

# Community Effects on Remainder Parcel Valuation

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•EACH YEAR the California Division of Highways completes more than 8,000 separate appraisals of real property needed for highway rights-of-way. About half of these appraisals are made in instances where only a portion of a whole property is needed, leaving the remainder in private ownership. For each partial acquisition two appraisals must be made: one of the property "before" removal of the portion needed and one reflecting its value "after."

Ordinarily a before valuation presents little problem—especially in the case of residential properties. The appraiser searches the immediately surrounding area for recent sales of similar properties. The comparable sales are adjusted for minor differences in time of sale, improvement, and neighborhood influence. If an appraiser is familiar with the area in question, the appraisal can often be accomplished in as little as one day. The choice of comparables which are near in both time and location insures that the economic influences which bear on value will be similar and obviates the necessity for any extensive market or community research.

The after valuation presents an entirely different problem. This appraisal must reflect the effect on a property of the removal of a portion and of the construction of the highway facility immediately adjacent. Theoretically the methodology of the after appraisal could be exactly the same as that used to determine the value before. However, a search of the immediate area for recent sales of similarly affected properties will almost always yield no result. This is understandable because in more than 10 yr of freeway construction in California, less than 40,000 remainder parcels have been created in the entire State; it has been estimated that far fewer than half of these have been sold, while still fewer represent valid and useable sales.

There is, of course, a next best solution. Sales from other areas, which are neither timely nor near in location, might provide some indication of freeway effect from which an appraiser could form an opinion of value. However, the courts have been understandably reluctant to admit as evidence sales which are not near in time or location and appraisers are reluctant to use substantiating data which will not be accepted in court. Their logic is clear; value is a function of time and location and any comparison of properties in different areas or sold at different times is error prone.

Despite the reluctance of the courts to admit sales of remainder parcels as evidence, they still remain the only factual documentary evidence of freeway effect. They are useable in a few specific instances and their usefulness could be extended if a means were found to document the necessary adjustments for time and location. For these reasons the California Division of Highways some years ago began a systematic investigation of every valid remainder parcel sale occurring along every California freeway. To date, approximately 1,000 such remainder parcel sales have been collected, tabulated and analyzed. Information collected includes appraised values of the whole property, of the part required for right-of-way, and of the remainder; eventual sales price; control data to permit time adjustments; physical changes in property; and physical data regarding property location, acquisition, and construction of the highway facility.

The objectives of the mass data collection were the determinations of the possible pattern development, of the relation of key variables, and of similarities. A range of effect might be determined on the basis of values and physical characteristics so that

an appraiser could, with reasonable confidence, form an opinion in any similar instance. Unfortunately, careful correlation and analysis have as yet produced no discernable patterns. Neither the physical characteristics of the takings, of the highway construction, nor of any minor geographic benchmarks provide keys to the use of the sales examples. In many cases, the investigation of these features and their correlation revealed diametrically opposed effects in situations of almost exact physical comparability. The appraiser with complete access to all gathered sales can find examples to support either damages or benefits in almost any case, depending on his own pre-formed opinions.

Because physical variables seemed to provide no clue to measurement of freeway effect, evidence of other variables was sought in the literature. A comprehensive study which concerned itself with only the possible effect of freeway construction and not that of severance suggested one approach to the problem. This study, of value trends among whole properties in residential tracts containing 22,396 homes, was completed by the Division of Highways in March 1957 (1). Sales among 1,697 homes constructed adjacent to freeways were compared with the sales prices of homes away from immediate freeway influence. Two significant conclusions of this study were that (a) "... factors inherent in the entire tract, such as the livability and physical appeal of the houses in one tract as opposed to another, or the social and economic status of the residents, have a greater influence on the price trend than a freeway, school, or some other non-residential use adjoining a small percentage of the homes in a particular subdivision," and (b) "The annual trend in resale prices among subdivision homes adjoining freeways follows a pattern consistent with the price trend of comparable homes."

A conclusion that relative demand in an area might outweigh any possible detrimental physical influence from a highway would seem to follow logically. This is, of course, a well-known fact in the case of commercial or industrial properties affected by freeways. Many examples have been gathered in these latter categories which show fantastic price increases for parcels whose shape has been virtually mangled and where nearly any other potential use has been precluded. In these cases, demand has clearly outweighed any physical detriment imposed by either right-of-way acquisition or freeway construction.

No such clear-cut factors are involved in residential property price changes. But inasmuch as measurable physical and geographic factors provide no clue to the wide variations in freeway effect among residential properties, it could be assumed at this point that relative demand in a residential area is also the major variable which ought to be measured. Unfortunately, the remainder parcel analyses made to date do not contain any data that would permit the measurement of relative demand levels or their effect on the parcels involved.

If the assumption is correct that relative demand levels in a residential area are responsible for the presence or absence of damages, an intensive large-scale study must be undertaken to provide the supporting data needed.

Before this could be done, a pilot study had to be completed which would strongly indicate that the effort would be justified. A recent study of remainder parcel sales in San Diego County was aimed at providing the necessary supporting data. The objective of the study was to relate subsequent sale prices to community economic trends. If the analyses among similar properties in dissimilar communities gave indication that properties tended to be unaffected or benefited in a strong demand area, the premise of the pilot study would be confirmed.

Efforts were concentrated in two suburban communities; La Mesa and El Cajon, about 15 mi east of the San Diego central business district (Fig. 1). They are reached from downtown San Diego by traveling two nearly parallel freeways which join into one at the eastern edge of La Mesa. The two communities have a common border, La Mesa being closer to San Diego. El Cajon is the last suburban community along this transportation corridor that is undergoing any intensive urbanization at the present time. Beyond El Cajon, most of the residential development is in the nature of ranches and small estates.

A freeway was completed through La Mesa to the El Cajon city limits early in 1957. The sales investigated in La Mesa are located along a portion of Calif. 198 which con-

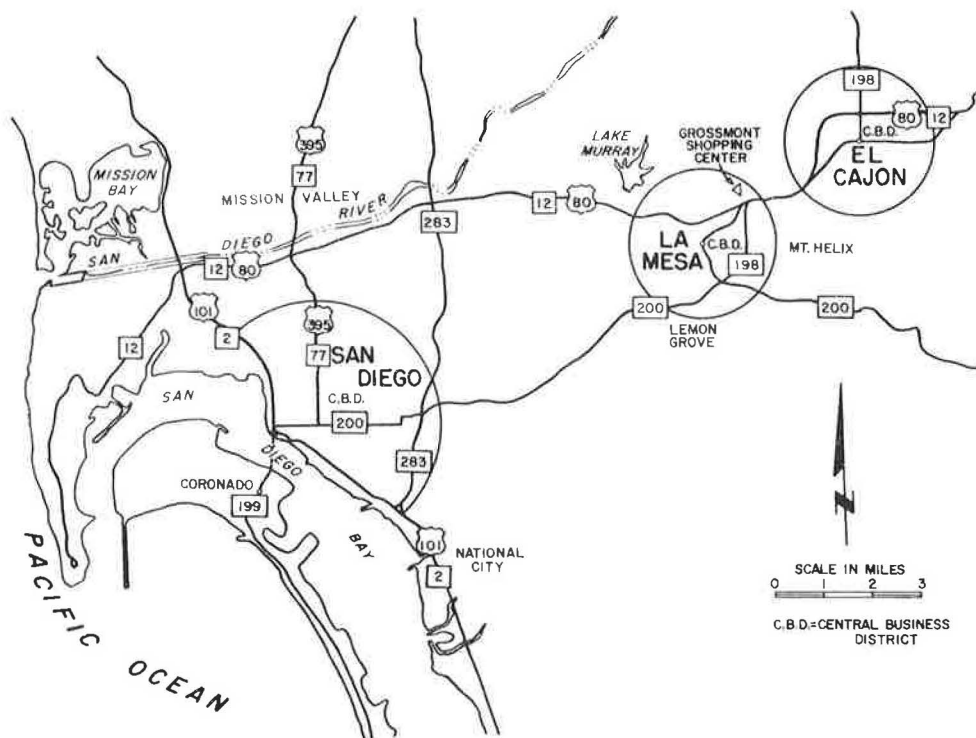


Figure 1. San Diego urban area.

nects Calif. 200 and 12. Calif. 12 was completed through El Cajon late in 1961. The orientation of the pilot study was toward solving an appraisal problem. Data on the remainder parcel sales followed a typical appraisal approach. Field research in the communities was primarily interview and observation because these are the tools most readily used by an appraiser. Reliance was on interview with local real estate salesmen and brokers who had worked in the communities for an extended period of time. Statistical data gathered were of the simplest type, i. e., population, retail sales, assessed valuation, and building permits. No attempt was made to correlate mathematically trends in these areas with trends in the real estate market, because most real estate appraisers do not have the facilities for extensive mathematical analysis. As a result, data relating to the communities of El Cajon and La Mesa are presented in the narrative fashion of an anthropological monograph with a limited statistical profile. There is a possibility of some distortion of image, but this possibility exists to a degree in all community studies, regardless of approach, technique, and sophistication.

#### REMAINDER SALES DATA

The after value of a remainder is an appraised value at the time of the highway acquisition. Freeway effect, in a specific instance, can be measured by adjusting this value to the time of study by use on a trend basis of sale prices of properties not physically affected by the freeway. Freeway effect is then the difference between the adjusted value and the actual sale price. For instance, if property in the area increased 5 percent during a year lapse, then the after value of the subject was increased in like percentage. The difference between this adjusted price and the actual sale price indicates the amount and degree of damages and benefits to the individual parcels.

Obviously, this adjustment, as well as the appraised after value, is subject to some error because the appraised after value relies to some extent on the judgment of the appraiser. For the sake of convenience, and in hope of canceling some of this potential error, the effects on these parcels were summarized by averages.

TABLE 1  
LA MESA REMAINDER SALES<sup>a</sup>

Sale	After Value (\$)	Adjusted Value (\$)	Sale Price (\$)	Net Change (\$)
1	19,490	20,662	21,500	+ 738
2	10,548	10,759	11,250	+ 491
3	10,548	11,708	13,000	+ 1,292
4	11,256	12,494	14,500	+ 2,006
5	10,730	12,447	13,900	+ 1,453
6	10,730	13,091	15,000	+ 1,909
7	13,144	14,590	14,800	+ 210
8	24,693	27,904	30,000	+ 2,096
9	11,720	11,837	11,500	- 337
10	14,625	17,404	16,000	- 1,404
11	13,011	13,663	12,500	- 1,163
12	13,011	13,793	13,300	- 493
13	13,011	14,443	13,950	- 493
14	14,700	15,238	15,000	- 288
15	11,720	14,086	14,000	- 86
16	13,851	13,990	13,950	- 40
Avg.	13,549	14,885	15,259	+ 368

<sup>a</sup>Gross change, + 12.5%; net change, + 2.5%.

## La Mesa

After limiting consideration to residential parcels, there were 16 valid sales in La Mesa (Table 1). Generally, this group has experienced a net benefit of 2.5 percent more than the general price rise in the immediate area.

Sales 11, 12 and 13 are three sales of one property, with sale 11 being the earliest, 12 the next and 13 the last. These sales are summarized in Table 2. Sale 9 and 5 are two sales of one property, sale 9 being the earliest. The first feature apparent is that the amount of damage may change through time. In addition, as Table 2 shows, the degree of damage (shown as a percent of sales price) changes through time. All other things being equal, the degree of damages should be a constant percentage of all subsequent sale prices. This theoretical constant does not bear out in the case of the market in La Mesa.

The two parcels which appear to be most severely damaged have something in common, i. e., isolation. For the sake of convenience Sales 11, 12 and 13 are designated parcel A, and Sale 10, parcel B. In the before condition, parcel A was a corner parcel. The freeway taking left a triangular parcel, the freeway being the base of the triangle and two city streets terminating at the freeway being the two sides. The apex of the triangle, the corner of the two city streets, was the point farthest from the freeway. In the after condition, parcel A is rather like an island, surrounded and exposed on all sides. It is, in a sense, physically isolated from all its neighbors.

Parcel B, also, is isolated in the after condition, but in a unique manner: it is situated on a street that was to some degree stratified in the before condition. At one end of the street were fine new homes, ranging from \$14,000 to \$50,000. The other end of the street was older, containing frame bungalows built in the 1920's and a chicken farm. There was, then, a "best" end and a "worst" end of the street. Parcel B would, in the before condition, be considered as part of the best end of the street, the improvement being worth at the time approximately \$12,000. The construction of the freeway, however, separated the two ends of the street—the best end on one side of the freeway and the worst end on the other. Parcel B was left on the worst end. This itself may not have been enough to create damage, but it is now the only new improvement located on this street; it stands isolated from the neighborhood of which it was once part.

The social and physical isolation of these two parcels are the only two instances where damages can be explained in a context of an apparent benefit of 2.5 percent. The other damaged parcels apparently are not unique, and on any project it would be expected that there would be a range of effect from damages to benefits because of the inconstancy of demand. Physically comparing them with the benefited parcels, no variables would be

TABLE 2  
SALE HISTORY OF ONE REMAINDER IN LA MESA<sup>a</sup>

Sale	Date	Adjustment Factor	Adjusted Value (\$)	Sale Price (\$)	Damage	
					Indicated (\$)	% of Sale
11	3/14/57	1.048	13,668.00	12,500	1,168	9.4
12	8/8/57	1.06	13,793.00	13,300	493	3.7
13	5/19/59	1.11	14,443.00	13,950	493	3.53

<sup>a</sup>Right-of-way acquired 7/11/55; before value, \$14,000; after value \$13,011.80; sold three times as shown.

found to facilitate prediction. On the average, however, properties in La Mesa show a strong tendency toward being benefited by the freeway.

### El Cajon

Sales in El Cajon reveal a contrary pattern. As Table 3 shows, three of the eight parcels show a benefit and the rest show a damage.

The average difference in sales price of the remainders, compared to a similar area, is -4.23 percent. It is interesting to note that of the eight sales, four are abutting the freeway, and four are not. The portion of the nonabutting parcels acquired was for a frontage road or city street widening. Of the four freeway abutting parcels, three are the benefited parcels. All nonabutting parcels show a damage.

In contrast to La Mesa, there is a possibility that the El Cajon parcels in the vicinity of the freeway may be rezoned sometime in the future—most likely to multiple residential. If there is rezoning, the superior identification features of the parcels abutting the freeway would most likely bring an increment to those parcels. For this reason, these parcels may have some speculative value and this may be reflected in a relative benefit.

The sales investigations in the two communities admittedly provide only the slimmest documentation of benefit in one community and damage in the other. It is rare, however, to find as many as 16 roughly similar remainder properties which have sold in a single community; therefore, the data were considered to be sufficient evidence for the purposes of this pilot study. To give credence to the initial assumption, it was necessary to examine, with the limited tools available, the relative demand structure in the two communities.

## COMMUNITY ANALYSIS

La Mesa and El Cajon are not actually communities as the term has been defined (2); they are primarily segregated aggregates (3). As a result, the character of these communities has changed somewhat in the last 10 yr, and will probably continue this change (4). The change is primarily attributed to the urbanization of California and the suburbanization of pre-existing communities. The consequent change in population has had significant impact on the normal indicators of community exchange activities. Both El Cajon and La Mesa in recent years have become increasingly dependent, both economically and socially, on the San Diego urban area. A complete analysis of their characters as communities would of necessity include an extensive consideration of the San Diego urban area and the interdependencies that have developed in the last several years. However, such a project is beyond the scope of this paper at the present time.

Between the city limits of the two communities is the unincorporated area of Grossmont. The Grossmont residential area generally follows the configuration of Mt. Helix and is considered to be one of the prime prestige neighborhoods in San Diego. Most Grossmont homes are on view sites. The proximity of Grossmont, as well as topography (Fig. 2), has had significant effect on the development of both communities and may be primarily responsible for the differences between them.

### La Mesa

The topography of La Mesa is primarily rolling and hilly. The old city developed in a bowl between the hills and along the old highway. Residential development extended into the hills south and east of the city in a spotty manner, becoming increasingly more deluxe in the direction of Grossmont. Downtown La Mesa was primarily a conglomeration of small shops extending for several blocks along the old highway (US 80). The old town is caricatured as a quiet village composed of retired businessmen and doctors tending small lemon or avocado groves.

TABLE 3  
EL CAJON REMAINDER SALES<sup>a</sup>

Parcel	After Value (\$)	Adjusted Value (\$)	Sale Price (\$)	Net Change (\$)
1	7,345	7,613	9,000	+ 1,387
2	14,000	14,154	14,750	+ 596
3	9,127	9,455	8,700	- 755
4	10,948	12,185	12,500	+ 315
5	11,296	12,127	10,981	- 1,146
6	11,884	12,522	8,500	- 4,022
7	13,345	13,805	13,500	- 306
8	13,345	13,998	13,900	- 98
Avg.	11,411	11,986	11,479	- 507

<sup>a</sup>Gross change, + 0.2%, net change, - 4.23%.

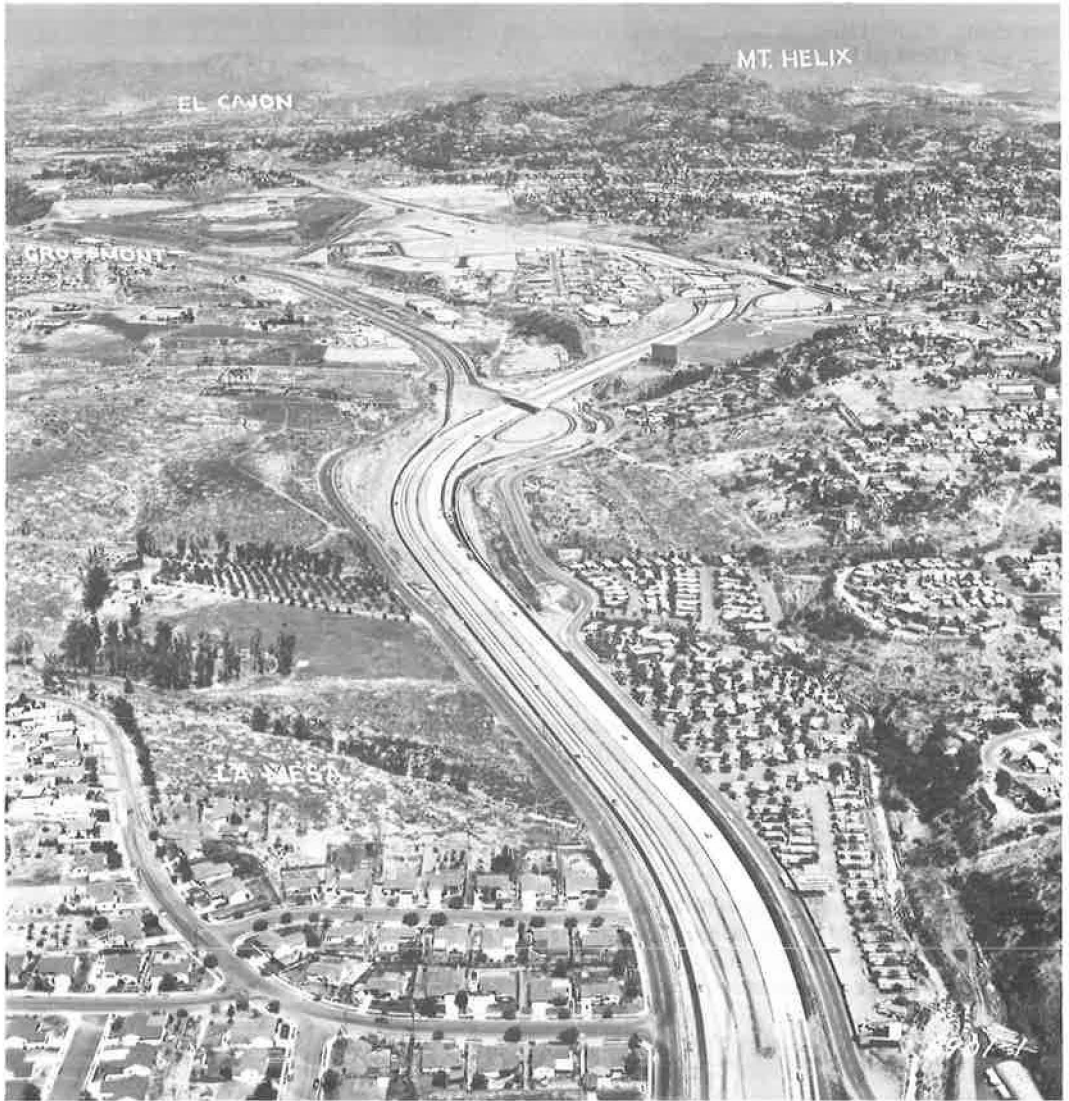


Figure 2. La Mesa-El Cajon-Grossmont area, showing freeways.

La Mesa, today, has become a typical middle-class bedroom community. The hills to the north are covered with homes: custom homes, tract houses and apartments. The hilly terrain with its view lots, combined with a warm climate, modern transportation, and proximity to Grossmont made La Mesa a natural residential suburb in the path of the San Diego boom. Today La Mesa has a large shopping center—Grossmont Shopping Center—on a plateau overlooking the old town, which draws its customers from all over the eastern San Diego urban area. It competes successfully with other established and larger, shopping centers in surrounding communities. Retail sales in La Mesa in the last five years have doubled—from \$26 million in 1957 to \$54 million in 1962 (5). Population nearly tripled between 1950 and 1960—from 10,946 to 30,441 (6).

### El Cajon

El Cajon is situated mainly on the flat floor of a fairly broad valley. This difference has several implications in the development of the community. For example, residen-

tial areas cannot emulate Grossmont with its rolling hills and view lots. The flat land of El Cajon, by reducing land development costs, reduced the cost of marketing a residential improvement, and consequently, attracted customers who desired lower-priced homes. If it were feasible to construct a scale of residential neighborhood desirability for the San Diego area, Grossmont would be at the top of the scale, La Mesa would be slightly above the middle, and El Cajon would be about one-quarter of the way to the bottom of the scale (excluding the residential section of the community located in the vicinity of Fletcher Hills in rolling terrain and adjacent to Grossmont). Of course, such a scale would be purely subjective, and the rating of the communities on this basis is not based on any factual material. But then, any scale which might indicate relative degrees of desirability must, by definition, be subjective.

Before the construction of the freeways, La Mesa and El Cajon most likely would have been approximately equal in terms of a desirability scale. Each was sparsely settled; each had a rather wide range of house types and values represented in their respective limits; each was characterized as being semi-rural and suburban.

### MARKETING CHANGES

El Cajon, before the era of urban expansion, was a minor marketing center for the surrounding area. For example, in 1957 retail sales in El Cajon were 50 percent greater than in La Mesa (\$40 million as against \$26 million). In 1957, per capita retail sales (all outlets) were \$1,850 in El Cajon but only \$1,140 in La Mesa. In San Diego County as a whole, per capita sales were approximately \$1,100. The El Cajon marketing area undoubtedly included parts, if not all, of La Mesa. The construction of improved transportation facilities reduced the space-time ratio to the major marketing center of the urban region and ultimately changed the character of El Cajon. In 1962, just 5 yr and two freeways later, per capita sales (all outlets) were: San Diego County, \$1,050; El Cajon, \$1,430 (off \$420); and La Mesa, \$1,660 (up \$520). Total retail sales increased 40 percent in El Cajon during this period (from \$40 million to \$57 million), but the community's role as a marketing area declined as competition from other areas increased with the expansion of the San Diego urban area.

This change of character becomes especially vivid when per capita sales are broken down into categories. For example, in La Mesa, general merchandise (department stores, etc.) increased from \$29.50 in 1960 to \$362.00 in 1962. This reflects the opening of the Grossmont Shopping Center and marks the beginning of a new era for La Mesa. But it marks the end of an old one for El Cajon. La Mesa has progressed at the expense of El Cajon. The location and environment in La Mesa, in connection with the merging of two freeways, made it a much more desirable location for a modern shopping center, and this one feature alone was enough to end the retail domination of El Cajon in the local area. El Cajon has a shopping center, but it is primarily a community shopping center and is not designed to attract customers from the surrounding areas.

In the future, it is most likely that these two communities will diverge even more. For example, the topography and location of El Cajon make it a fairly good prospect for future industrial development, and, in fact, the city has adopted a policy of encouraging industry. An area known as El Cajon Industrial Park has been set aside on the north of the community; light industry has developed to some extent along the freeway at the west of the city, and it seems likely that this trend towards an industrial orientation will continue. Because of topography, this sort of development is not feasible in La Mesa. If diversification of tax base were the primary goal of city government, El Cajon would make better progress than La Mesa.

Ecology and local government decisions have dictated a divergent course for La Mesa and El Cajon. Probably the freeway system played a major role in this development; its role of improving accessibility, reducing the space-time ratio, and reducing transportation costs most likely accelerated the suburbanization of both La Mesa and El Cajon. In neither case can the divergent roles be wholly attributed to the freeway; if a pre-existing propensity to develop in this manner is assumed, it may be concluded that the role of the freeway was to, at most, reinforce or strengthen that trend.

## SUMMARY AND CONCLUSIONS

There is, then, a strong desire and hence, market for La Mesa homes that is absent in El Cajon. This fact, when coupled with the earlier approximation of a tendency toward benefit in La Mesa and toward damage in El Cajon would seem to substantiate the basic premise of the pilot study and provide justification for further efforts to develop a means of measuring relative demand so that adjustments can be made for location, as well as for time.

Aside from the major conclusion of the study, at least two significant warning signs were noted: (a) even in an area of generally beneficial influence a property may be severely damaged if it is isolated from other like properties which tend to generally support values, and (b) even in an area where demand is generally weak a property may be benefited if the possibility of a zone change to permit a more compatible and higher and better use exists. Each before and after appraisal should carefully note the possibility of either of these occurrences.

The pilot study utilized a monograph technique which is a method entirely unsuited to the presentation of evidence in court proceedings. The court would prefer the submission of sales evidence with sound documentation as background for any adjustments. Much data collection remains before such an adjustment can be made with confidence. It is suggested that two additional bits of information about each remainder sale might help significantly in the development of a measure of relative demand: (a) the original asking price for the subject property, and (b) the length of time that it was listed for sale. To be able to relate this period for purposes of measurement, however, some index of relative demand in the surrounding area must be provided. This could be accomplished by the development of an average listing period for control properties. A comparison of the listing period of the subject property with the average listing time in the area should permit an index of relative demand levels to be constructed.

It was mentioned earlier that many examples exist of properties which have enjoyed substantial special benefits. These properties are, almost without exception, those where an obvious change to a higher and better use has occurred as a result of the properties peculiar relationship with the adjacent highway. The relative demand index need not be developed in these cases. The problem properties are mainly in the residential class where no obvious reason exists for benefits or where damage amounts might be more than ordinary because of depressed demand in the surrounding area.

The investigations conducted during this pilot study clearly showed that damage-benefit appraisal is an art still in its infancy. The fact of damages or benefits is established in the market place as is the value of property in general but, unfortunately for the damage-benefit appraiser, this market place is nearly always an environment different from that in which he is working. The appraiser must exercise more than ordinary care in every partial acquisition situation to insure adherence to the concept of just compensation. In these instances, more than ordinary care would envisage a complete market analysis until such time as additional documentation can definitely establish a pattern of effect in the different market environments in which the appraiser must form his opinions.

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