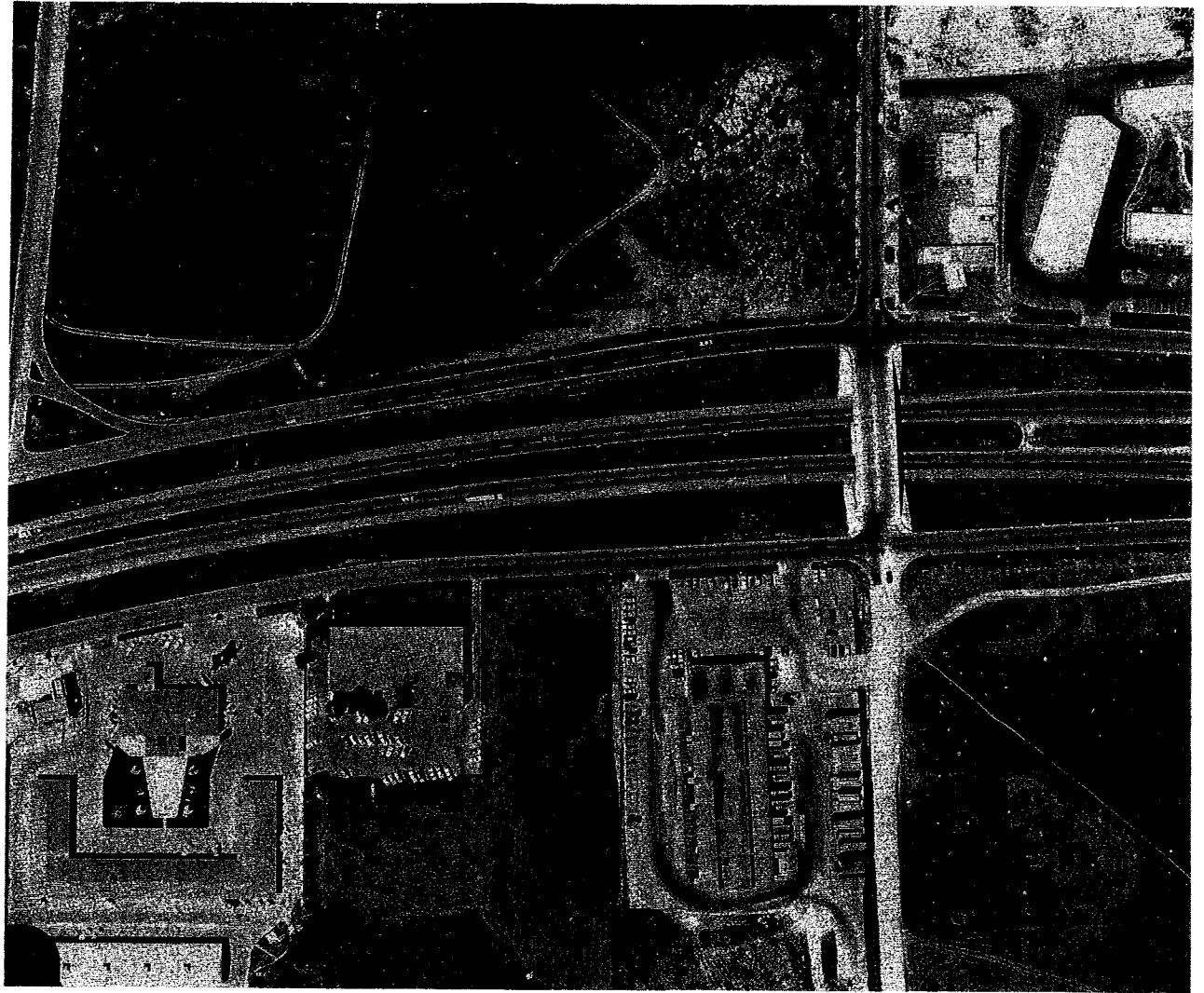
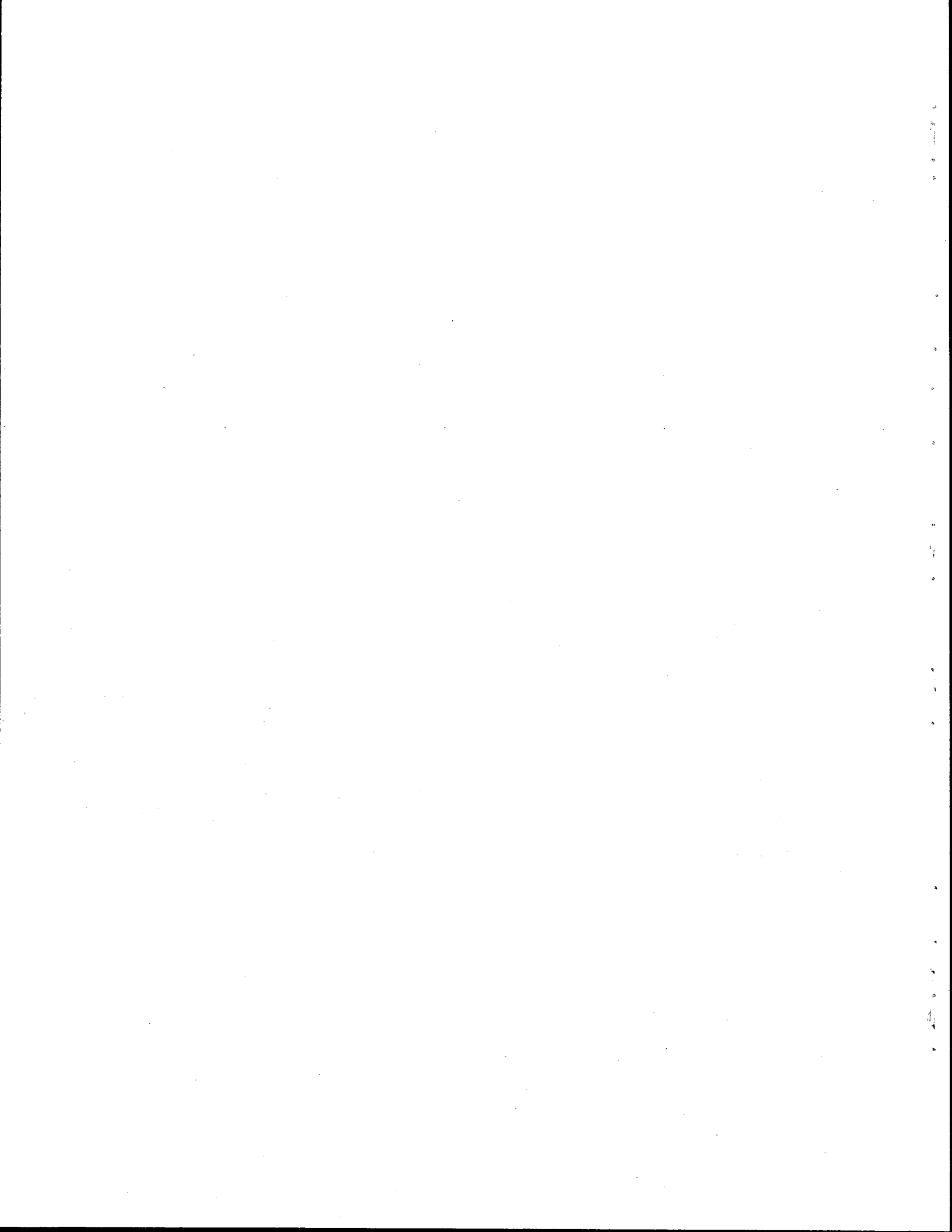


[1964]



A 1964 aerial view of IH 35 passing through the Austin Study Area.



RESTUDY OF CHANGES IN LAND VALUE, LAND USE, AND BUSINESS ACTIVITY
ALONG A SECTION OF INTERSTATE HIGHWAY 33, AUSTIN, TEXAS

By

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Austin is one of nine areas being studied to determine the economic impact of the Interstate System on local areas in the state. The objectives of the study in each area are to analyze land value, land use, and business activity changes along the Interstate System and also its impact on businesses located along segments of the old route which was bypassed.

The Austin area has been studied two times, resulting in the publication of an original report in 1960 and the restudy report in 1965. This summary gives some of the major findings presented in detail in the restudy report.

Changes in Land Value

An analysis of 2,312 usable land sales within the study area compared with 1,080 such sales in the control areas (both shown in Figure 1) indicates both the absolute and relative changes in land values over a 21-year period. Acreage and subdivided land sales were analyzed separately.

By breaking down the 21-year period into shorter periods as dictated by the construction schedule of the new highway and the cut off date of the original report, four time periods resulted: a base period, 1941-48; a construction period, 1948-53; a first after period, 1954-57; and a second after period, 1958-61. The first period was used as a base from which to analyze the amount of change in land values occurring in the study and control areas before and after construction of the new highway.

In determining the amount of land value change attributed to location of the new highway in the study area, the main burden of proof was placed on unimproved acreage property sales prices. Adjusted to constant dollars, Table 1 shows the increases in the prices of such property between the before and after periods. Using two combined measurements explained in more detail in the

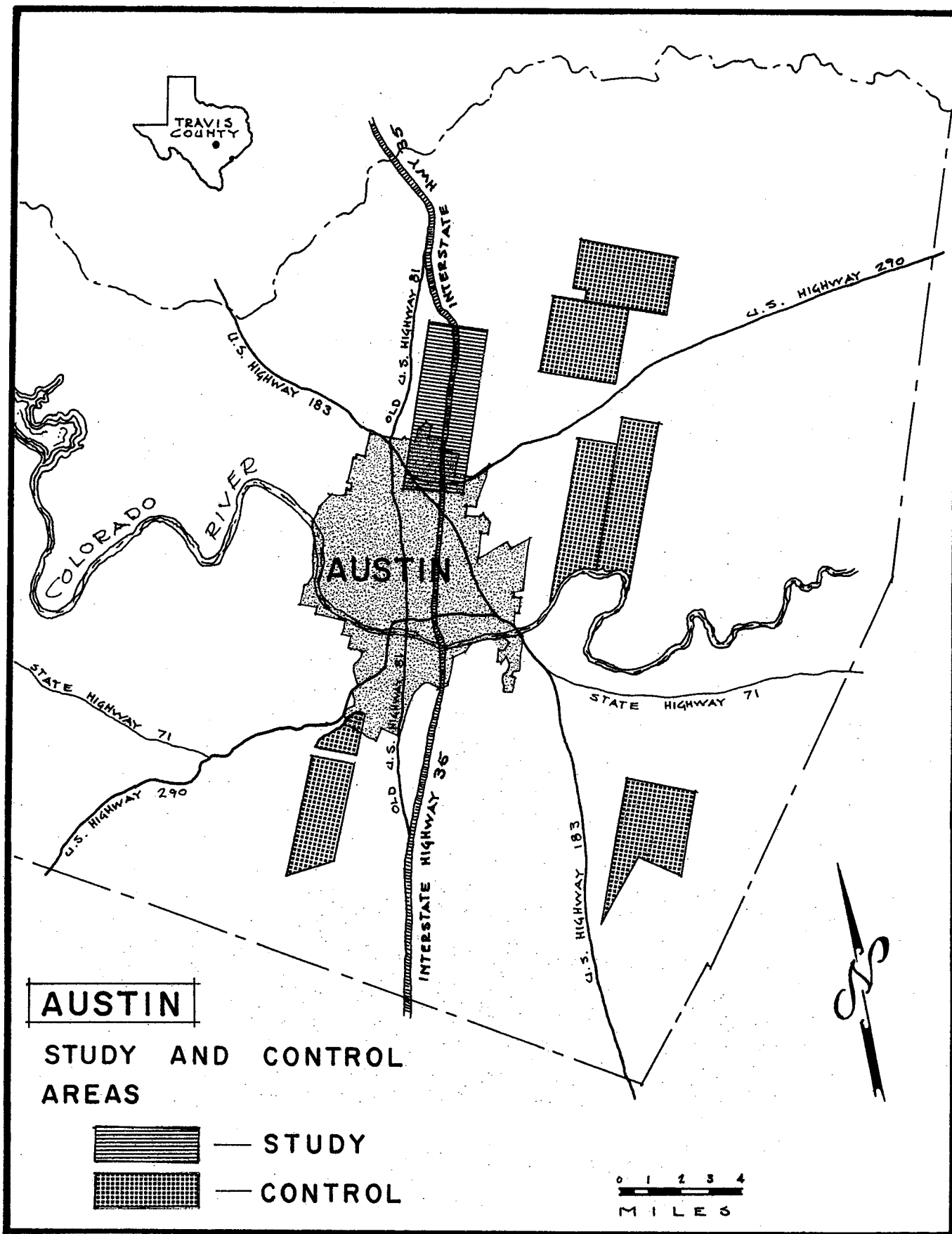


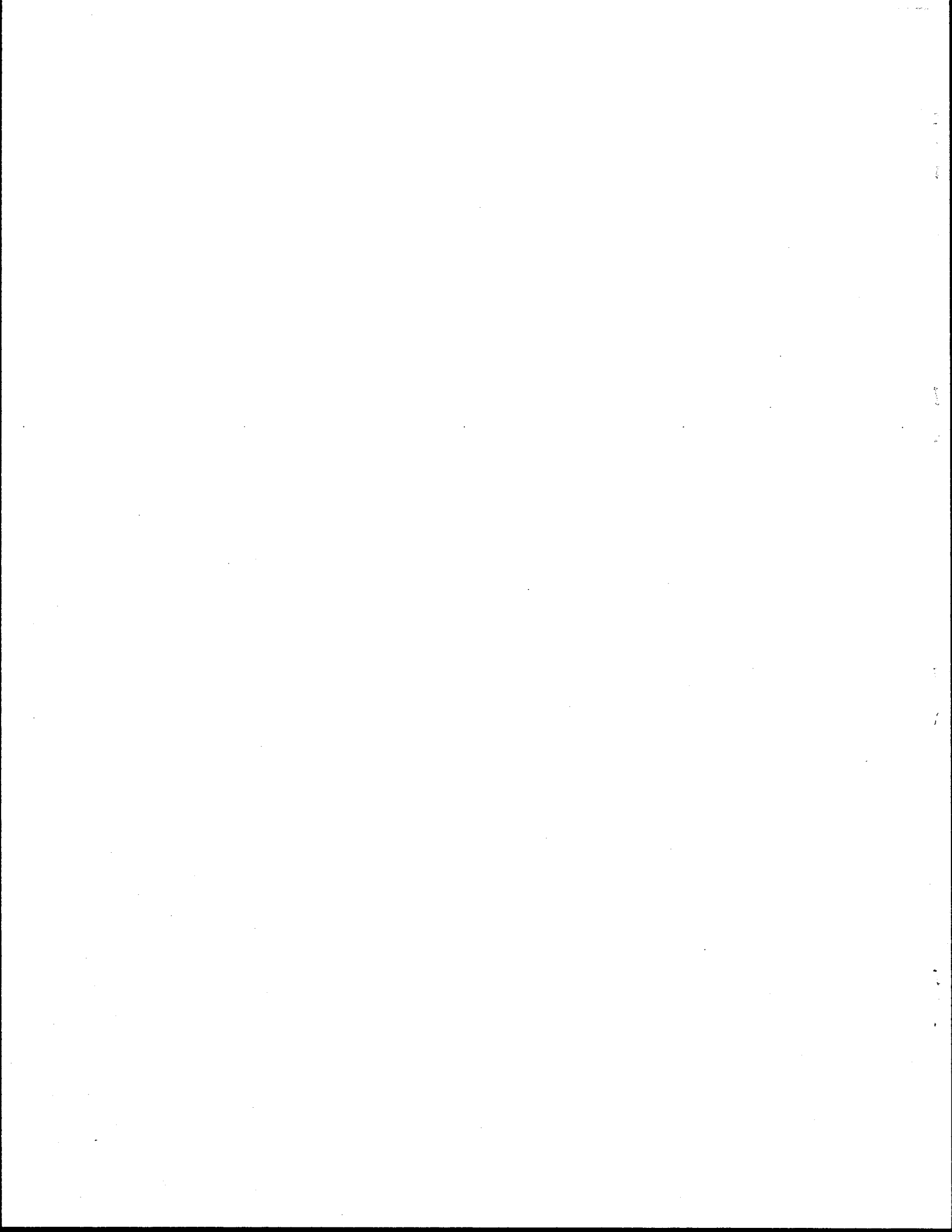
Figure 1

TABLE 1

ADJUSTED LAND PRICES OF UNIMPROVED ACREAGE TRACTS
IN THE STUDY AND CONTROL AREAS, AUSTIN, TEXAS
In Constant Dollars (1947-49=100)

| Item | Price Per Acre ^{1/} | | Difference Between Areas | Percent of Study Area Before Period Price |
|-----------------------------------|------------------------------|--------------|--------------------------------|---|
| | Study Area | Control Area | | |
| Before Period (1941-48) | \$ 525 (96) | \$130 (152) | \$ 395 | |
| Construction Period (1949-53) | 1,085 (42) | 297 (139) | 788 | |
| First After Period (1954-57) | 2,388 (64) | 535 (81) | 1,853 | |
| Second After Period (1958-61) | 3,114 (33) | 707 (96) | 2,407 | |
| Whole After Period (1954-61) | 2,635 (97) | 628 (177) | 2,007 | |
| <u>Increase Between Periods</u> | | | | |
| Before & Construction | | | | |
| Dollars | \$ 560 | \$167 | \$ 393 | 75% |
| Percent | 107% | 128% | -21% | |
| Construction & Whole After | | | | |
| Dollars | \$1,550 | \$331 | \$1,219 | |
| Percent | 143% | 111% | 32% | |
| Before & Whole After | | | | |
| Dollars | \$2,110 | \$498 | \$1,612 | 307% |
| Percent | 402% | 383% | 19% | |
| <u>Probable Highway Influence</u> | | | | |
| Percent | 163% | | | |
| Dollars | \$ 856 | | | |

^{1/} Number of transactions is shown in parentheses.



restudy report, the probable highway influence on land values in the study was \$856 per acre or 163 percent. One measurement considers the dollar or absolute price changes between periods for each area, and the other the percent or relative price changes between periods for each area. Most of the study area increase occurred in the first after period.

The new highway had a less pronounced influence on the prices of unimproved subdivided land than nonsubdivided land in the study area. Between the construction and whole after periods, the probable highway influence on land prices was \$.00836 per square foot or 22 percent. Most of the price increase for the study area occurred during the second after period.

A division of the study into two equal sections to ascertain the highway influence on land values in relation to distance from the central business district of Austin showed that the section farthest away received more highway influence than the section closest to the city.

After the new highway was opened to traffic, the value of abutting land increased rapidly and considerably more than non-abutting land value. Abutting land farthest from the city experienced the greatest gains.

Changes in Land Use

From the last year (1948) before construction began on the new facility to 1962, extensive land use changes occurred in the study area, especially on tracts abutting the highway. Figure 2 shows the study area land use as of 1951. The photograph shows that in 1951, study area land was still primarily in agricultural use. Figure 3 is also an aerial photograph showing all the changes in land use occurring after 1951. By the end of 1961, 24 businesses were located in the area, 19 of which were abutting the new highway. However, some of these are unsightly, such as junk yards selling used parts.

In addition to the commercial businesses, there were three office buildings, three industrial businesses, one nursing home, and one retirement home located in the area near the new highway.

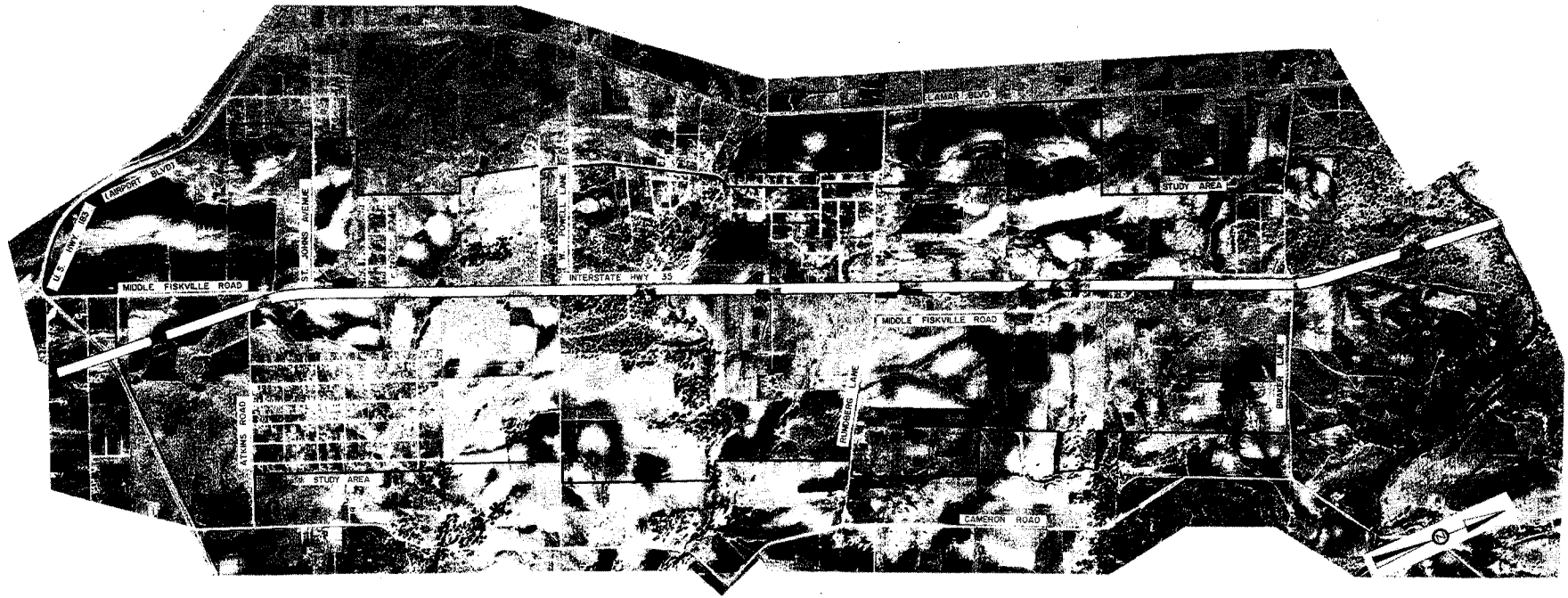


Figure 2. An aerial view of the Austin Study Area showing land use in 1951, before construction of the new highway. (Scale is 1 inch = .625 miles.)

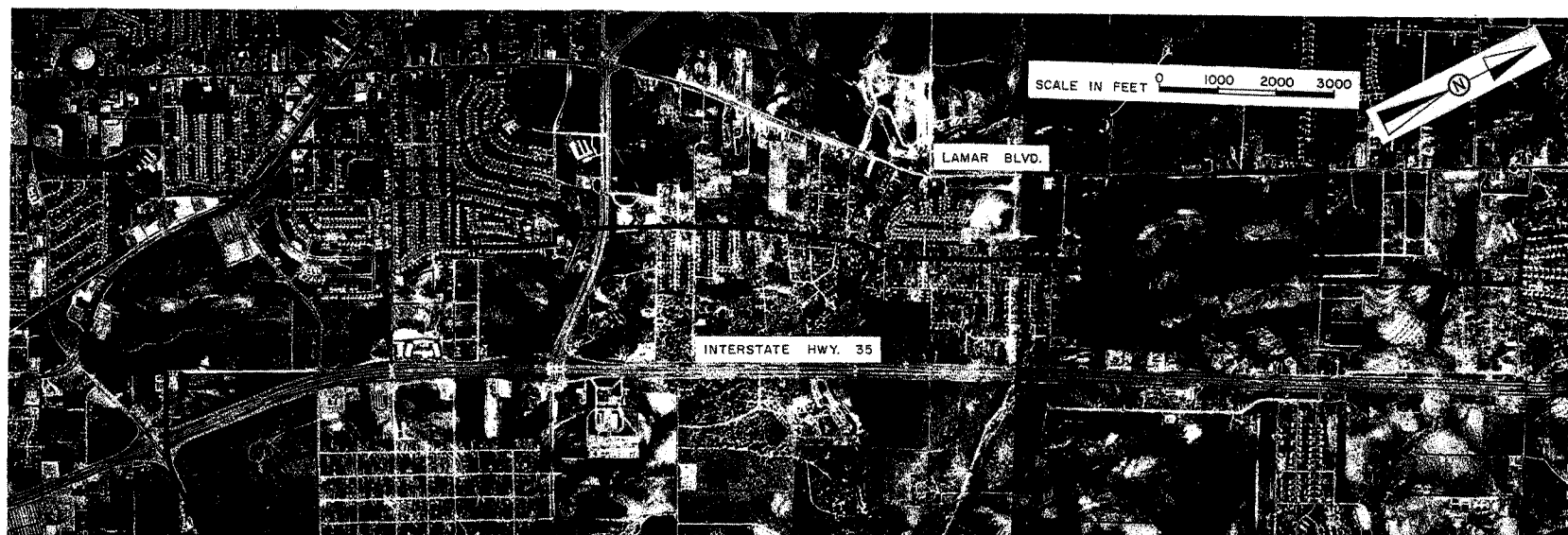


Figure 3. An aerial view of the Austin Study Area showing land use in 1964, after construction of the new highway.

There were only five subdivisions in the area by 1948 compared to 22 by 1961. Most of these were at least 75 percent built up by 1961. Also, over 20 rural residences were constructed in the area after 1948.

Land value and land use comparisons showed that as land succeeded to higher uses in the study area, it increased in value accordingly. Even the values of land lying idle increased in value at an increasing rate, with the largest gains occurring in the last study period after completion of the new highway.

Changes in Business Activity

A study of business activity along parallel sections of the old and new highways in 1957 and 1961 showed that the new highway definitely stimulated business activity within the area as a whole. In 1961, there were 54 percent more businesses of all types located along both routes than on the old route alone in 1953. Most of these were retail businesses. After the new highway was constructed, 86 new businesses were established on both routes as opposed to 29 businesses which closed.

There were 104 and 119 retail businesses in operation along the combined routes in 1957 and 1961, respectively. Gross dollar sales and other data were collected from most of these retail businesses by personal interviews. The dollar volume was estimated for those businesses refusing to divulge such information.

The retail businesses were separated according to the degree of their dependence upon traffic for sales volume. Service stations, food service establishments, and motels were considered as traffic-serving firms and all other retail businesses were considered to be nontraffic serving. Gross dollar sales data were analyzed on this basis.

Table 2 shows that the old route traffic serving businesses suffered significant losses in gross sales between 1953 and 1957 and experienced only a 1.7 percent recovery between 1957 and 1961. In contrast, firms of this group which located along the new route experienced a 90 percent increase in sales during the last period. However, there were only seven new route businesses compared to 46 old route businesses. Therefore, dollar volume increases for both routes combined was 17 percent between 1957 and 1961 and 15 percent between 1953 and 1961.

Old route nontraffic serving businesses were generally helped by the removal of through traffic. Very few operators indicated that they lost business volume due to the new highway. The estimated gross sales of this group increased more than the average rate for the entire city of Austin between 1953 and 1961. In fact, the traffic serving and nontraffic businesses combined experienced a greater increase than the whole city as well as the state.

The old route businesses have begun to make significant adjustments which are already proving advantageous to their economic health.

Changes in Other Economic Indicators

Changes in other selected economic indicators, shown in Table 3, suggest the city of Austin has fared quite well economically between 1953 and 1961, and that its future economic growth (especially within the study area) looks bright.

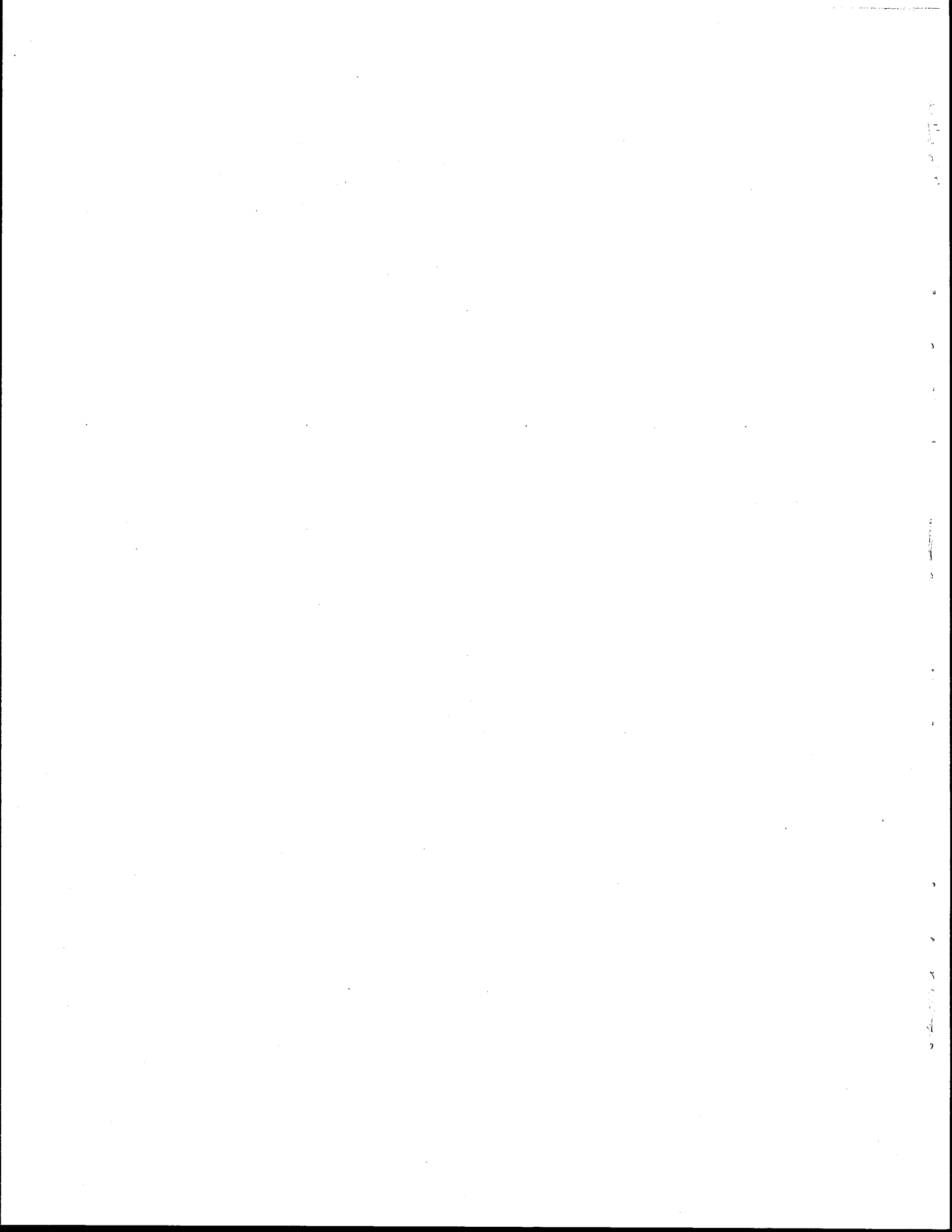


TABLE 2

TOTAL GROSS SALES VOLUME OF ALL RETAIL BUSINESSES
LOCATED ALONG BOTH ROUTES BETWEEN SELECTED YEARS - 1953, 1957 AND 1961

| Businesses | Dollar Volume | | | Percent Change Between | | |
|--|-------------------|-------------------|-------------------|----------------------------|----------------------------|----------------------------|
| | 1953 (Dollars) | 1957 (Dollars) | 1961 (Dollars) | 1953 and 1957 (Percent) | 1957 and 1961 (Percent) | 1953 and 1961 (Percent) |
| <u>Traffic Serving Businesses</u> | | | | | | |
| 46 Old Route | \$2,388,058 | \$1,939,065 | \$1,971,442 | -18.8% | 1.7% | -17.4% |
| 7 New Route | NA | 409,601 | 780,440 | NA | 90.5 | NA |
| Subtotal | \$2,388,058 | \$2,348,666 | \$2,751,882 | -1.6% | 17.2% | 15.2% |
| <u>Nontraffic Serving Businesses</u> | | | | | | |
| 76 Old Route | \$4,238,837 | \$6,033,717 | \$8,127,343 | 42.3% | 34.7% | 91.7% |
| 9 New Route | NA | 316,571 | 521,545 | NA | 64.7 | NA |
| Subtotal | \$4,238,837 | \$6,350,288 | \$8,648,888 | 49.8% | 36.2% | 104.0% |
| <u>Traffic Serving and Nontraffic Serving Businesses</u> | | | | | | |
| 122 Old Route | \$6,626,895 | \$7,972,782 | \$10,098,785 | 20.3% | 26.7% | 52.4% |
| 16 New Route | NA | 726,172 | 1,301,985 | NA | 79.3 | NA |
| Grand Total | \$6,626,895 | \$8,698,954 | \$11,400,770 | 31.3% | 31.1% | 72.0% |

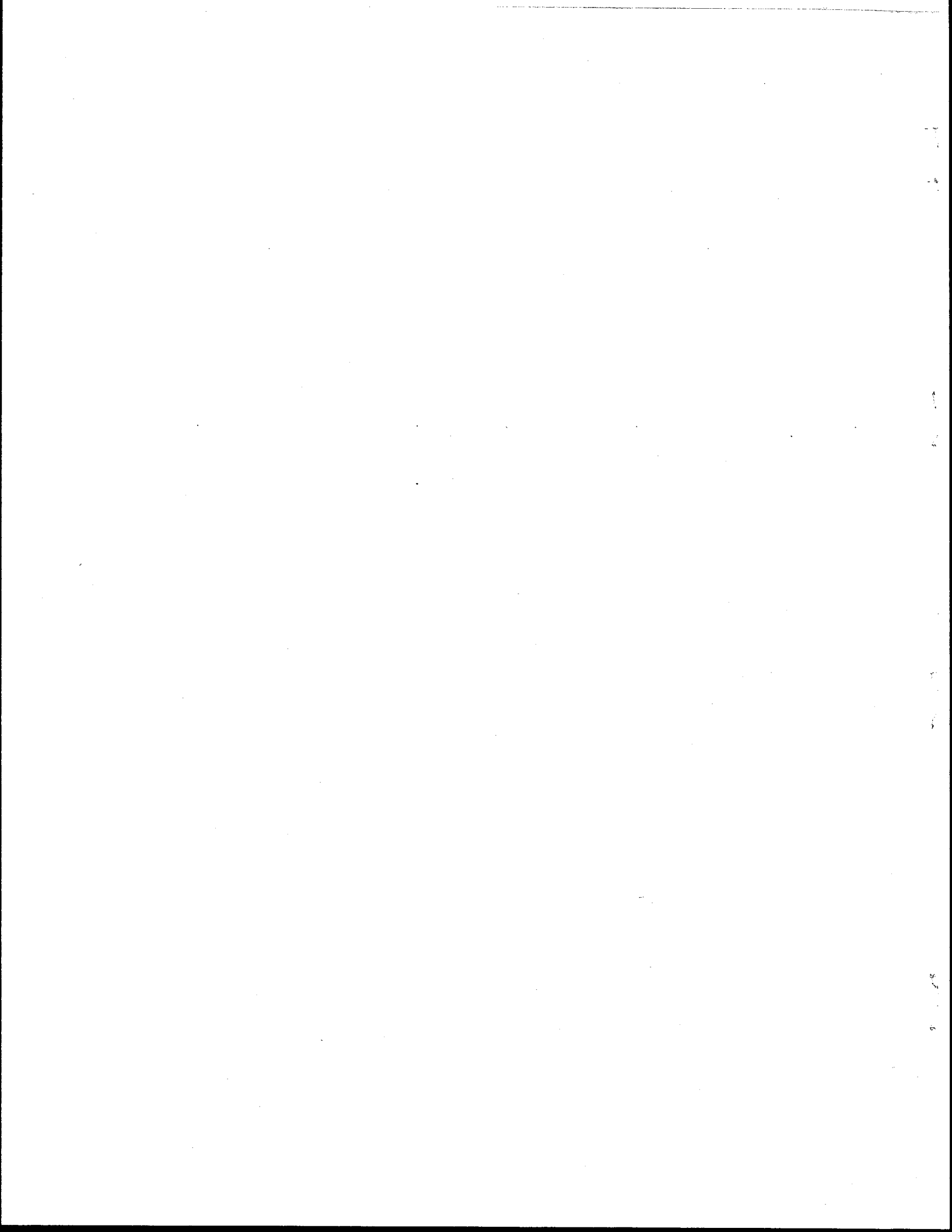


TABLE 3

SELECTED ECONOMIC INDICATORS IN THE CITY OF AUSTIN
FOR DESIGNATED YEARS - 1953, 1957 AND 1961

| Item | Quantities | | | Percent Changes Between | | |
|---|------------------|------------------|------------------|-------------------------|----------------------|----------------------|
| | 1953 (Number) | 1957 (Number) | 1961 (Number) | 1953-57 (Percent) | 1957-61 (Percent) | 1953-61 (Percent) |
| Natural Population Increase | 3,065 | 3,667 | 3,692 | 19.6 | .7 | 20.5 |
| Assessed Valuation of Property | \$382,365,500 | \$447,580,660 | \$536,774,830 | 17.1 | 19.9 | 40.4 |
| Total Employed | 64,323 | 71,685 | 80,950 | 11.4 | 12.9 | 25.8 |
| Total Employed in Manufacturing | 4,057 | 5,325 | 5,870 | 31.3 | 10.2 | 44.7 |
| Total Employed in Nonmanufacturing | 38,466 | 43,710 | 49,220 | 13.6 | 12.6 | 28.0 |
| New Dwelling Units Authorized | 1,313 | 1,205 | 2,165 | -8.2 | 79.7 | 64.9 |
| Total Building Permit Values \$ | 34,116,375 | \$ 43,319,981 | \$ 57,330,225 | 27.0 | 32.3 | 68.0 |
| Electric Customers | 44,338 | 51,499 | 55,437 | 16.2 | 7.6 | 25.0 |
| Water Customers | 40,082 | 46,948 | 52,550 | 17.1 | 11.9 | 31.1 |
| Enrollment at University of Texas | 15,732 | 19,002 | 18,740 | 20.8 | -1.4 | 19.1 |
| Enrollment in Austin Inde- pendent School District | 23,541 | 30,100 | 35,673 | 27.9 | 18.5 | 51.5 |
| Motor Vehicle Registration | 58,632 | 76,265 | 98,830 | 30.1 | 29.6 | 68.6 |
| Postal Receipts | \$ 2,573,987 | \$ 3,500,462 | \$ 5,033,061 | 36.0 | 43.8 | 95.5 |

Source: Basic data about Austin and Travis County prepared by Department of Planning, City of Austin, Texas.

