer to potential industrial concerns three arterial railroad routes, an excellent highway system, and a rapidly expanding labor force and local market, but it has negligible material resources and its sites for industrial use are rapidly vanishing.

By means of active, conscious, Valley-wide promotion it might be possible for the growing urban centers to attract a few additional industries, but these would scarcely be comparable in size to the Lockheed Aircraft Company or the General Motors Chevrolet plant. The Valley has been in grave need of large-scale industrial establishments capable of employing from one to five thousand workers, whenever defense demands for aircraft have lessened or the motion picture industry has slowed its pace. In view of present-day technological developments, these additional plants would specialize in precision assembly work—automobiles, automotive and aircraft parts, electric motors, tools, etc.

It is unfortunate that the socio-geographic factors promoting the head-long urban residential development of the Valley appear to have doomed the area in regard to industrialization. There seems very little likelihood that even a small degree of the industrial economic self-reliance, so much to be desired in view of its location, can be achieved before all land near the major transportation arteries has been absorbed by residential settlements. It is also unfortunate
that those who should be most concerned about the economic well-being of the Valley have been so preoccupied reaping the rewards from land ownership and residential construction that no attention has been given to this vital matter. There is no indication, at present, that any serious effort will be made by responsible individuals to achieve even the most limited industrial development of the Valley until too late—as it is now much too late in North Hollywood.

The commercial development of North Hollywood has more than kept pace with the ever-expanding market engendered by the increase in population. In some instances commercial building has exceeded the immediate demand and new shops stand vacant. In sections removed from the well-established commercial centers, especially along the arterial highways, stores tend to change ownership rapidly, and appear to mark an over-extension of such development. (Plate II.) This state of affairs is most noticeable along the northern stretch of Lankershim Boulevard and the east-west cross-roads penetrating Tracts #19, #20, and #21. With an over-abundance of commercially zoned land—virtually the four corners of every major highway intersection, the urge to construct small shopping centers and establish an independent small business becomes well-nigh irresistible. Unfortunately, small stores must compete with the "super-market" shopping centers scattered throughout the community as well as branch outlets of the major Los Angeles business houses located along Lankershim Boulevard. A highly motorized population with mobile shopping habits defies the geographic limits usually associated with marketing areas. Thus it would appear that shopping centers in North Hollywood and throughout the Valley will continue as a response to this mobility rather than to the preferences of local merchants and building contractors, or to any rational planning.
71. Municipal Administration and Public Transportation.

Nearly every phase of municipal government in North Hollywood and the Valley has been seriously affected by the rapidity of post-World War II urban settlement. Maintenance of the basic public services in this large area has involved very heavy expenditures of labor, material resources, and money. The expenses of the past few years have been merely initial ones incident to the beginnings of urban settlement. With the continued expansion of population in an area of approximately 200 square miles—an area as large as the City of Chicago, the need for further decentralization of municipal government functions will become acute. Some municipal affairs will have to be delegated to each urban community—North Hollywood, Van Nuys, Encino, Reseda, Woodland Hills, Northridge, Canoga Park, Chatsworth, Granada, etc. With an area larger than most cities and a population climbing toward the one million mark, it will not be feasible to continue a centralized Valley-wide municipal administration emanating from Van Nuys.

Today, North Hollywood is a city approximating 100,000 inhabitants, but it is completely dependent on the City of Los Angeles, as a whole, for all its municipal services—the strength of the police and fire forces, the nature and extent of local improvements, the operation of the library, parks, and playgrounds, etc. This is not an ideal situation nor one likely to promote interest in local government, but North Hollywood is incapable of providing the tax funds for such unparalleled urban development as now being experienced. This is due to the character of the predominantly single residence type of land use, which results in a relatively low assessed valuation on property and consequent inadequate tax base for securing revenue.
North Hollywood and the Valley will not be in a position to reimburse
the city treasury with tax revenues comparable to the essential munici-
pal expenditures in this area for many years to come.

An adequate public transportation system between North
Hollywood and the rest of the city via Cahuenga Pass or within the
Valley itself is lacking today. The vastness of the Valley, its
low density of population, and its scattered nuclei of settlement
are virtually insurmountable social and geographical obstacles to
the development of an economically sound rapid transit system. This
does not mean that such a system will not be constructed, especially
if public opinion forces the issue into the political arena, but it
does mean that such a project must be viewed as a constant financial
liability and a continual drain on the municipal treasury, which, in
turn, will lead to still higher taxation.

72. Resume.

In the foregoing study an endeavor has been made to investi-
gate and evaluate some of the geographic and sociologic factors in-
fluencing the spread of urbanism in North Hollywood and the San
Fernando Valley. These physical and cultural agents have been instru-
mental in the development of certain trends and have led to the for-
mulation of certain conclusions. These trends and conclusions may be
briefly summarized as follows:

1. The Valley will continue to attract large numbers of
settlers and rapidly increase in population due to the availability
of an abundance of land suited to residential development.

2. North Hollywood will continue to grow, but at a much
slower rate than in the past few years due to the decline in land
available for single dwelling units.

3. Population growth of North Hollywood and the Valley is intimately related to the limitations of and demands on the water supply, to the restrictions upon industrial development, to public transportation, and to types of residential occupancy.

4. A few sections of North Hollywood have been the scene of hasty post-war housing construction of a flimsy nature, and these areas will be subject to rapid physical deterioration and possible blight within a few years—the "bungalow" slums.

5. Rising land values, inadequate and improper zoning, and a lack of civic interest have doomed North Hollywood, in its peculiar geographic situation, to a precarious non-industrial existence—a virtual economic parasite dependent on the metropolitan region for its livelihood.

6. An ex-centric location, the lack of industrially utilisable natural resources, improvident zoning, rising land values, and general disinterestedness on the part of local residents have virtually eliminated the possibility of industrial development commensurate with the needs in North Hollywood and the Valley.

7. Rapid increase in population and consequent expansion of the local market has promoted a very active development of commercial enterprise in the heart of North Hollywood. Nevertheless, population mobility via the private automobile will continue to dictate the type and distribution of commercial land use—the "drive-in supermarket" shopping center located at the intersections of major highways in areas of rapidly expanding residential settlement.

8. Continuation of the rapid expansion of population in North Hollywood and the Valley, during succeeding decades, will throw
an ever-increasing burden on the city government and render the 
maintenance of municipal services most onerous due to the enormous 
size of the area, relatively low population density, scattered nuclei 
of settlement, relatively low revenue yield from real estate taxation 
in relation to expenditures, and insistence on a highly urbanized 
level and standard of living.

5. Lack of adequate industrial development, continuation 
of rapid population growth, and creeping traffic paralysis will increase 
tremendously the need for construction of a rapid transit system linking 
North Hollywood and the Valley with the metropolitan area, but such a 
transportation system will be a costly venture due to the low population 
density, scattered nuclei of settlement, and low revenue yield per 
passenger mile.

Today, North Hollywood exists as a virtually completed urban 
development of the type now prevailing in Southern California. Nearly 
all available land is being utilized in one fashion or another. It 
is a product of a given set of physical and cultural factors and these, 
in turn, account for its emphasis on single dwelling residences, 
"shoestring" and poly-nuclear commercial development, paucity of 
industrial establishments, lack of self-government and utter dependence, 
financially and politically, on the metropolitan center for its munici-
pal services, and last, but by no means least, tremendous growth of 
population within an exceedingly short span of time. The unplanned 
nature of this rapid urban development in North Hollywood is an 
invitation to serious socio-economic maladjustments. Within the not 
too distant future, this community as well as the Valley will be forced 
to acknowledge the gravity of its social problems—problems arising 
from a flaunting of the limitations imposed on the region by its
physicial and social setting.

Though it is much too late to "plan" the urban settlement of North Hollywood, it is possible for responsible officials to learn a few lessons from the recent mistakes occurring in this community development and attempt to prevent a repetition of these errors on a Valley-wide scale. Unfortunately this appears to be a most unlikely prospect in view of recent urban developments throughout the Valley. Continuance of such large-scale urbanization with thought only of immediate cash returns is inviting disaster—a disaster of such magnitude as to imperil the economy and solvency of the whole metropolitan region.

To say that North Hollywood is typical of urban fringe areas throughout the metropolitan regions of the United States or the Western world is hardly justifiable. Every metropolitan region and every urban fringe area has a distinctive personality—an outgrowth of its physical and cultural background. Nevertheless, North Hollywood does illustrate some of the basic problems facing urban developments in every section of the nation, if not the world. (93) These vast conurbations must strive to solve the problems associated with the rapid expansion of population into outlying areas, the coordinated development of various land use functions, and the synchronization of developments in the fringe areas with those in other parts of the city. To this extent, each and every urban fringe area and metropolitan region faces similar problems—problems which can only be solved within the framework provided by its physical milieu and its social history.
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18. Ibid. pp.5-8.


27. C. McWilliams, op. cit., pp.52-54.


34. **U.S. District Court, Southern California Division**, loc.cit.


40. Ibid. pp.67-68.


45. F. W. Keefer, op.cit., pp.72-75.


47. F. M. Keefer, op. cit., pp. 76-84.


49. Ibid., pp. 45-53.


54. Ibid., pp. 50-53.


59. Ibid., pp. 92-127, 422-444.
60. J. P. Young, "Industrial Background," Los Angeles: Preface to a Master Plan, (Los Angeles: Pacific Southwest Academy, 1941), pp. 61-77.

61. C. B. Bennett and M. Breivogel, op. cit., p. 11.


72. Ibid. p. 16.

73. Ibid. p. 11.


CAHUENGA (ká-wén'gá): The name probably is derived from an Indian ranchería (settlement), "undoubtedly named from some Gabrieleno-Shoshonean word." (Kroeber). The meaning is unknown.

CALABAZAS (kál-á-bás'ás): The Spanish word signifying pumpkin, squash, or gourds.

Caminó Real (ká-mé-nō rā-ōl): The Spanish term for a public road or trail between presidios (forts), missions, and settlement. Frequently mistakenly referred to as the King's or Royal Highway.

CANADA (kán-yá'dá): The Spanish word meaning "valley".

CANOGA PARK (ká-no'gá): A community in the San Fernando Valley named after Canoga, New York, which had, in turn, taken its name from the Indian village Canoeh, "place of floating oil".

CHAMISE (chá-més): Chamisal (chá-mí-sál): A name given to the greasewood, a species of chaparral, by the Indians of the San Fernando Mission.

CHAPARRAL (chá-pā-rál): The Spanish term designating a place where the evergreen oak (chaparro) grows.

ENCINO (en-sē-nō): The Spanish word signifying "live oak".

MANGANITA (mán-zá-nē-tá): The diminutive form of the Spanish word for "apple", hence, "little apple". This word was given to a species of chaparral having berries resembling small apples, which were relished by the Indians.

PACOIMA (pä-kō'í-mä): The name is derived from a Gabrieleno-Shoshonean word meaning "running water".

RANCHERÍA (rún-chē-rē-á): The Spanish word for a collection of ranchos, rude dwellings, a hamlet, or village.

REZEDA (ré-zē-dá): The botanical name for mignonette, and the name of a community in the San Fernando Valley.

SAN GABRIEL (săn gä-bri-ēl): The Spanish form of the name for Saint Gabriel. The name of a mission and mountain range in Southern California.

SANTA MONICA (sän-tä mon-ē-ca): The Spanish form of the name for Saint Monica. The name of a city and mountain range in Southern California.
Santa Susana (sán-tá soo-sá-ná): The Spanish form of the name honoring Saint Susanna. The name of a mountain range in Southern California.

Saticoy (sat-í-koi): A term derived from the name of a Chumash rancheria, but its meaning is unknown today.

Sepulveda (sé-púl-vé-dá): The Spanish name of one of the first families to settle in Southern California at the base of the Verdugo Mountains. Owners of vast ranchos in this part of California.

Simi Hills (sē-mē): The term is derived from the Ventura dialect of the Chumash, Shimigi or Shimii—a place or village.

Toluca Lake (tó-loo-ká): An Aztec word transferred from a small city near Mexico City, Mexico, but its meaning is not known.

Topanga Canyon (tó-pán-gá): A Gabrielino-Shoshonean place name of which the true meaning has been lost.

Toyon (toi-ōn): The Spanish word signifying the Christmas berry or California holly shrub—a species of chaparral and not a true holly.

Tujunga (tū-hung-gá): Tianga means "mountain range" in Southern Paiute, and Tujunga may be derived from a similar word in the Gabrielino dialect, which is related to Southern Paiute. (Kroeber)

Verdugo (vür-dō-gó): The name commemorates the Verdugo family, which was one of the first Spanish families to secure a land grant in Southern California.

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In the following bibliography no attempt has been made to cite all the works consulted in the preparation of this study, nor has an effort been made to present a comprehensive compilation of the literature pertaining to urban geography, urban sociology, or urban planning. Instead, this bibliography has been limited to the more pertinent and significant works, either of a specific or general nature, which contributed to this study.

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