Grand Junction Downtown Development Strategy Plan

Phase Two Summary

GRAND JUNCTION

DOWNTOWN DEVELOPMENT STRATEGY PLAN

PHASE II SUMMARY
OCTOBER, 1980

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INTRODUCTION

The Phase II effort of the Downtown Development Strategy Plan has two major areas of emphasis; an analysis of Downtown parking and market considerations for retail, office and housing. The following sections of this report treat each of those areas of interest in a separate section. The surveys that were undertaken as a basis for these investigations are described in general terms in a separate section also, but the specific findings used in the market and parking studies are included within the bodies of those reports.

Application of the findings included here will be evaluated in the Phase III effort which considers the use of this base information in alternative design and market strategy scenarios.

SURVEYS/INTERVIEWS

DOWNTOWN SHOPPER/PARKER SURVEYS

An important element of the Phase II effort was directed at gaining local insight into the perceptions of shoppers, parkers and other general users of the Downtown area. The intent was to assemble a data base of public opinion and observations taken in the field, to use as a comparison with the data which was more suited to technical measurement gathered during the parking and market analysis studies.

While future design and/or alterations to the Downtown area cannot be based wholly on Downtown shoppers opinions, their perceptions of problems concerning finding places to park, ability to shop in a convenient, leisurely fasion, and the Downtown's overall "attitude" toward the shopper, (whether real or imagined), are going to be part of the decision that guides the potential shopper Downtown to make purchases or elsewhere to competing areas. Since perceptual observations can be highly individualized, the most reasonable approach to learning these perceptions was to interview the individuals while those perceptions were being formed or experienced.

Surveys were conducted during the week of September 22-27. The days chosen for sampling were a Wednesday through Saturday period to include mid-week, Friday evening and Saturday shopping/parking peaks. Surveys were conducted all day long, from the time of store openings to closings and through the noon lunch hour.

Interviews were conducted as shoppers returned to their cars on both sides of Main Street and on side streets on each block between 2nd and 7th, as well as in the larger parking lots located behind Main Street stores on Colorado and Rood.

Several areas of interest were covered during the interviews to avoid the necessity for separate surveys. Questions concerned 2 major areas of investigation; A) The market area served by the Downtown and the general nature of the shopping trip and B) The shoppers observations concerning parking in the Downtown as to convenience, ease of locating a space and the distance travelled on foot from parking to destination. Other, more peripheral questions were also asked during the interview related to feelings about public transit and store hours Downtown, but the major emphasis was placed on the two basic areas of interest noted above.

One of the benefits of an on-site survey conducted over several days is that subtle adjustments to the format on interviewing procedure may be made after the initial responses begin coming in, to "fine-tune" the survey instrument. This allows for more detailed information to be gathered about specific problems or areas of interest that become obvious after the first day. For example, times of the year when parking problems seemed greatest could be identified by questioning on the second day of interviews, once it became apparent that the parking "problems" shoppers were generally describing were not occurring on the day of the interview.

The results of the Shopper/Parker surveys have been utilized in preparing the Market Analysis and Parking Analysis section of this report. A synopsis of the general shoppers' observations surveyed as well as the observations of the survey team may be of interest here.

In terms of problem identification, the issue that was raised repeatedly was parking. When all parking-related existing problems or suggested improvements were tabulated, approximately 70% of the sample indicated a concern of some type with parking. At the same time, only 30% of the total sample indicated that they had experienced problems in finding parking on the day of the interview. This pattern of a "general" complaint concerning parking but an absence of a parking problem on the day of the interview was consistent throughout the interview period. Once this pattern became obvious (essentially after the first morning of sampling) interviewers were instructed to ask when parking problems were experienced. The response in approximately 70% of the sample indicated the Christmas shopping season as the prime parking problem period. The consistent indication of Christmas time as the most commonly experienced problem period implied that the parking difficulties encountered then were bad enough of and impact to be remembered for the rest of the shopping year. This once-a-year major parking problem might be discounted as being insignificant because of its infrequency. At the same time, a large proportion of Downtown retail revenues are the result of Christmas shopping. With the advent of a competing shopping area in Mesa Mall, shoppers' perceptions of parking problems in the Downtown during this high-volume season could have a serious negative effect on expenditures.

Another perceptual observation arising from the interview concerns metering. Approximately 27% of those interviewed advocated removal of parking meters on Main Street. While this is less than a third of the total, this question was open-ended and did not directly ask for an opinion concerning meter removal. A 27% unsolicited response is fairly significant, particularly since it was second only to the "need for more parking" as a suggested improvement by those interviewed. (8)

Follow-up questions identified meters as a way of "charging them to shop". They felt their expenditures in the Downtown should be sufficient reason to provide parking without what they expressed as a "penalty" for shopping. Naturally the 5% of the sample who had received parking tickets were more vehement in their comments, but overall the pattern of objection to the highly visible metered parking was consistent.

Another 10% of the sample, again in response to an open-ended query concerning improvements Downtown mentioned removal of one-way streets. This received the third highest percentage response of the open-ended questions and related primarily to the difficulty in circulating through the Downtown to find parking.

Questions concerning other means of transport besides automobiles to the Downtown received a limited response. Interviewers were instructed to survey bike-riders whenever possible to assemble a data base for this shopper type. In all, 6 bicyclists were interviewed during the survey period. Their concerns in every case reflected what they felt was a lack of adequate bike-racks for locking-up their bikes. The concrete front-tire restraint bike holders currently in use are not suited to the majority of alloy or light steel-rim 10-speed bikes. They cause bending of the wheel-rims and do not afford adequate locking positions for both wheels and the frame without considerable lengths of cable. Bicyclists also uniformly indicated the lack of safe access to the Downtown for bikes and identified this lack as a real deterrent to shopping by cyclists. (9)

Two questions concerning public transport were included in the sample - one relating to bus service to the Downtown as a correlation to the County-wide public transportation study, and one relating to circulation within the Downtown. Sixty-one percent of those surveyed said they would ride a bus from their residence to the Downtown if one were available. The location identified (10) (11)

as the most desirable stop was between 5th and 7th on Main Street. Fifty-three percent of those surveyed indicated that they would ride a downtown trolly-bus from parking areas to their shopping destination, but almost all qualified that response by saying that it should be very inexpensive or free.

Shoppers preferences concerning shopping hours were also surveyed as a secondary question during the interviews. The largest percentage of respondents, 36%, indicated Friday night as the time they would most prefer Downtown stores to be open. Thursday night was second with 24% and Wednesday night third with 22%. The survey also indicated that 73% of the sample preferred stores to stay open until 9:00 or 10:00 at night. The next highest percentage, 14%, indicated they would prefer stores to open earlier in the morning.

A count of stores open on Friday night indicated that a total of 34 stores were open along Main Street until at least 8:00. Ten stores specifically indicated that they would be open until 9:00. Three restaurants were open along Main Street as well as both movie theatres. Additionally 2 restaurants were open in close proximity to Main Street on 7th. The most active block in terms of open stores was between 5th and 6th with 14 stores, a restaurant and a movie theatre. Main between 3rd and 4th had the least number of stores open but contained an interesting mix of uses with a restaurant, book-paper-magazine shop and quality clothing store open at the same time.

(12) Overall street-activity fell off rapidly in the Downtown soon after 5:00 P.M. Shoppers who appeared after this time had specific destinations nd spent virtually no time browsing.

Shoppers overall evaluations of the Downtown were surveyed with a nine-category question in which they could rate aspects of shopping, parking, convenience, service, quality, store hours, etc. as excellent, good, fair or poor. The results of this survey were tabulated separately for those shoppers from Grand Junction and from outside Grand Junction. The categories, ratings and percentages are shown on the following table.

In general, the Downtown was rated highly in terms of customer service, quality, and value received for dollar spent. Parking and convenience were the notable high scores in the "poor" category.

DOWNTOWN SHOPPER SURVEY RESULTS

(13)

CHARACTERISTICS		PERCENTAGES			
		E	G	F	P
Shopping Value	Grand Junction	17.3	52.4	20.5	9.7
	Other Than	27.1	54.2	18.6	0
	Total	19.6	52.9	20.0	7.4
Prices	Grand Junction	3.8	25.5	39.9	20.7
	Other Than	5.2	51.7	24.1	19.0
	Total	4.1	39.4	36.1	20.3
Customer Service	Grand Junction	10.9	63.4	17.5	8.2
	Other Than	17.9	64.3	14.3	3.6
	Total	12.6	63.6	16.7	7.1
Convenience	Grand Junction	6.6	50.2	15.8	29.5
	Other Than	12.3	66.7	12.3	8.7
	Total	7.8	53.3	14.8	24.2
Parking	Grand Junction	2.8	17.6	16.6	62.9
	Other Than	1.7	36.7	25.0	36.7
	Total	2.5	2.2	18.7	56.6
Cleanliness	Grand Junction	20.6	63.9	12.8	2.8
	Other Than	17.2	77.6	1.7	3.4
	Total	19.7	67.2	10.1	2.9
Quality	Grand Junction	10.9	59.9	24.7	4.3
	Other Than	19.3	68.4	12.2	0
	Total	12.9	62.0	21.8	3.3
Value	Grand Junction	4.4	52.8	29.4	13.3
	Other Than	6.6	65.6	21.3	6.6
	Total	4.9	56.0	27.4	11.6
Store Hours	Grand Junction	10.2	42.2	22.2	25.1
	Other Than	3.6	63.6	14.5	18.2
	Total	8.7	47.4	20.4	23.5

RETAIL MARKET ANALYSIS

COMPARISON GOODS - RETAIL MARKET ANALYSIS

Comparative goods retailing comprises the majority of the business activity in Downtown Grand Junction. Retailing largely sets the tone of the downtown area as a major regional trade center. Because of this focal role of retail activity, the analysis of the retail market is a critical factor in assessing the direction of future downtown development. As major new competition, such as Mesa Mall, makes its effects felt in the Western Slope retail picture, downtown Grand Junction must carefully assess its position. Is downtown's traditional role as the major retail center still viable? Should downtown's retail activity be aimed at a more specialized retail market? Will office and governments activities take over as downtown's major activity, leaving retailing as a secondary function? All of these questions require market research for informed judgements.

Specific market data, such as the size of the retail market area, the buying power within that area, and the strength of current and future competition will affect the answers to these important questions. These issues are explored in the following pages from a market analysis point of view. This analysis examines the purchasing power of the current and projected population within a defined market area. By then projecting the market share which the downtown is likely to capture in the future, the total downtown retail sales and floor space which can potentially be supported results.

The market analysis defines the potential downtown sales. It does not determine, for example, if a new downtown department store could be built given the existing downtown development, financial conditions or public and private incentives which might be offered. The market analysis looks only at sales potential and the "normal" sales required to justify a given quantity of sales area.

Market Area

Any retail activity draws the vast majority of its sales from a definable market area. By determining the area from which Grand Junction draws its comparison goods buyers, the current and projected future sales generated from that area may be determined. The following paragraphs describe how the market area was delineated.

In order to determine the importance of population and purchasing power growth in Grand Junction's regional market area, both the Primary Market Area (PMA) and Secondary Market Area (SMA) were defined.

The Primary Market Area is the smallest area from which 80 percent of all sales originate. The Secondary Market Area is the smallest area from which the next ten percent of all sales originate. The PMA should also include all of the area for which Grand Junction is the closest or most convenient comparison shopping center. The SMA should include that area for which Grand Junction is a primary competitor to other local comparison shopping areas. (1)

For example, the City of Delta provides some comparison shopping opportunities, but Grand Junction is probably a major competitor because of its reasonably close proximity and ease of access. (2)

Objective determination of the PMA and SMA was accomplished through several means. First, a check cashing survey was conducted for downtown retail stores banking at First National Bank and at U.S. Bank. All checks deposited on Monday, August 25, including the night deposits from the previous Friday, Saturday and Sunday, were included in the survey. Classified by type of store, (such as department stores, clothing stores, and furniture stores,) the amount of the check and the home address indicated on the check were recorded. Tabulation of this data indicates the (3) percentage of total sales paid for by check, originating from various areas.

This means of analysis provides a very detailed and objective method of delineating market area. It takes (4) into account the amount of purchase as well as the frequency of purchase. It also avoids perceptual inaccuracies which sometimes cause merchants to overestimate the size of their market area. Large purchases

from distant areas sometimes create more significant impressions than the frequent smaller purchases made by locals.

The results of the check cashing analysis for department and apparel stores are shown in Table 1. (There were not a sufficient number of other store types to protect the confidentiality of the information in reporting the results.) (5)

Of all purchases made with checks in the downtown department stores during the time period covered, 65.2 percent of the dollar value originated from Grand Junction addresses. A slightly higher percentage of apparel store sales came from that area. (6)

As the initial results of the check cashing survey were discussed, some merchants indicated that out-of-town customers were more likely to pay with cash or credit cards rather than checks. If this were the case, then the check cashing survey would tend to overestimate the Grand Junction area share of the market and underestimate the more distant share. In order to evaluate this possibility, the home address of interviewees in a shopper/parker survey, conducted as people returned to their parked cars in the downtown area, were also tabulated as shown in the third column of Table 1.

Based on these results, it was estimated that the Grand Junction Area, including Clifton and Fruitvale, comprise approximately seventy percent of the total market. The remainder of Mesa County adds another ten percent of the market. (7)

Mesa County's boundaries provide a good approximation of the Primary Market Area. Looking into surrounding areas, Delta and Montrose Counties each contribute approximately three percent of the market while Garfield County adds another 4 1/2 percent. Although Rio Blanco and Grand Counties showed smaller shares because of their small populations, it was felt that Grand Junction was the logical major shopping location for these areas. The total of this five county SMA contributes slightly over ten percent of total sales. The remaining sales were widely dispersed, ranging from tourist sales from California, Ohio and Colorado Front Range cities to more regional addresses like Craig, Durango and Gunnison. (8)

Because some sales losses from within the PMA and SMA naturally occur, for example, as people travel or vacation, it was assumed that the remaining ten percent of the Grand Junction market coming from beyond the SMA would be equally offset by sales losses or "leakage" to other areas from within the PMA and SMA.

TABLE 1

GRAND JUNCTION RETAIL MARKET AREA (9)

AREA	CHECK CASHING SURVEY (% OF $ SPENT) DEPT. STORES	APPAREL STORES	SHOPPER/PARKER SURVEY (% OF INTERVIEWS)
GRAND JUNCTION	65.2	69.2	61.0
CLIFTON	6.9	3.2	5.8
FRUITVALE	-	1.7	1.9
GRAND JUNCTION AREA	72.1	74.1	68.7
OTHER MESA COUNTY	11.4	6.9	10.4
TOTAL MESA COUNTY	83.5	81.0	79.1
DELTA	1.4	1.1	0.8
OTHER DELTA COUNTY	3.3	1.5	1.9
TOTAL DELTA COUNTY	4.7	2.6	2.7
MONTROSE	0.8	2.3	2.7
OTHER MONTROSE COUNTY	1.2	1.0	0.8
TOTAL MONTROSE COUNTY	2.0	3.3	3.5
RIFLE	1.6	0.8	1.9
GLENWOOD SPRINGS	0.5	1.5	0.4
OTHER GARFIELD COUNTY	2.6	3.6	1.2
TOTAL GARFIELD COUNTY	4.7	5.9	3.5
RANGELY	3.3	-	-
OTHER RIO BLANCO COUNTY	0.1	0.7	-
TOTAL RIO BLANCO CO.	3.4	0.7	-

TABLE 1 - CONT.

AREA	CHECK CASHING SURVEY (% OF $ SPENT) DEPT. STORES	APPAREL STORES	SHOPPER/PARKER SURVEY (% OF INTERVIEWS)
MOAB	0.3	-	1.2
OTHER GRAND COUNTY	-	0.5	0.8
TOTAL GRAND COUNTY	0.3	0.5	1.9
5 COUNTY SECONDARY MARKET AREA	13.3	13.0	11.6
OTHER	3.2	6.0	9.3

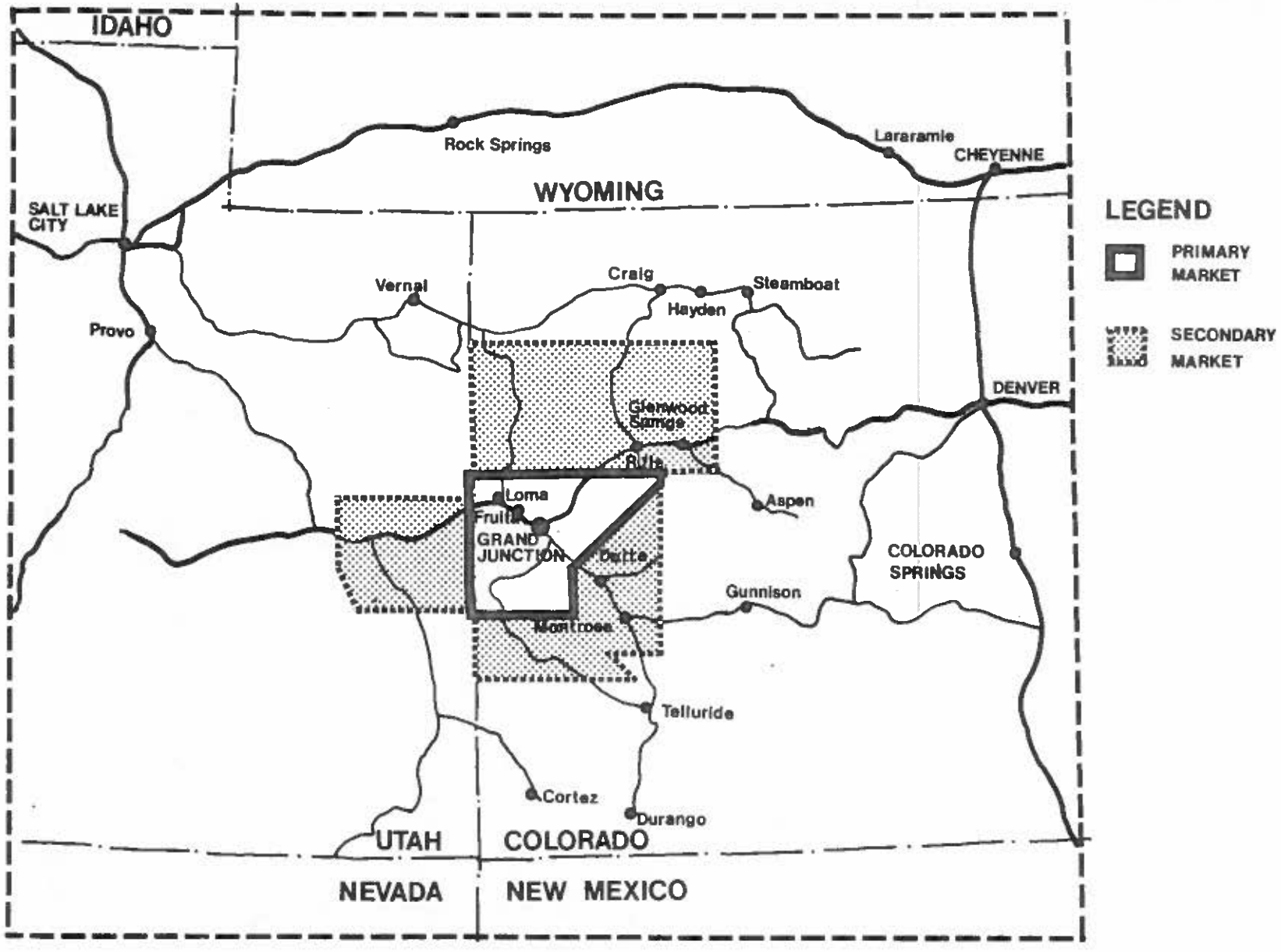


FIGURE 1 PRIMARY AND SECONDARY MARKET AREAS : REGIONAL CONTEXT

Market areas are influenced by the factors of accessibility and competition. Figure 1 shows the PMA and SMA in the context of their regional setting and relative proximity to other cities and their trade areas within the two-state region. Grand Junction is fortunate in its crossroads location. Easy accessibility is provided south to Delta and Montrose Counties along U.S. 50; east to Rifle and Glenwood Springs and west into Grand County along I-70 and U.S. 6, and north to Rangely on Colorado 139.

(10)

Beyond the Secondary Market Area, simple distance limits Gand Junction drawing power. Ouray, for example, is nearly 100 miles from Grand Junction; Gunnison is 125 miles, Craig is 150 miles. While residents of these areas may occasionally shop in Grand Junction, they are part of the tertiary market which comprises less than ten percent of total retail sales. Competition from the larger retail centers of Salt Lake City and Denver also limit the SMA. The center of Eagle County is 130 miles from Grand Junction, but only 120 miles from Denver. Vernal is 140 miles from Grand Junction, 150 miles to Provo and 180 miles to Salt Lake City. The larger retail offerings of these larger cities are likely to attract most of Vernal's business. Figure 2 shows the Primary and Secondary Market Areas in greater detail and locates the major incorporated cities and towns within that area.

(11)

Because some sales losses from within the PMA and SMA naturally occur, for example, as people travel or vacation, it was assumed that the remaining ten percent of the Grand Junction market coming from beyond the SMA would be equally offset by sales losses or "leakage" to other areas from within the PMA and SMA.

The current and projected populations of the Primary and Secondary Market Areas are shown in Table 2. Family and household incomes are shown in Table 3 for the PMA and SMA.

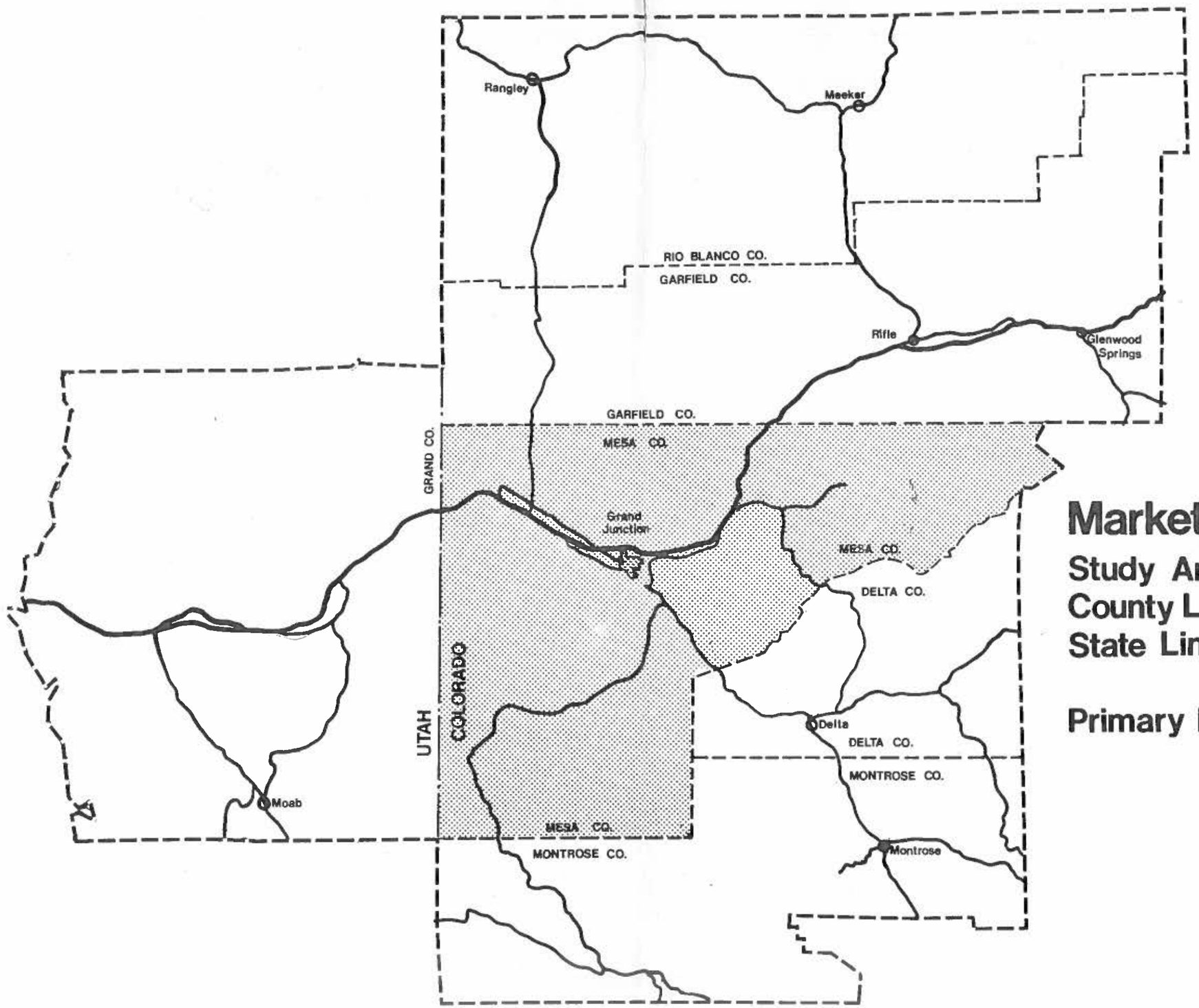

Rangley
Meeker
RIO BLANCO CO.
GARFIELD CO.
Rifle
Glenwood Springs
GARFIELD CO.
MESA CO.
GRAND CO.
Grand Junction
MESA CO.
DELTA CO.
UTAH
COLORADO
Delta
DELTA CO.
MONTROSE CO.
Moab
MESA CO.
MONTROSE CO.
Montrose
Market Study Area
Study Area Boudary
County Line
State Line
Primary Market Area

TABLE 2. POPULATION PROJECTIONS, PRIMARY & SECONDARY MARKET AREAS

	1980	1985
Primary Market Area		
Mesa County	79,540[1]	118,745[1]
Secondary Market Area		
Delta County	21,600[2]	29,200[2]
Montrose County	25,200[2]	30,600[2]
Garfield County	23,013[1]	55,694[1]
Rio Blanco County	6,111[1]	19,392[1]
Grand County	8,100[2]	8,900[4]
Total	84,024	142,786
PMA AND SMA	163,564	261,531

Sources:

1. Colorado West Area Council of Governments, August 1980
2. Colorado Division of Planning, "Population Estimates and Projections", August 1979
3. U.S. Bureau of the Census, 1980 Census preliminary results
4. State of Utah Population Projections

TABLE 3. FAMILY AND HOUSEHOLD INCOME DISTRIBUTION

	PRIMARY MARKET AREA			SECONDARY MARKET AREA		
	1970 CENSUS %	1980 FORE-CAST %	1985 FORE-CAST %	1970 CENSUS %	1980 FORE-CAST %	1985 FORE-CAST %
FAMILY INCOME (14)						
$ 0 - 4999	27.2	7.2	2.6	29.7	8.7	3.2
$ 5000 - 6999	14.9	6.0	2.6	16.0	7.1	3.1
$ 7000 - 9999	22.1	7.3	2.9	23.0	7.9	3.1
$ 10000 - 14999	23.1	17.7	10.3	19.6	15.4	9.0
$ 15000 - 24999	10.1	36.8	41.4	9.3	35.4	40.1
$ 25000 - 49999	2.3	21.7	34.7	2.2	23.4	37.9
$ 50000 UP	0.3	3.5	5.5	0.2	2.2	3.6
AVG FAM INC $	9070	20933	26366	8549	20410	26023
MEDIAN FAM INC $	8070	18241	22645	7553	18102	20886
HOUSEHOLD INCOME						
$ 0 - 4999	38.4	11.1	4.4	38.7	12.2	5.0
$ 5000 - 6999	13.4	8.0	4.5	14.5	9.2	5.2
$ 7000 - 9999	18.9	9.9	5.1	20.1	10.3	5.4
$ 10000 - 14999	18.9	17.7	12.0	16.7	15.6	10.6
$ 15000 - 24999	8.2	33.1	40.7	8.0	32.2	39.7
$ 25000 - 49999	1.9	17.4	28.7	1.9	18.8	31.4
$ 50000 UP	0.3	2.8	4.6	0.2	1.8	2.9
AVG FAM INC $	8267	18643	23963	8037	18203	23617
MEDIAN FAM INC $	6722	15996	20886	6559	15837	21017

IMPORTANT: 1. HOUSEHOLD INCOME INCLUDES THE INCOME OF FAMILES AND UNRELATED INDIVIDUALS. HOUSEHOLD INCOME IS THE TOTAL AVAILABLE INCOME IN THE AREA.
2. ALL FORECAST FIGURES ARE EXPRESSED IN 1980 DOLLARS.

SOURCE: CACI, ARLINGTON, VIRGINIA

Analysis of Retail Sales Potential

Retail expenditures by the populations within the primary and secondary market areas were examined for specific goods which were determined to be appropriate indicators of the overall retail sales market. The intent of this evaluation was to arrive at a reasonably accurate estimate of Grand Junction's retail sales potential for these specific goods for both primary and secondary market areas. A description of the methodology employed to provide the background data and subsequent evaluations is perhaps in order before proceeding to an analysis of the findings.

In the 1972-74 period the Bureau of the Census conducted the Consumer Expenditure Survey. This survey of buying habits detailed the expenditures made by 43,000 households on 2300 specific products and services along with the demographic characteristics of the households.

The results of this rather detailed research were provided in a computer-readable format allowing for the development of statistical models of buying habits as they relate to demographic characteristics of income, age, race, household and family size, occupation and education. The base information also allowed a distinction to be made between metropolitan and non-metropolitan areas in each region of the county. Statistical models applied to a specific area can therefore use local demographic information to estimate retail expenditures specific to that area's current demographic characteristics. The resulting expenditure estimates and specifies not only to the region and the metropolitan/non-metropolitan character, but also to the specific land demographic characteristics of the area being examined.[1] (15)

Table 4 shows the 1980 per capita expenditures for various products within the defined PMA and SMA for Grand Junction. It should be noted that per capita sales were adjusted for inflation using 1979 Colorado sales tax figures. The expenditures noted in Table 4 reflect this adjustment. (16)

[1] Per capita sales were adjusted for inflation using 1979 Colorado sales tax figures.

TABLE 4

ANNUAL EXPENDITURES BY MERCHANDISE LINE

MERCHANDISE LINE (17)	PER CAPITA ANNUAL EXPENDITURES		ANNUAL EXPENDITURES ($1,000,s)				GRAND JUNCTION % OF SMA	GRAND JUNCTION POTENTIAL SALES	
			1980		1985			1980	1985
	PMA	SMA	PMA	SMA	PMA	SMA			
			(POP=79,540)	(POP=84,024)	(POP-118,745)	(POP=144,586)			
MENS AND BOYS APPAREL	161.72	142.48	12,863.2	11,928.9	19,203.4	20,600.6	50	18,827.7	29,503.7
WOMENS AND GIRLS APPAREL	179.92	162.24	14,310.8	13,640.2	21,364.6	23,457.6	50	21,121.9	33,093.4
FOOTWEAR	63.96	65.52	5,087.4	5,508.5	7,594.9	9,473.3	40	7,290.8	11,384.2
HOUSEHOLD TEXTILES	41.60	39.52	3,308.9	3,322.6	4,939.8	5,714.0	20	3,973.4	6,082.6
HOUSEHOLD FURNITURE	87.88	82.16	6,990.0	6,907.5	10,435.3	11,879.2	40	9,753.0	15,187.0
FLOOR COVERINGS	54.08	52.00	4,301.5	4,371.8	6,421.7	7,518.5	40	6,050.2	9,429.1
MAJOR APPLIANCES	146.64	140.92	11,663.7	11,847.7	17,412.8	20,375.1	60	18,772.3	29,637.9
RADIO, TV, RECORDINGS	82.16	77.48	6,535.0	6,514.1	9,756.1	11,202.5	70	11,094.9	17,597.9
TV	24.44	23.40							
STEREO	24.44	21.84							
RECORDS & TAPES	33.28	32.24							
HOUSEHOLD FURNISHINGS	48.36	46.80	3,846.6	3,934.7	5,742.5	6,766.6	40	5,420.5	8,449.1
SMALL APPLIANCES	5.72	5.72							
HOUSEWARES	12.48	12.48							
MISC. FURNISHINGS	30.16	28.60							
JEWELRY	17.64	17.68	1,403.1	1,486.4	2,094.7	2,556.3	70	2,443.6	3,884.1

Applying these per capita expenditures to the 1980 PMA and SMA populations yields total potential retail expenditures made by the population of these areas. Using this data to project future sales is somewhat more involved. Obviously, some demographic characteristics will change as Grand Junction grows. Energy development is likely to result in somewhat higher incomes, a relatively small household size, and proportionately more younger households. Unfortunately, the specific characteristics of these changes are as yet unknown and cannot be used to specifically alter expenditure patterns. Per capita expenditures are likely to increase as more income is made available. Increases will be different for different types of products. Table 4 takes the conservative view that 1985 per capita expenditures will remain at their current level and shows the distribution of those expenditures for the representative merchandise lines.

Of the potential sales from the SMA, Grand Junction should expect to capture only a portion of those sales. That potential capture was estimated by examining 1979 retail sales tax figures for each SMA county. Those figures were used to determine current capture rates within the various counties for each type of comparison good. The remainder of the potential sales was considered as potential sales for Grand Junction.

For 1985, it was assumed that the SMA would continue to build its 1979 market share. While total sales in the SMA counties will increase, none of the smaller competing market towns will grow large enough to support stores more competitive with Grand Junction. Grand Junction, on the other hand, is growing large enough to offer a wider variety of shopping goods which will strenghten its competitive position. In the long run, Grand Junction will continue to be the regional shopping center for the Secondary Market area as evidenced by the projections given for each of these areas within the SMA.

Market share estimates for Grand Junction range from 70 percent for jewelry to 20 percent for household textiles, as shown in Table 4 . The majority of all merchandise items fall around fifty percent. All of the PMA expenditures will be potential Grand Junction sales. Adding the PMA annual expenditures

to the indicated proportion of the SMA expenditures results in total potential sales in the Grand Junction area, shown in the final column of Table 4.

Retail sales in particular types of stores are derived by distributing merchandise line sales into the store types which handle the majority of those sales.[1] The store types selected were those which comprise the bulk of comparison goods retailing. There are general merchandise stores (including department, discount and variety stores) men's, women's and family apparel stores, shoe stores, furniture, home furnishings, appliances, stereo-TV-recordings, and jewelry stores. The distribution of merchandise line sales by store types was taken from the 1972 Census of Retail Trade, the most recent data available.

Current sales patterns may not match these distribution exactly. For example, a large proportion of Grand Junction's general merchandise stores are discount stores, such as K-Mart, Tempo and Gibson's. These stores quite likely have lower sales in the furniture, major appliances, and jewelry categories than do all general merchandise stores state-wide. By 1985, Grand Junction's growth is likely to bring it to the statewide averages. Without specific data available for Grand Junction, use of the statewide figures is reasonable.

Total sales in the merchandise lines specified in Table 5 indicate only a portion of sales for each store type. In most cases, the specified merchandise lines comprise well over ninety percent of the total sales by that type of store. For example, for the men's and boy's apparel stores the merchandise lines of men's and boy's apparel comprise 94.4 percent of those stores total sales. The adjustment to 100 percent sales is made in the line labeled "Specified Merchandise as Percent of Total Sales." In the case of general merchandise stores, only 63.1 percent of total sales are in the merchandise lines shown.

Because these stores sell such a wide variety of items, other merchandise lines such as "auto tires, batteries and accessories" with 5.2 percent of total sales and "hardware and electrical supplies" with 2.5 percent, comprise the remaining 36.1 percent of total sales.

[1] Census of Retail Trade: 1972 "Merchandise Sales, Colorado", Bureau of the Census, Table

TABLE 5. GRAND JUNCTION SALES POTENTIAL BY STORE TYPE, 1980 and 1985

MERCHANDISE LINE	POTENTIAL SALES ($1,000's) 1980	1985	GENERAL MERCHANDISE SALES 1980	1985	% OF LINE	MEN'S & BOY'S APPAREL SALES 1980	1985	% OF LINE
Men's and Boy's Apparel	18,827.7	29,503.7	9,526.8	14,928.9	50.6	5,234.1	8,202.0	27.8
Women's and Girl's Apparel	21,121.9	33,093.4	11,553.7	18,102.1	54.7			
Footwear	7,290.8	11,384.2	2,945.5	4,599.2	40.4	218.7	341.5	3.0
Household Textiles	3,973.4	6,082.6	2,499.3	3,826.8	62.9			
Household Furniture	9,753.0	15,187.1 ~~3,667.1~~	3,667.1	5,710.3	37.6			
Floor Coverings	6,050.2	9,429.1	1,052.7	1,640.7	17.4			
Major Appliances	18,772.3	29,637.9	7,208.6	11,381.0	38.4			
Stereo, TV, Recordings	11,094.9	17,497.9	2,729.3	4,329.1	24.6			
Housewares and Misc. Furnishings	5,420.5	8,449.1	2,731.9	4,258.3	50.4			
Jewelry	2,443.6	3,884.1	623.1	990.4	25.5			
			44,538.0	69,765.9		5,452.8	8,543.5	
Specified Merchandise as Percentage of Total Sales			÷ .631				÷ .944	
TOTAL MARKET POTENTIAL			70,583.2	110,564.0		5,776.3	9,050.3	

TABLE 5. CONTINUED

	WOMEN'S AND GIRL'S APPAREL SALES 1980	SALES 1985	% OF LINE	FAMILY APPAREL 1980	1985	% OF LINE	FOOTWEAR 1980	1985	% OF LINE
Men's and Boy's Apparel	376.6	590.1	2.0	2,579.4	4,042.0	13.7			
Women's and Girl's Apparel	5,259.4	8,240.3	24.9	2,745.8	4,302.1	13.0	1,161.7	1,820.1	5.5
Footwear	255.2	398.4	3.5	612.4	956.3	8.4	2,850.7	4,451.2	39.1
Household Textiles				127.1	194.6	3.2			
Household Furniture									
Floor Coverings									
Major Appliances									
Stereo, TV, Recordings									
Housewares and Misc. Furnishings									
Jewelry	41.5	66.0	1.7						
	5,932.7	9,294.8		6,064.7	9,495.0		4,012.4	6,271.3	
Specified Merchandise as Percentage of Total Sales	÷ .912			÷ .964			÷ .961		
TOTAL MARKET POTENTIAL	6,505.2	10,191.7		6,291.2	9,849.6		4,175.2	6,525.8	

TABLE 5. CONTINUED

	FURNITURE			HOME FURNISHINGS			APPLIANCES		
	1980	1985	% OF LINE	1980	1985	% OF LINE	1980	1985	% OF LINE
Household Textiles	651.6	997.5	16.4	278.1	425.8	7.0	83.4	127.7	2.1
Household Furniture	6,134.6	9,952.6	62.9	751.0	1,169.4	7.7			
Floor Coverings	756.3	1,178.6	12.5	3,841.9	5,987.5	63.5			
Major Appliances	1,182.7	1,867.2	6.3				5,913.3	9,934.9	31.5
Stereo, TV, Recordings	499.3	791.9	4.5				843.2	1,337.4	7.6
Housewares and Misc. Furnishings	119.3	185.9	2.2	189.7	295.7	3.5			
Jewelry									
	9,343.8	14,603.7 973.7		5,060.7	7,878.4		6,839.9	11,401.0 400.0	
		÷ .969			÷ .940			÷ .884	
TOTAL MARKET POTENTIAL	9,642.7	15,070.9 452.7		5,383.7	8,381.3		7,737.4	12,897.1 896.0	

TABLE 5. CONTINUED

	STEREO, TV, RECORDINGS			JEWELRY		
	SALES		% OF LINE			% OF LINE
	1980	1985		1980	1985	
Household Textiles						
Household Furniture	312.1	486.0	3.2			
Floor Coverings						
Major Applicances	1,276.5	2,015.4	6.8			
Stereo, TV, Recordings	5,880.3	9,326.9	53.0			
Housewares and Misc. Furnishings				151.8	236.6	2.8
Jewelry				1,505.3	2,392.6	61.6
	7,468.9	11,828.3		1,657.1	2,629.2	
	÷ .934			÷ .874		
TOTAL MARKET POTENTIAL	7,996.7	12,664.1		1,896.0	3,008.2	

Table 6 uses the 1980 and 1985 sales potential for each store type to indicate the floor space which could be supported by the level of sales. The expected sales per square foot is based on available, standards for store-type surveyed, subsequently adjusted with the combined experience and research of Larry Smith and Associates and Development Control, Inc. These two members of the consulting team utilized wide experience in both market research and in shopping center development and management to provide an estimated sales figure appropriate to the Grand Junction area. Table 6 also compares the floor space supported with ~~with~~ existing floor space. The inventory of existing floor space outside of Mesa Mall and excluding general merchandise, furniture and appliance stores, was discounted by fifteen percent to account for the inefficiencies inherent in the older store buildings. Because the sales per square foot figures reflect highly space efficient modern shopping centers, this adjustment brings the existing space into "shopping center equivalent" values.

It should also be noted that the existing space figures include a fully occupied Mesa Mall. Actual and expected occupancy at the new center was determined by examination of the existing and proposed uses at the Mall itself. That examination indicated the following occupancy figures:

Mesa Mall Existing and Proposed Occupancy (Sq.Ft.)

	Existing Committed	Proposed
General Merchandise	286,000	286,000
Food sales	2,200	8,600
Food service	7,200	28,700
Apparel	67,600	97,900
Shoes	19,100	21,000
Home furnishings	2,100	11,100
Stereo/TV/Record	5,000	13,400
Hobby/Special Interest	4,400	12,800
Gifts/Specialty	10,700	23,000
Jewelry & Cosmetics	9,400	10,900
Drugs	15,000	15,000
Other Retail	1,400	9,200
Personal Services	0	7,000
Recreation/Community	16,600	18,300
Total	446,700	562,900

TABLE 6
RETAIL SPACE DEMAND
1980 and 1985

STORE TYPE	ANNUAL SALES ($1,000's) 1980	ANNUAL SALES ($1,000's) 1985	EXPECTED SALES PER SQ. FT.	FLOOR SPACE SUPPORTED 1980	FLOOR SPACE SUPPORTED 1985	EXISTING SPACE*
GENERAL MERCHANDISE	70,583.2	110,546.0	$100.00	705,800 Sq.Ft.	1,105,550	582,500 (295,500)
MENS AND BOYS APPAREL	5,776.3	9,050.3	$125.00	46,200	72,400	
WOMENS AND GIRLS APPAREL	6,505.2	10,191.7	$125.00	52,000 148,500	81,500 232,700	202,200 (104,300)
FAMILY APPAREL	6,291.2	9,849.6	$125.00	50,300	78,800	
SHOES	4,175.2	6,525.8	$125.00	33,400	52,200	47,700 (26,700)
FURNITURE	9,642.7	15,070.9	$ 60.00	160,700	251,200	153,000 (153,000)
HOME FURNISHINGS	5,383.7	8,381.3	$ 85.00	63,300	98,600	34,100 (23,000)
APPLIANCES	7,737.4	12,897.1	$ 90.00	86,000	143,300	41,000 (41,000)
STEREO, TV, RECORDINGS	7,996.7	12,664.1	$150.00	53,300	84,400	31,300 (17,900)
JEWELRY	1,476.5	2,341.6	$250.00	7,600	12,000	24,600 (14,400)

*Includes estimates of fully occuppied Mesa Mall space; numbers in ( ) exclude Mesa Mall; existing store areas, excepting general merchandise, furniture, and appliances, were discounted by 15 percent to account for the inefficiencies of old buildings

Excluded from the existing general merchandise figures is the Montgomery Wards store, scheduled to close in December.

A comparison of the existing and potentially supportable floor space shows that additional general merchandise space is warranted by current sales potential. An additional 120,000 square feet could be supported in 1980, growing to 520,000 square feet by 1985. Apparel stores are currently overbuilt by approximately 50,000 square feet, assuming a fully occupied Mesa Mall. With 30,000 square feet of that space not yet leased, this study suggests that leasing of that spce may take some time until demand catches up with supply. Shoe stores are currently overbuilt by 14,000 square ft. Growing demand will slightly surpass the current supply by 1985. Furniture stores are currently in appropriate relation to demand, although an additional 100,000 square feet will be needed by 1985. Home furnishings, appliances, and stereo/TV/recordings stores are insufficient for current demand by wide margins. By 1985, tripling of existing store space will be possible. The opposite appears to be true of jewelry stores. Current supply, even before the addition of Mesa Mall, is nearly twice the amount warranted. With the addition of Mesa Mall jewelry stores, this situation would theoretically continue into 1985. Fierce competition and many casualties are indicated by this supply/demand mismatch. (27)

While some of this discrepancy may be due to unusual factors not considered in the analysis, the magnitude of the indicated oversupply of this merchandise type, assures that a significant problem exists.

The retail market analysis results show important implications for the future of downtown Grand Junction:

1. Existing and future demand shows need for additional department store space. Current demand would allow for one additional department store of 80,000 to 100,000 square feet. By 1985 several additional stores would be possible. However, no department stores are likely to enter the market until the effects of Mesa Mall can be determined. Sufficient general merchandise demand will exist in 1985 to support the opening of another three-anchor mall. However, demand for additional apparel stores would not be sufficient to fill the shops implied by such a development, if existing clothing stores continue to operate in their current locations. (28)

2. The furniture, home furnishings, appliances, and stereo/TV/recordings stores are currently in demand. While downtown locations are not ideal for these space-extensive types of stores, a share of this demand could be met by downtown locations. The possibility of creating a "home shopping" district could affect some potential disadvantages of downtown.

3. Some jewelry stores are likely to become casualties of an oversupply situation, with some of those casualties in downtown locations.

In terms of downtown development scenarios, two possibilities present themselves.

1. Downtown could attract one or two department stores to re-anchor the downtown shopping park as a major retail center. While this solution would be ideal, the realities of downtowns competing against shopping centers for department stores makes this scenario a long-shot. Modern shopping centers are very efficient merchandising operations and therefore very attractive to anchor stores. Because of unified ownerships, malls are able to offer space bargains to department stores and to be able to recoup this this expense from high rents on smaller shop spaces. Unified control of malls also allows efficient advertising and merchandising of the entire center. A downtown areas' fragmented ownership and frequent lack of unified cooperation among merchants makes them less attractive as prospective department store locations. The potential of this scenario will be examined in greater detail during the continuation of this study.

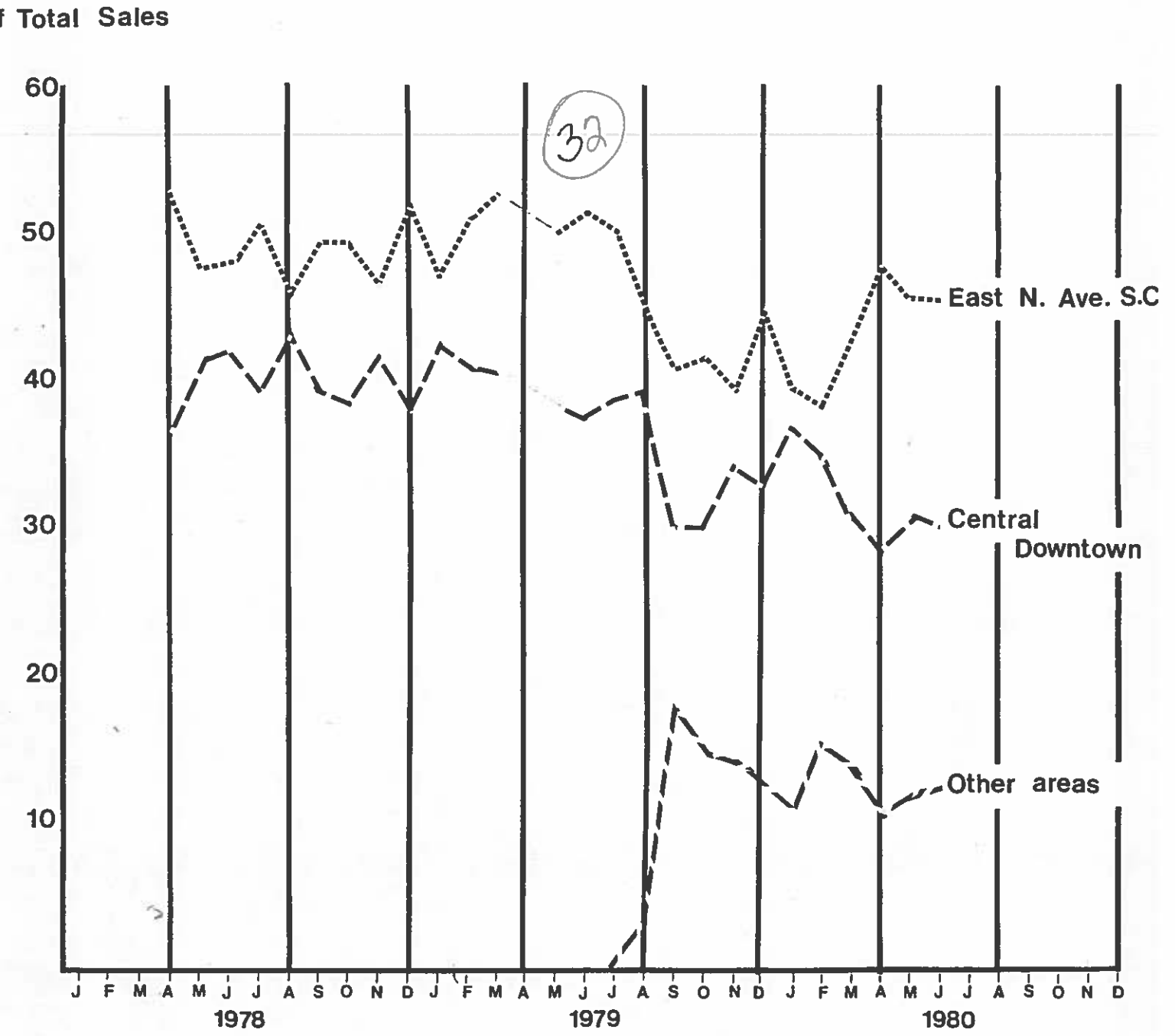
2. Downtown could re-fashion a portion of it's shopping area "specialty" center, catering to higher priced fashion goods. This scenario would build on the strength of the existing high quality downtown stores, the restaurants, and the historic character of the area to improve upon downtown as a place for fashion merchandising. The feasibility of this scenario is strengthened by proposed plans for the Commons office tower, new hotel and cultural arts center, in addition to the Two Rivers convention facility and the current tourist trade. This scenario would require intensification of specialty shopping stores into an area of perhaps three of the exiting four blocks of the shopping park. Along with retail stores, the addition of more restaurants and personal service establishments is necessary for a successful specialty center.

The market analysis points toward several potentially workable possibilities for downtown. Although some store types are currently overbuilt, this situation will be rectified in all but the case of jewelry stores by 1985 market growth. None of the potential retail development possibilities for the downtown mentioned here have been eliminated by the market analysis. This is particularly encouraging in light of the recent development of Mesa Mall, as the effect of that project on the Downtown's market was essentially unknown but was felt to be significant. Specific analysis of that project's impact on Downtown shopping will have to await a longer historical period of observation; particularly through the seasonal shopping peaks at Christmas and the back-to-school period.

Recent Downtown market shares of the clothing, shoe and department stores' sales are shown in Figure 3 for the "East North Avenue Shopping Center", "Central Downtown" and "Other Areas" (which includes the opening of Sears at Mesa Mall). The effects of the Mesa Mall opening on Downtown sales are not yet available. (31)

FIGURE 3.

Market Shares in Clothing, Shoes and Department Stores



CONVENIENCE GOODS - RETAIL MARKET ANALYSIS

In contrast to comparison on shopping goods, convenience goods are purchased frequently, are fairly low priced, and are fairly homogeneous. Primary examples of convenience goods are grocery and drug store items, including food beverages, personal care products and housekeeping supplies. Convenience goods buyers usually base their store choice on easiest access, although some store image and price competition also affects choice.

Convenience goods tores constitute a small part of the study area's retail offerings. The major convenience goods stores in the study area are City Market, Grand Avenue Rexall and Mesa Drug. The market area for these uses is typically defined by a five minute driving time. From within this area, about 70 percent of total sales should be drawn. In general terms, this provides a market area extending north to North Avenue, east to Twelfth Street and south and west to the Colorado River. The 1980 population in that area is:

AREA	POPULATION	HOUSEHOLDS	HOUSEHOLD SIZE
Tract 1	444	268	~~1.54~~ 1.65
Tract 2	2116	1193	~~1.97~~ 1.7
Tract 3	1400	786	~~1.94~~ 1.78
Tract 9 (G.Jct. pt. only)	769	291	~~2.79~~ 2.64
Total Market Area	~~4669~~ 4729	2538	~~1.84~~ 1.86

Per capita food store sales in Colorado approximate $1,100 annually.[1] Applying this figure to the market area, total food store expenditures should be $5,135,900 per year. Based on 1979 actual food stores sales in the Central and Greater Downtown areas of $4.05 million[2] downtown food stores capture 55 percent of their market area's expenditures. Given the close competition from North Avenue's competing store, this capture rate is excellent. Improving upon the market share is not probable. Increased sales are likely to come only through population growth within the market. The housing section of this report examines that possibility.

Drug stores sales approximate 14 percent of food store sales nationally.[3] Applying this percentage the market

1 Colorado Sales Tax Reports.
2 City of Grand Junction Sales Tax Statistical Comparison Report.
3 Survey of Current Business, August 1980.

area food stores expenditures implies drug store expenditures of $719,000 from market area residents. Actual 1979 sales were $1,095,750. Obviously drug stores in the downtown are drawing from a larger market than the typical convenience market. A large part of their market is based on sales to area employees and to comparison shoppers who are in the vicinity for other primary purposes. Drug store sales in this situation are better related to the size of the area as a retail shopping center and to the office employment. Both of these factors are as yet speculative. Existing proposals for office space would increase the study area inventory by about 75 percent, while realization of the total 1980-85 demand would more than double the existing inventory.

Downtown retail future is less clear. If new anchor department stores are attracted to locate on Main Street, then stabilized or increasing retail activity is likely; therefore additional drug store space is justified as part of the shopping area. Without new department stores, departure of the existing stores will result in decreased retail activity. In this case, office development will compensate for this loss, but no additional drug store space will be needed.

CULTURAL/ENTERTAINMENT MARKET OVERVIEW

Cultural and entertainment uses are an important though not particularly large part of the downtown mixture of uses. Downtown has two movie theatres, 8
13 ~~ten~~ restaurants (excluding fast food) and ~~four~~ bars. Downtown is a major entertainment location for the Grand Junction area, rivaled by North Avenue and Horizon Drive. Unlike those areas, downtown offers the opportunity to walk from one entertainment facility to another through pleasant surroundings. Planned future developments in the downtown, notably the Commons office building and the proposed hotel, indicate the need for expansion of existing facilities in the downtown.

(37) Restaurants in the immediate downtown area are primarily expensive "tablecloth" or diner types. Choices of other restaurant types, including fast food and ethnic restaurants is very limited. This lack of sufficient restaurant offerings seems particularly noticeable at noon, when the area's office workers are looking for an eating place. Provision of a multiple-offering eating facility, where many individual vendors offer different food items from separate booths or carts surrounding a central eating space appears to be quite marketable in the downtown area. The festive atmosphere which could be created by such a facility would also strengthen downtown's specialty shopping image, if that is selected as a preferred option.

Downtown's ease of accessibility to Orchard Mesa, Redlands and the rest of the Grand Junction area is advantageous for restaurant locations. With Grand Junction's rapidly growing population, demand for evening meal restaurants will grow proportionately. Location in terms of specific areas' convenience to a market area is of little importance for this market.
(38) The area's demand for evening meal restaurants is likely to increase by fifty percent along with the population. Adding five new restaurants to the downtown would maintain the existing market share. However, sufficient unmet demand exists so that doubling of the downtown eating establishments seems warranted by 1985, if projected office demand and replacement of two downtown department stores is realized. It should

be noted that success of any restaurant operation is much more dependent upon the quality of operation in the individual establishment than on the location.

More theatre demand is measured by an accepted industry standard calling for one screen per 10,000 population within a five mile radius.[1] That measurement would justify 6 screens (excluding drive-ins) in the Greater Grand Junction area currently and nine or ten screens by 1985. Currently 5 movie screens operate in Grand Junction, with two downtown and three at North Avenue. An additional two screens will be added at Mesa Mall. This will satisfy demand through 1982. Additional movie theatres are most likely to be built in multiple-screen configurations. Because of the building size and parking requirements of such facilities, downtown would not be an attractive location for a new theatre. The primary concern for downtown is in retaining the two existing theatres.

(39) A stage theatre does not currently exist in Grand Junction. Development of a performing arts center has been proposed on the property bounded by First, Rood, Second and White. The Grand Junction area's current population would support a performing arts center in terms of total numbers. Communities of similar size have successfully operated art centers with community or semi-professional theatrical companies and a mixture of other art, craft and educational functions. Growing population will bring with it new residents who expect performing and visual arts to be available. Population by itself does not of course accurately describe demand for a performing arts facility except in general terms. A more reliable indicator is levels of education of the attending population which generally has some direct correlation with income.

Incomes in the $15,000 to $24,999/yr. range are projected to increase from approximately 9100 households to 18,500 households in the five year period from 1980 to 1985. Incomes in the $25,000 to 49,000/yr. range are projected to increase from approximately 5,000 households to 13,100 households. $50,000/yr. households are projected to increase from 840 to 2,101 during this same period.

[1] W. Helton, regional manager, American Multi-Cinema.

(40)

These figures indicate a total of approximately 17,800 new households in the $15,000 to $50,000 income range over the next 5-year period. These increases appear to additionally support the contention that the offerings of a performing arts facility which would have considerable appeal for mid and upper-level income households will gain support in Grand Junction.

The location of such a facility Downtown, and particularly in the vicinity of the Two Rivers Plaza would seem both logical and highly desirable. Such a location would strengthen other aspects of downtown development as well as creating more general activity in an area of downtown in need of that type of an energy-generator.

OFFICE MARKET ANALYSIS

GRAND JUNCTION
OFFICE MARKET ANALYSIS

Downtown Grand Junction has traditionally been the center of the financial, legal, and governmental communities of Mesa County. Until the recent period of rapid growth, most of Grand Junction's non-medical office space has been located in the study area. Heavy demand for office space in more recent times has been answered by developments along Horizon Drive, North Avenue and in Foresite Industrial Park. This trend toward outlying office locations has serious implications for downtown and its future role in satisfying Grand Junction's future office demands. This analysis will focus on recent trends in office utilization, projection of future office demand, and estimation of the downtown area's share of the future demand.

In order to narrow the focus of the office market research to that type of office space which would affect downtown, only major office space will be considered. Major office space is defined as office buildings containing 5,000 or more square feet of leasable office area. It should be noted that other small offices will also develop in the market.

Recent Trends

The recent period of office construction has brought significant changes to downtown. Construction of the Valley Federal Savings and Loan building in 1974, Mesa Federal Savings and Loan in 1974 and the new U.S. Bank Building in 1978 brought 158,000 square feet of new office/financial institution space into downtown in the last six years. Of this total new space, however, only 85,100 square feet was in speculative offices, the remainder being used by the financial institution/developer. In the same period, 250,000 square feet of major office buildings have been built in other Grand Junction locations. While financial institutions have been the owners and major tenants of downtown office space, more speculative office development has been the rule in other locations. Tables 1 and 2 show major existing office spaces downtown and in other Grand Junction locations. (1)

Vacancy rates in the Grand Junction office market appear negligible. Of the 18 existing projects contacted, 12 reported occupancy of 95 percent or greater. Overall occupancy rates are 94.4 percent (2)

TABLE 1.

GRAND JUNCTION OFFICE SPACE ANALYSIS
EXISTING PROJECTS
(DOWNTOWN)

(3)

PROJECT NAME	TOTAL SQ. FT.	SQ. FT. IN OFFICE	YEAR BUILT	% OCCUPANCY WHEN BUILT	% OCCUPANCY CURRENTLY	TENANT TYPES SOUGHT AVERAGE SQ. FEET	COMMENTS/OBSERVATIONS
US Bank	40,000	10,000	1978	60%	94%	Professional offices, mortgage companies, commodities, law offices, low traffic users with longevity.	Bank may expand into existing office space in next 3-5 yrs., take an additional 7,500 sq. ft. Existing bank structure is built to add another 1 or 2 stories on the rear 1/2 of both buildings.
First National Bank	39,000	8,000	-	0	100%	Lawyers, accountants, professional offices	
Valley Federal Savings and Loan	100,000	70,700	1974	1977 - 90%	100%	Securities companies, attorneys, CPA's, insurance companies, union oil	
Commercial Building	10,400	10,400	1951		100%	Professional offices, architects, engineers	
Mesa Federal	18,000	4,400	1974-75	100%	100%	Federal office and U.S.G.S.	
Enterprise Building (marginal)	12,000	12,000	-				3 story walk-up.
Main Street Arcade	14,500	7,000	1975	60% in 1977	100%		

TABLE 2.

GRAND JUNCTION OFFICE SPACE ANALYSIS
EXISTING PROJECTS
(OUT OF DOWNTOWN)

(4)

PROJECT NAME	TOTAL SQ. FT.	SQ. FT. IN OFFICE	YEAR BUILT	% OCCUPANCY WHEN BUILT	% OCCUPANCY CURRENTLY	TENANT TYPES SOUGHT AVERAGE SQ. FEET	COMMENTS/OBSERVATIONS
Parkwood Plaza	60,000	29,000	1973	95% (90% in 1977)	88%	Accountants, insurance cos., attorneys, avg. sq. ft. 700, 400 smallest, largest 2000.	31,000 sq. ft. of structure is used for furniture store.
Horizon Corplex	55,000 (net)	43,329	June 1979	70%	97%	2500 avg sq.ft., 200 sq.ft. on "executive concourse" suites, 2400 avg. Exploration, energy investment companies.	4-story bldg. - 10,000 sq. ft. is used for restaurant, 1571 used for liquor store. $11.25-$15.00/sq.ft. executive concourse. All spaces to go to $$12+/sq.ft. if leased now.
Centennial Plaza	20,000	16,000	1976	-	90-95%	Real estate, dentists, professional offices avg. 200-1000 sq. ft.	Liquor store uses 3000 sq. ft. of total sub-shop uses, approx. 1,000 sq. ft., 1 suite not leased of 800-1000 sq. ft.
Crossroads Plaza	23,000	20,000 (net)	Sept. 1979	100%	100%	Engineering, construction offices, federal offices, energy concerns, CBS construction.	25 story building
Pinyon Center	15,500	13,000 (net)	1978	50%	95%+	Avg. spaces 1000-5000 sq. ft. real estate offices, engineers, accountants, mining cos., avg. sq. ft. 400	Located 2000 N. 12th; full service offices, phone secretarial services $270-400 month. 1200 remaining unleased currently.
Mesa United Bank	42,000	8,700	1978	.05%	80%	Credit cos., "law office" users, mining firms, state offices.	1700 remaining vacant, State Labor Dept. has 1200 sq. ft., State Health Dept. has 450 sq.ft.
Horizon Bldg.	39,000	39,000			100%	All federal government tenants.	

TABLE 2.
(cont'd)
GRAND JUNCTION OFFICE SPACE ANALYSIS

EXISTING PROJECTS
(OUT OF DOWNTOWN)

(5)

PROJECT NAME	TOTAL SQ. FT.	SQ. FT. IN OFFICE	YEAR BUILT	% OCCUPANCY WHEN BUILT	% OCCUPANCY CURRENTLY	TENANT TYPES SOUGHT AVG. SQ. FT.	COMMENTS/OBSERVATIONS
Foresight Plaza	14,500	14,200	1978	–	92%	Professional offices, service cos, computer cos., exploration pipe cos.	Located 25 & F Road, 1200 sq. ft., State Health Dept. has 450 sq. ft.
Treece Building	13,780	13,000	1979	75%	100%	Engineering cos., surveyors, FAA.	Horizon Drive is Tenants use approx. 3-4000 sq. ft. each.
Plateau Resources	16,320	16,000	1978	100%	100%	Used entirely by Plateau Resiurces	Horizon Drive: same construction as Treece Bldg.
Occidental	32,960	32,960	1977	100%	100%	All space used by Occidental, with the exception of one tenant - engineers	$8 sq. ft. cost in 1977-78 probably go to $12 sq.ft. + if leased today. Current tenant lease expires April 1981 and Occidental will take that space over.

in the downtown and 96.6 percent in other areas. If financial institutions which own buildings are excluded from the calculations, occupancy rates drop to 89.7 percent downtown and 96.1 percent in other areas. These high occupancy rates indicate a very strong office market.

Projected Office Demand

Demand for Grand Junction office space is likely to result from two major sources. First, energy companies and the related services which they generate will require offices. Past experience has shown that energy companies tend to locate their administrative facilities in Grand Junction where scheduled airlines, motels and support services are readily available. Similarly, Grand Junction is the logical location for suppliers of materials, equipment and services to the energy development companies. A second source of office demand is the services required to meet the needs of a growing population. Additional medical, legal, financial, government and other office-using services will be required in direct proportion to the population served.

While conceptualization of these office demand factors is relatively simple, projecting future demand is much more difficult. Projecting office demand requires considerable subjective judgement to arrive at realistic potentials. Two methods of projection were used. A conservative projection of office space was developed from historic rates of employment growth, shown in Table 3. First Mesa County's annual average employment by industrial sector was projected to 1985 based on the 1975 to 1979 trend[1] (using straight line linear regression analysis). Based on the industrial sector in which the employment increase fell, a percentage of the new employment was assumed to require office space. These judgements were made in light of the sometimes peculiar characteristics of Mesa County employment patterns. Half of additional mining employment was assumed to require office space because of the tendency for energy companies to locate administration functions in Grand Junction for operations located in surrounding counties.

[1]Mesa County Capital Improvements Program Draft, ODA, 1980, p. 6

TABLE 3.

GRAND JUNCTION OFFICE DEMAND BY INDUSTRY SECTOR

1979 - 1985

SECTOR	EMPLOYMENT 1979	EMPLOYMENT 1985	1979-85 CHANGE	% IN MAJOR OFFICE SPACE	NEW OFFICE EMPLOYMENT	OFFICE DEMAND @ 225sq.ft/ EMPLOYEE	DOWNTOWN %	DOWNTOWN SQ.FT.
MINING	1,654	2,649	995	50%	498	112,050	10	11,205
CONSTRUCTION	2,837	4,763	1,926	5%	96	21,600	-	-
MANUFACTURING	2,624	3,235	611	-	-	-	-	-
TRANS., COMM., UTILITIFS	1,716	2,043	327	30%	98	22,050	50	11,025
WHOLESALE AND RETAIL TRADE	7,745	10,823	3,078	5%	154	34,650	50	17,325
FINANCE, INSURANCE, R.E.	1,160	1,804	644	90%	580	130,500	50	62,250
SERVICES	5,809	8,602	2,793	40%	1117	251,370	40	100,550
GOVERNMENT	5,009	6,386	1,377	50%	689	155,025	70	108,520
						727.245		310,875

Exploration firms which require office space, also tend to centralize in Grand Junction. Construction firms are expected to keep only five percent of their Mesa County employees in offices. While this may still seem somewhat high, it should be considered that major contractors and developers will likely locate their regional offices in Grand Junction for their Western Slope operations. Manufacturing employment is not expected to require any office space separate from manufacturing plants. The transportation, communications and utilities categories covers a wide variety of types of employees, from drivers and service workers to administrative staff. Thirty percent of the new workers are estimated to be involved in office-based activities. Five percent of the wholesale and retail trade employees are expected to require office space separate from other operations. Included in this group are the manufacturer representatives and service staffs selling supplies and equipment to energy companies, wholesalers whose offices are separate from warehousing, and retail operations, such as business machine retailers which sale from an office base. The finance, insurance, real estate group will require office space for virtually every employee. However, some of that space may be provided in non-major office spaces, such as on-site real estate sales offices, small owner occupied insurance offices, etc. The category was discounted by ten percent to account for this. 10

Service uses include such a wide variety of functions that they are the most difficult to estimate. While services include medical, legal and accounting employment which would require offices, it also includes repair, cleaning, motel, entertainment and others which are not office functions. It was conservatively estimated that forty percent (based on 44% of Colorado service employment in health and business services) of new employment will require major office building space. 11 Government employment is heavily dependent on office space. Discounting for government educational employment and non-office government services, but also remembering Grand Junctions' position as a regional center, fifty percent of government employment growth is expected to require major office accommodations.

Total new employment in major office space, resulting from these estimates, is shown in Table 3. Using a standard of 225 square feet of office per employee, total projected office space required by each industry 12

over the 1980-85 period is calculated for the Grand Junction area. Estimates of the percent of required office space which might locate downtown were also developed. While the downtown study area currently contains 41 percent of Grand Junction's major office space, future development potential was evaluated separately for each industry. Mining offices have shown a heavy preference for Horizon Drive locations. Conversations with these companies indicate their locations to be heavily influenced by access to the airport, motels, and I-70. This location preference would be difficult to overcome in favor of downtown. Therefore, only a 10 percent market share of mining offices was allocated to downtown. Communications and utility offices have traditionally located within the study area, though recent developments in the Grand Junction news media have violated that tradition. In recognition of these recent precedents, half of this industry group is expected to find downtown locations. The wholesale and retail trade offices are also expected to split equally between downtown and other locations. Finance, insurance and real estate offices have long been downtown strengths. However, convenience of location to the customer have lured much of the development in this industry to more suburban locations. The more specialized aspects of this industry will likely remain downtown, while the customer-oriented functions disperse elsewhere. Again, an even split of downtown and other locations is likely. (13)

Service functions in office spaces are primarily business and medical services. It is expected that business services will locate primarily downtown, while medical services will locate primarily elsewhere. A forty percent downtown market share results.

Government offices have and will continue to locate around downtown because of its central location and proximity to other government offices. Only government offices with unusual requirements, such as storage areas, will remain in other locations permanently. Overall, 70 percent of new government office employees are expected to work downtown.

The results of these assumptions place Grand Junction's office market at 727,000 additional square feet of office space over the six year period. Annual construction of over 120,000 square feet of offices is justified. Of this demand, downtown is likely to capture nearly 59,000 square feet per year on the average, or a total of 353,000 square feet over the six year period.

Proposed Office Development

Tables 4 and 5 show known office development proposals which appear to be live projects. A total of 223,000 square feet are proposed in the downtown area through 1982. This includes 88,000 square feet of financial institution space and 135,000 square feet of general office space. Outside of downtown, 223,720 square feet of office development are proposed for completion by the end of 1981. This space includes only 4,500 square feet for Western Federal (Valley Federal's building size is not yet known). Approximately 65,000 square feet of that space are pre-leased or committed. Reported rents ranged from $8 to $14 per foot, while the majority of the triple net leases were in the $9 to $12 range. In the downtown, only the Commons is not being built by a financial institution which eventually expects to occupy the entire building.

Proposed office space appears to be planned somewhat in excess of avarage annual demand. However, pre-leasing is proceeding favorably both in and out of downtown. Failure of some of the proposed projects should also be expected as a natural part of the development process.

Conclusion

Further downtown office development is warranted by market demand. Approximately 130,000 square feet of office space beyond that now planned, will be required by 1985, according to the conservative estimates. Care hsould be taken not to overbuild the downtown market in the early years of the 1980's. A successful Commons project will do much more to assure continuing downtown office demand than would early overbuilding. ~~Even more important, overbuilding outside of downtown should be discouraged to prevent rate-cutting competition for downtown office projects~~.

TABLE 4.

GRAND JUNCTION OFFICE SPACE ANALYSIS
PROPOSED PROJECTS
(DOWNTOWN)

PROJECT NAME	TOTAL SQ. FT.	SQ. FT. IN OFFICE	YEAR BUILT	% OCCUPANCY WHEN BUILT	% OCCUPANCY CURRENTLY	TENANT TYPES SOUGHT AVERAGE SQ. FEET	COMMENTS/OBSERVATIONS
First National Bank	140,000	60,000	1981-82(?)	0	0	Professional Offices no averages given	Banks short-intermediate term needs are for 60-80,000 sq. ft. Ultimate expansion is to 100-140,000 sq. ft.
he Commons	120,000	83,000	March 1982	30,000	0	Professional offices	6 story building, 25,000 sq. ft. ground floor space is set aside for retail uses. Restaurant will use 4,500 sq. ft. of this total. Demand is seen as being for spaces greater than 1,000 sq. ft. Most tentants looking for space in excess of 2,500 sq. ft.
Valley Federal	8,000	0	1982	All bank 8,000	0	Bank expansion	
Columbia	15,000	0	1982	All bank 8,000	0	Replacement of existing structure.	
	Totals:	Bank: 88,000 Office: 135,000 Offices & Bank: 223,000					

TABLE 5.

GRAND JUNCTION OFFICE SPACE ANALYSIS
PROPOSED PROJECTS
(OUT OF DOWNTOWN)

(14)

PROJECT NAME	TOTAL SQ. FT.	SQ. FT. IN OFFICE	YEAR BUILT (To be Completed)	% OCCUPANCY WHEN BUILT	% OCCUPANCY CURRENTLY	TENANT TYPES SOUGHT AVERAGE SQ. FEET	COMMENTS/OBSERVATIONS
Horizon Park Plaza	67,000	65,440	April 1981	50% pre-leased	0	Energy related uses	3 story bldg. w/helipad located off Horizon Dr. A. 5,000 sq.ft. $12.50/ft. w/ 5 yr. lease B. $13.50/ft. 5,000 sq.ft.
Plaza Del Sol	10,000	10,000	Feb. 1981		0	Dentists/doctors	1 story $9.60 sq. ft. located on 30th and E (Rocky Mt. Realtors)
Enterprise Park (warehousing)	26,500	6,000	Oct. 1980	0	0	Small professional offices	Located North Ave., Melody Lane 1 story (Les Smith)
* Crossroads Business Center (warehousing)	(2 bldg) East - 44,000 West - 44,000	14,040 (net) 14,040 (net)	Feb. 1980 May 1980	90% leased 7.800 leased	0	Energy related	2 - story buildings, ground floors may be retail, wholesaling, warehousing (Dale Muff)
Western Federal Bank	(2 bldgs.) 13,500 26,500	9,000 * 26,500 *(4,500 2 yr. lease)	Oct. 1981	0	0	Energy related users	Two three story buildings, second story of smaller bldg. will be on a short lease to allow for bank expansion. 24 1/2 & F Road 2 acre site (McWilliams)
Valley Federal	(1 new bank building)	-	Summer 1981	0	0	Light service-related uses	1 bank building, possiblity of 2 other office buildings on 6-acre site. Moose lodge site (Homer Brown)
Foresight Plaza (2nd bldg.)	14,500	14,200	Fall 1980	0	0	Service, energy-related	

TABLE 5
(cont'd)
GRAND JUNCTION OFFICE SPACE ANALYSIS

PROJECT NAME	TOTAL SQ. FT.	SQ. FT. IN OFFICE	YEAR BUILT (To Be Completed)	% OCCUPANCY WHEN PRE-LEASED	% OCCUPANCY CURRENTLY	TENANT TYPES SOUGHT AVERAGE SQUARE FEET	COMMENTS/OBSERVATIONS
F Road & 32nd	12,600	12,600	Dec. '81	60% pre-leased	0	Professional office users.	2 story bldg. $9.50 sq. ft. total net, approx. $12.50 "with everything", rent includes lighting, carpeting and devising walls. (Sinclair Assoc
Walnut Office Center	15,000	15,000	June '81	0	0	Bank on 1st floor at 3-4000 sq. ft. Real estate professional offices.	2 story bldg. $9.00 sq. ft. $12-$12.50 complete
Sherwood Park Plaza	6,900	6,900	Spring '81	0	0	Professional offices, attorneys, accts. Offices ranging from 400 to 3400 sq.ft.	2 floors - 3240/floor $9.50-10.00 sq. ft. triple net - up to $14.00 complete
Village Fair	21,000	21,000	Sept. '81	0		Service center for architects and professionals.	$8-12.00 sq. ft. - no committed tenants (Earl Jensen)
	4,500	4,500				Financial institution.	

SOURCES ?

As a check against the conservative "straight line" projection, a second and more optimistically based projection of total office demand was also developed. Using the :Greater Grand Junction Area" population projection developed by Colorado West Area Council of Governments (COG), office development was related to population growth and projected into the future. First, office occupancy in the 1977-80 period was determined through interviews with major office building managers. (15) During that period, 186,000 square feet of office space was constructed and occupied, exclusive of financial institutions. Population during the same period increased by 6,878 resulting in 27 square feet of new office space for each person added to the population. If the 1977-80 office space/employment/population relationships continue through 1985, then a 1985 population of 94,817 will require 1,089,300 square feet of additional office space (exclusive of financial institutions). This methodology shows results nearly fifty percent higher than the previous methodology. This methodology tends toward the very optimistic picture. By basing the projection on a period of modest population growth and rapid office development, excessive office space results from a future period of rapid population growth.

To illustrate an opposite extreme, if the ratio of major office space to total population were maintained at the 1980 level of 9.3 square feet per capita, only an additional 374,000 square feet of office space would be indicated by the 1985 projection of 94,817. (16) It seems, then, that the original demand for 727,245 added feet of major office space is the most reasonable.

✓

Are historic trends appropriate in a boom area?

HOUSING : MULTI-FAMILY MARKET OVERVIEW

Housing Market Overview

Projected population growth in Mesa County will create demand for unprecedented housing production over the next five years. County population growth of 39,200 persons from 1980 to 1985[1] will create 15,700 new households over the next five years. Housing industry response to this demand may create new housing patterns in terms of unit types not previously available on the market in the Grand Junction area. This overview of the housing market is primarily concerned with demand for multi-family housing which might be located on redevelopment or infill sites within the downtown study area.

Demand for multi-family housing in Mesa County is undergoing some significant changes in the current shift toward smaller households, high mortgage interest rates and rapidly inflating building costs. Multi-family housing was virtually synonymous with rental housing twenty years ago. Popularity of condominiums and townhouses as ownership units and the accompanying variety of housing prices has made analysis of the multi-family market much more complex as it is often only a question of individual buyer preference that make it distinguishable from the demand for a conventional single family unit.

Overall housing demand will be a function of projected household growth. Annual household growth was computed from CWACOG population projections for Mesa County, as shown in Table 1. A 49 percent population increase will combine with slightly falling household size to produce a 52 percent increase in households overall. Annual household growth will be uneven over the five year period, ranging from 1322 new households in 1981 to 4961 in 1984.

The distribution of these housing units into housing types and costs will be determined by household size, age, and income characteristics. Trends in these factors are examined in the following paragraphs.

The size of households has shifted substantially in the last decade. Nationally, average household size dropped from 3.14 persons in 1970 to 2.81 persons in 1978. A continued decline to 2.73 persons in 1980 and 2.58 persons by 1985 is expected.[2] Mesa County has experienced a similar decline from 2.97 persons in 1970 to 2.65 persons in 1980.

[1] CWACOG Population Projections by 1980

[2] Bureau of the Census, Current Population Reports, p-25, No. 805, May 1979.

The number of households in each household size in Mesa County is shown in Table 2 . Over the 1970-78 period one and two-person households increased much more rapidly than larger households. A continuation of this trend is likely as more rapid household growth occurs overall.

TABLE 1. MESA COUNTY POPULATION AND HOUSEHOLD GROWTH

End of Year	Population[1]	Household[2] Size	Households	Annual New Households
1980	79,540	2.65	30,015	---
1981	82,730	2.64	31,337	1,322
1982	90,319	2.63	34,342	3,005
1983	99,218	2.62	37,869	3,527
1984	111,787	2.61	42,830	4,961
1985	118,745	2.60	45,671	2,841

[1] Colorado West Area Council of Governments, August 1980

[2] 1980 household size is from preliminary results of 1980 Census; continued slow decline in household size is assumed.

Since smaller households have been observed historically to be mobile, rapid population growth will strengthen the declining household size. If the household size distribution of the 1970-78 new households approximates the 1980-85 growth, household size distribution of that growing population can be projected to be as follows:

Household Size	No. of New Households	%
1 person	7,139	45.6
2 person	4,164	26.6
3 person	2,239	14.3
4 person	2,192	14.0
5 person	720	4.6
6+ person	-798	-5.1
Total	15,656	100.0

Table II ?

(1)

HOUSING MARKET OVERVIEW

Table 2. Households by Number of Persons, Mesa County

NUMBER OF PERSONS	1970 NO.	1970 %	1978 NO.	1978 %	1970-78 New Households NO.	1970-78 New Households %
All households	17,640	100.0	26,000	100.0	8,360	100.0
1	3,259	18.5	7,073	27.2	3,814	45.6
2	5,771	32.7	7,998	30.8	2,227	26.6
3	2,719	15.4	3,917	15.1	1,198	14.3
4	2,663	15.1	3,833	14.7	1,170	14.0
5	1,702	9.6	2,083	8.0	381	4.6
6+	1,526	8.7	1,096	4.2	-430	-5.1

Sources: 1970 Census of Housing, 1979 Survey of Buying Power Data Service

Sales and Marketing Management etc.

An examination of the figures in the New Households table indicates that over seventy percent of the net new households will be in the one and two person categories. Higher density multi-family housing is particularly appropriate to these smaller households.

Age of households also affects housing choice. Young households and older "empty nesters" are more attracted to multi-family configurations, while middle-aged households tend to prefer conventional detached single family living. Table 3 examines 1970-78 changes in the age of household heads in Mesa County. The largest increase in a ten-year age group was in the 25 to 34 year-old household heads (Note that the 45 to 64 year old group covers twenty years; therefore each ten year group accounted for about half of the 26.9 percent gain.) The elderly population (though not strictly a ten-year group) registered the second largest gain. More rapid growth will not be likely to maintain the same proportion of elderly households. Much of the elderly household increase has been due to simple aging of the population rather than to an influx of new older population. With more rapid growth, this process will be a less significant share of total growth. Taking this into account, 1980-85 household growth is estimated to be as follows:

Age of Household Head	No. of New Households	%
Under 25	1,879	12
25 - 34	4,697	30
35 - 44	2,348	15
45 - 64	4,384	28
65+	2,348	15
Total	15,656	100

Rapid growth of households with heads under age 35 and ones age 65 indieats favorable conditions for multi-family development based on general buyer trends and desirable patterns in Mesa County.

Additionally, incomes of the areas' households will of course have a direct effect on housing choices. Combined with housing affordability resulting from mortgage interest rates, incomes will indicate the price levels of housing demanded by new households. Income levels are derived from 1970 Census, 1976 Survey of Income and Education, and from Bureau of Economic Analysis

total income estimates. Projections are based on extensions of the historic trends using a recursive model.[1] Table 4 shows 1970, 1980 and 1985 households by income (1985 incomes are stated in 1980 dollars). The income distribution of the new households from 1980 to 1985 is projected to be as follows:

Income	No. of New Households	%
$ 0 - 4,999	-1,322	-8.4
5,000 - 6,999	-346	-2.2
7,000 - 9,999	-642	-4.1
10,000 - 14,999	168	1.1
15,000 - 24,999	8,653	55.3
25,000 - 49,999	7,885	50.4
50,000+	1,261	8.1
Total	15,656	100.0

Increasing incomes among existing households will combine with the relatively high incomes of newcomer households to produce a considerably higher overall income distribution. This high level of income will favor ownership over rental housing units.

[1] CACI, Inc., 1979

Table 3, Households by Age of Household Head, Mesa County

AGE OF HEAD	1970 NO.	1970 %	1978 (8) NO.	1978 (8) %	1970-78 New Households NO.	1970-78 New Households %
All households	17,640	100.0	26,000	100.0	8,360	100.0
14-24	1,154	6.5	1,905	7.3	751	9.0
25-34	2,754	15.6	4,922	18.9	2,168	25.9
35-44	3,028	17.2	4,110	15.8	1,082	12.9
45-64	6,564	37.2	8,813	33.9	2,249	26.9
65+	4,140	23.5	6,250	24.0	2,110	25.2

Sources: 1970 Census of Population, 1979 Survey of Buying Power Data Service

Table 4. Household Income, Mesa County

ANNUAL INCOME	1970 NO.	1970 %	1980 NO.	1980 %	1985 NO.	1985 %
All Households	17,640	100.0	30,015	100.0	45,671	100.0
$ 0 - 4,999	6,781	38.4	3,332	11.1	2,010	4.4
$5,000 - 6,999	2,371	13.4	2,401	8.0	2,055	4.5
$7,000 - 9,999	3,330	18.9	2,971	9.9	2,329	5.1
$10,000 - 14,999	3,328	18.8	5,313	17.7	5,481	12.0
$15,000 - 24,999	1,440	8.2	9,935	33.1	18.588	40.7
$25,000 - 49,999	342	1.9	5,223	17.4	13,108	28.7
$50,000 +	51	0.3	840	2.8	2,101	4.6

Sources: Households from 1970 Census and CWACOG projections, income distributions from CACI, Inc.

An examination of housing affordability relates incomes to housing purchasing power. Table 5 shows affordable housing for household incomes assuming a maximum payment of 28 percent of income (qualifying criteria for FMHA mortgages). Fluctuating interest rates make tremendous differences in levels of affordability. Assuming that interest rates level out at eleven percent over the long term, an income of $20,000 could buy a $48,000 dwelling. Adjusting the income distribution for the 1980-85 new households to account for the increased incomes of low income households (that is the loss households in the lower income ranges) affordable housing demand at 11% interest is calculated as follows:

~~11%~~ 14%

Income (1,000's)	1980-85 New Households	Affordable Housing
15 - 20	2,604	36,000 - 48,000
20 - 25	3,907	48,000 - 60,000
25 - 30	2,365	60,000 - 72,000
30 - 35	1,971	72,000 - 84,000
35 - 40	1,577	84,000 - 96,000
40 - 45	1,182	96,000 - 108,000
45 - 50	789	108,000 - 120,000
50+	1,261	120,000+

Patterns of buyer preference or housing purchase decision based upon criteria of affordability can also be evaluated by examining housing construction trends.

Recent residential construction patterns in Mesa County provide some indication of the housing preferences of the growing population. Table 6 shows building permits issued in Mesa County during the 1975-1979 period.

TABLE 5. AFFORDABLE HOUSING -- BY INCOME AND INTEREST RATE

	GROSS ANNUAL HOUSEHOLD INCOME						
	15,000	20,000	25,000	30,000	35,000	40,000	50,000
Gross Monthly Income	1,250	1,667	2,083	2,500	2,917	3,333	4,167
Available PITI payment @ 28%	350	467	583	700	817	933	1,167
Available mortgage payment if taxes and insurance = 12% of PITI	308	411	513	616	719	821	1,027
Mortgage amount supported w/ 30 yr. amortization, interest rate of:							
13%	27,800	37,200	46,400	55,700	65,000	74,200	92,800
12%	29,900	40,000	49,900	59,900	69,900	79,800	99,800
11%	32,300	43,200	53,000	64,700	75,500	86,200	107,800
10%	35,100	46,800	58,500	70,200	81,900	93,600	117,000
Maximum housing purchase price with 1/4 yr. income as down payment.							
13%	31,500	42,200	52,700	63,200	73,800	84,200	105,300
12%	33,700	45,000	56,200	67,400	78,700	89,800	112,300
11%	36,100	48,200	60,200	72,200	84,300	96,200	120,300
10%	38.900	51,800	64,800	77,700	90,700	103,600	129,500

TABLE 6. MESA COUNTY HOUSING UNITS

	Single Family	Multi-Family	Total	% Multi-Family
1975	815	189	1,004	18.8
1976	984	467	1,451	32.1
1977	1,235	392	1,627	24.1
1978	1,554	313	1,867	16.8
1979	1,313	495	1,808	27.4
1975-79 Total	5,901	1,856	7,757	23.9
Annual Average	1,180	371	1,551	23.9

Continuation of this five year average into the 1981-85 period would result in multi-family demand of:

	Multi-Family Unit Demand
1981	329
1982	748
1983	878
1984	1,235
1985	707
Total	3,897

(allows for 4% vacancy)

Table 7 provides an estimate of the total number of housing units required in Mesa County during the 1981-85 period and assumes a percentage breakdown for both condo/townhouse and condominium/apartment unit types. This determination utilizes the 5-year average of building permit activity for multi-family units as a basis for this projection and assumes an increase of preference for the lower-maintenance, higher density unit-type in Mesa County as housing costs continue to climb and the number of 1 and 2 person households entering the market increases.

The percentage of capture that the downtown area will exercise over the total multi-family market will depend largely upon the lengths to which the City is willing to go to attract multi-family housing downtown. Increased cultural, entertainment and professional-office activity and development will certainly strengthen the downtowns' draw for such a market. The availability of land in "transitional" stages of use close to the downtown core will also offer attractiveness.

Since the concept of a high-quality multi-family project downtown is without a recent comparable precedent the success of such a project is somewhat speculative. At the same time, even if we were to assume a highly conservative capture rate of 2% of the condominium unit-type market, this allows for a 36 unit project on an appropriate downtown site in the 1981-85 period. With the proper incentives such a "pilot" project should be realizable and can serve as the impetus for similar developments. A live-in population is a critical factor in enhancing the viability of a downtown area. In the next design phase, specific residential alternatives will be tested in the "transitional" use areas at the downtown's periphery to evaluate site feasibility as well as the necessary land acquisition or financing requirements.

Table 7 Estimated Multi-Family Demand, 1981-85, Mesa County

PRICE RANGE (or rental equivalent)	1981-85 Total Housing Units Required	Townhouse		Condo/Apt.	
		%	No.	%	No.
$36,000 - 48,000	2,604	20	54	70	1,823
$48,000 - 60,000	3,907	30	1,172	20	781
$60,000 - 72,000	2,365	10	237	5	118
$72,000 - 84,000	1,971	10	197	1	20
$84,000 - 96,000	1,577	5	79	0	0
$96,000 - 108,000	1,182	2	24	0	0
$108,000 - 120,000	789	2	16	0	0
$120,000+	1,261	0	0	0	0
Total	15,656	11.4	1,179	17.5	2,742

28.9% of all new housing in multi-family housing types

PARKING INVENTORY/ANALYSIS

DOWNTOWN GRAND JUNCTION
PARKING ANALYSIS

In order to determine the profile of existing parking use in downtown Grand Junction, certain inventories, count programs and surveys were conducted. The data derived from this effort has provided a base for the evaluation of current problems and needs, and for the development of future needs based on proposed changes in the downtown character and development pattern. The following were done:

- Parking inventory
- Parking turnover survey on-street
- Parking turnover survey in selected off-street lots
- Parking utilization counts in other off-street lots
- Parker interviews, and,
- Field observation and evaluation by professional personnel

Parking Inventory

A detailed inventory was conducted within the study area. Field investigations were supplemented with available data from other studies, aerial photographs and other information. This inventory provides a detailed assessment of all public and private parking spaces available in the area, meter or time limits, type of space (parallel, diagonal, etc.), no parking zones, parking restrictions, and other features. In addition, the inventory also identified one-way streets, traffic control signs (stop, yield) and traffic signals. These features and facilities are shown on Figure 1. (1)

There are 3986 total parking spaces in the inventory area; 2120 are public and 1866 are private. Of those public spaces, 1546 are on-street and 574 are off-street. There are 1326 parking meters in the study area; 62.5% of total public spaces. Of the remaining 794 public spaces, 73 are signed for a certain time limit and 721 are essentially unlimited, unrestricted parking. (2)

Parking Turnover Survey

Within the central downtown area more extensive and detailed analyses of parking use were carried out. In the area bounded by Grand Avenue on the north, Seventh Street on the east, Colorado Avenue on the south, and Second Street on the west, there are 903 public on-street parking

spaces. About 85 percent (796 of the on-street spaces are metered and 88 percent 331 of the off-street spaces are metered. (3)

On August 20, 1980 all 903 on-street spaces within this central area were monitored and checked every half hour from 10:00 A.M. to 6:00 P.M. On October 20, 1980, a similar survey was conducted in four off-street public lots. The characteristics of use in each category is important in defining problems and deriving conclusions.

License plates were recorded for each space if occupied to develop a picture of the use of every space on each block face and street in the area. From this it was possible to determine the average length of stay, the average spaces available, the average number of cars using the spaces during the day and other factors related to space use, supply and demand.

Parking and Signalization Inventory

METERED SPACES/ ON-STREET

- 24 min.
- 1 hour
- 2 hour
- 4 hour
- 10 hour

OFF-STREET

- 10 hr — Metered with time
- Private

- Signed limit
- Unsigned
- Limit of Turnover Counts
- + Traffic Signal
- −; ▸ Stop sign; Yield

- ✱ Volume Count Locations
- → One way

City/County Development Department

PARKING INVENTORY BY BLOCK

LOCATION		NO. SPACES	TYPE
2nd Street			
Grand to White	(W)	9	Unmetered
	(E)	9	Unmetered
White to Rood	(W)	6	Unmetered
	(E)	8	Unmetered
Rood to Main	(W)	9	M-2
	(E)	6	M-2
Main to Colorado	(W)	2	M-2
	(E)	2	M-2
3rd Street			
Grand to White	(W)	10	Unmetered
	(E)	10	Unmetered
White to Rood	(W)	5	M-0
	(W)	3	M-2
	(E)	10	M-10
Rood to Main	(W)	16	M-2
	(E)	13	M-2
Main to Colorado	(W)	10	M-2
	(E)	6	M-2
4th Street			
Grand to White	(W)	3	Unmetered
	(E)	3	M-2
	(E)	5	M-2
White to Rood	(W)	5	24 minutes
	(E)	5	24 minutes
	(E)	4	M-2
Rood to Main	(W)	10	M-1
	(E)	12	M-1
Main to Colorado	(W)	4	24 minutes
	(E)	11	M-1
5th Street			
Grand to White	(W)	2	24 minutes
	(W)	4	M-2
	(E)	4	M-2
White to Rood	(W)	2	M-1
	(E)	9	24 minutes
Rood to Main	(W)	6	M-1
	(E)	9	M-1
Main to Colorado	(W)	7	M-1
	(E)	6	M-1

6th Street

Grand to White	(W)	10	Unmetered
	(E)	18	Unmetered
White To Rood	(W)	10	24 minutes
	(E)	11	M-1
Rood to Main	(W)	10	M-1
	(E)	11	M-1
Main to Colorado	(W)	11	M-1
	(E)	11	M-1

White Avenue

2nd to 3rd	(N)	11	S-2
	(S)	13	S-2
3rd to 4th	(N)	6	M-2
	(N)	6	24 minutes
	(S)	7	M-2
	(S)	7	24 minutes
4th to 5th	(N)	8	M-2
	(S)	12	M-2
5th to 6th	(N)	13	M-2
	(S)	13	M-1
6th to 7th	(N)	11	M-10
	(N)	1	M-1
	(S)	3	M-1
	(S)	4	M-10

Rood Avenue

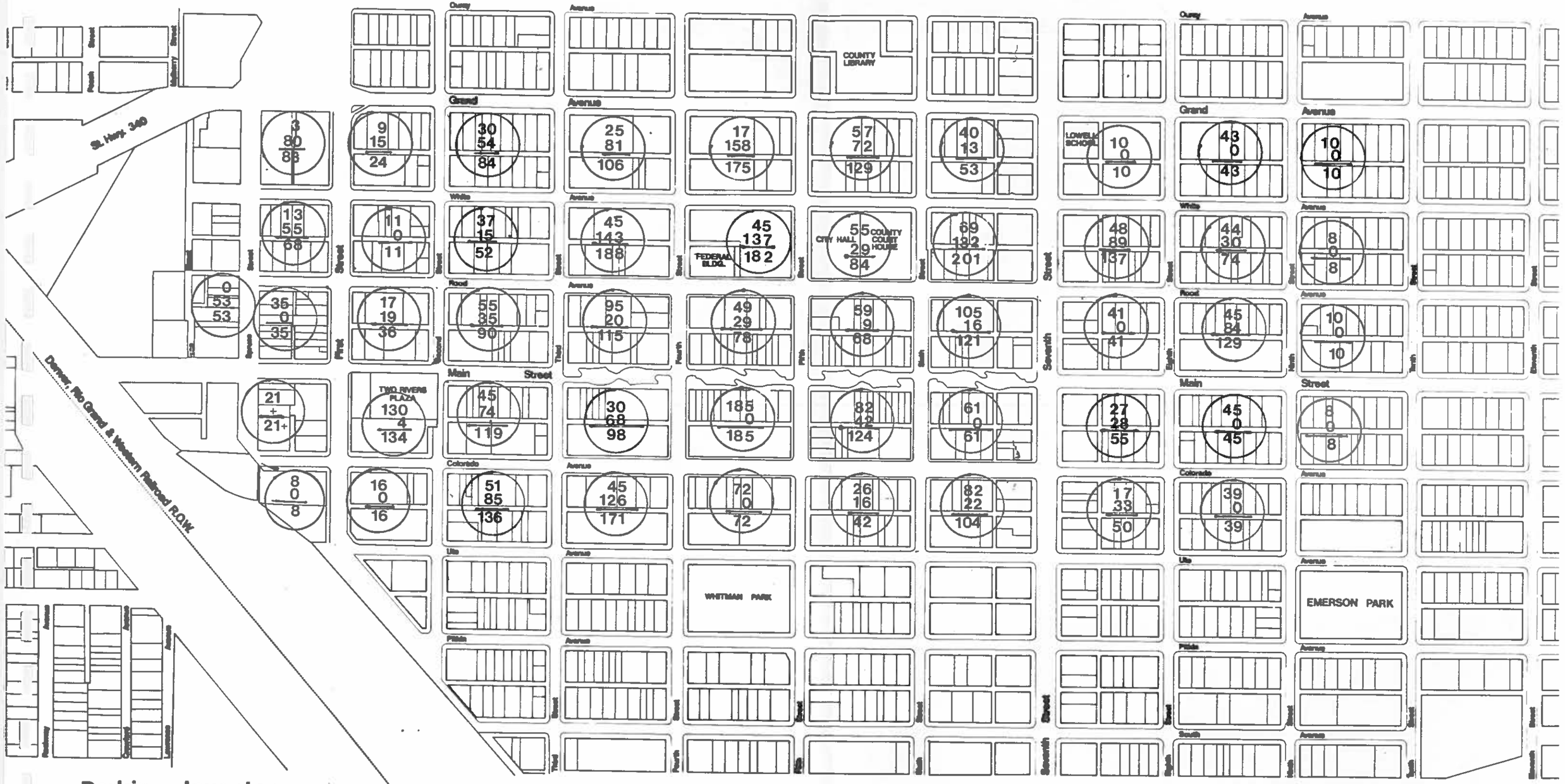
2nd to 3rd	(N)	8	M-10
	(S)	10	M-10
	(S)	2	M-2
3rd to 4th	(N)	11	M-2
	(S)	12	M-2
	(S)	7	24 minutes
4th to 5th	(N)	22	M-2
	(S)	8	M-2
	(S)	6	24 minutes
5th to 6th	(N)	23	M-1
	(S)	24	M-2
6th to 7th	(N)	13	M-2
	(N)	2	24 minutes
	(S)	10	M-2
	(S)	5	24 minutes

Main Street

2nd to 3rd	(N)	21	M-2
	(S)	13	M-2
3rd to 4th	(N)	9	M-1
	(S)	10	M-1
4th to 5th	(N)	10	M-1
	(S)	10	M-1
5th to 6th	(N)	10	M-1
	(S)	9	M-1
6th to 7th	(N)	10	M-1
	(S)	10	M-1

Colorado Avenue

2nd to 3rd	(N)	13	M-2
	(N)	7	M-10
	(S)	8	M-2
	(S)	3	M-1
	(S)	11	M-10
3rd to 4th	(N)	10	M-2
	(S)	17	M-2
4th to 5th	(N)	23	M-2
	(N)	1	24 minutes
	(S)	23	M-2
5th to 6th	(N)	1	24 minutes
	(N)	4	M-2
	(S)	17	M-2
6th to 7th	(N)	15	M-4
	(N)	5	M-10
	(S)	9	M-2
	(S)	9	M-10



Parking Inventory

PUBLIC AND PRIVATE SPACES

LEGEND

45 / 126 / 171 — PUBLIC PARKING / PRIVATE PARKING / TOTAL PARKING

City County Building

On-Street Turnover

As shown in Table 1, the overall average occupancy of all on-street spaces was 63%. During the period surveyed, 3,890 cars parked in these spaces, an average of about 4.3 cars per space during the 8 hour period. Almost 6 percent of all cars parked were there for 4 hours or more and almost 14 percent of all cars exceeded the meter limit at which they were parked.

Some additional key points indicated from the data in Table 1 includes:

- Parking use on Main Street is the highest, averaging 82 percent during the 8 hour period between 2nd and 7th Streets. (If you look only at spaces between 3rd and 7th, the rate increases to a very high 94 percent average use, and between 10:00 A.M. and 5:00 P.M. in the same area, it increases to 96 percent.)

- Spaces along Colorado Avenue experience the lowest overall use of those on any street, at only 45 percent.

- Rood Avenue and Main Street realize the highest number of cars which park over the designated limit, but 5th and 6th streets had the highest percent of total cars parked overtime.

- Overall, about 13.6 percent of all cars parked on-street in the central area parked for longer than the posted limit.

Most of the time controlled spaces in the area are short-term (2 hours or less). As shown in Table 2, 701 of the 903 total spaces (78%) are short-term. Almost 12 percent are unmetered and only about 10 percent are long-term meter controlled. (6)

Also shown in Table 2 is the percent use of each type space based on total actual spaces available and the percent occupancy of the practical capacity based on the realization that all spaces cannot be occupied at any one time. This adjustment from theoretical (100%) to practical capacity has the primary function and realization of reducing the need for motorists to circulate in search of a vacant space and that certain turnover must take place. (For metered on-street spaces this relationship is 85 percent of total capacity equals (7)

practical average capacity.

A few key data items to come from Table 2 include:

- Overall, the practical capacity within the area containing 903 total spaces is about 779. (8)
- The spaces are utilized to only about 73 (9) percent of practical capacity.
- (10) Ten hour and four hour meters are greatly underutilized.
- (11) One hour meters appear to have a high percent utilization, but this is attributable in large part to the number of cars which are parked over the limit.

(12) A look at only the metered spaces is shown in Table 3. There are 796 metered spaces. Almost 3,130 cars parked in those spaces during the survey, an average of 3.9 cars per space. The average length of stay for each meter type is shown, with shorter-term spaces having a higher tendency for an average length of stay which exceeds the maximum proscribed limit. For example, in 24 minute meters, the average length of stay was about 38.4 minutes and for one hour meters, it was over one hour. This again reflects the lack of enforcement and the tendency to overpark rather than park in the appropriate meter length spaces provided elsewhere.

On-Street Accumulation

As shown in Figure 2, the average utilization, or proportion of cars parked in the central area was relatively constant from 10:00 A.M. to 5:00 P.M., dropping as low as 63 percent and reaching a highest total use between 2:00 P.M. and 2:30 P.M. at 74 percent.

(13) Accumulation in short-term only spaces shows an even greater relative evenness, varying only 8 percent from 10:30 A.M. to 3:00 P.M. This indicates that short-term spaces are being used at about the same degree of consistency as long-term spaces.

TABLE 1

ON-STREET PARKING ANALYSIS

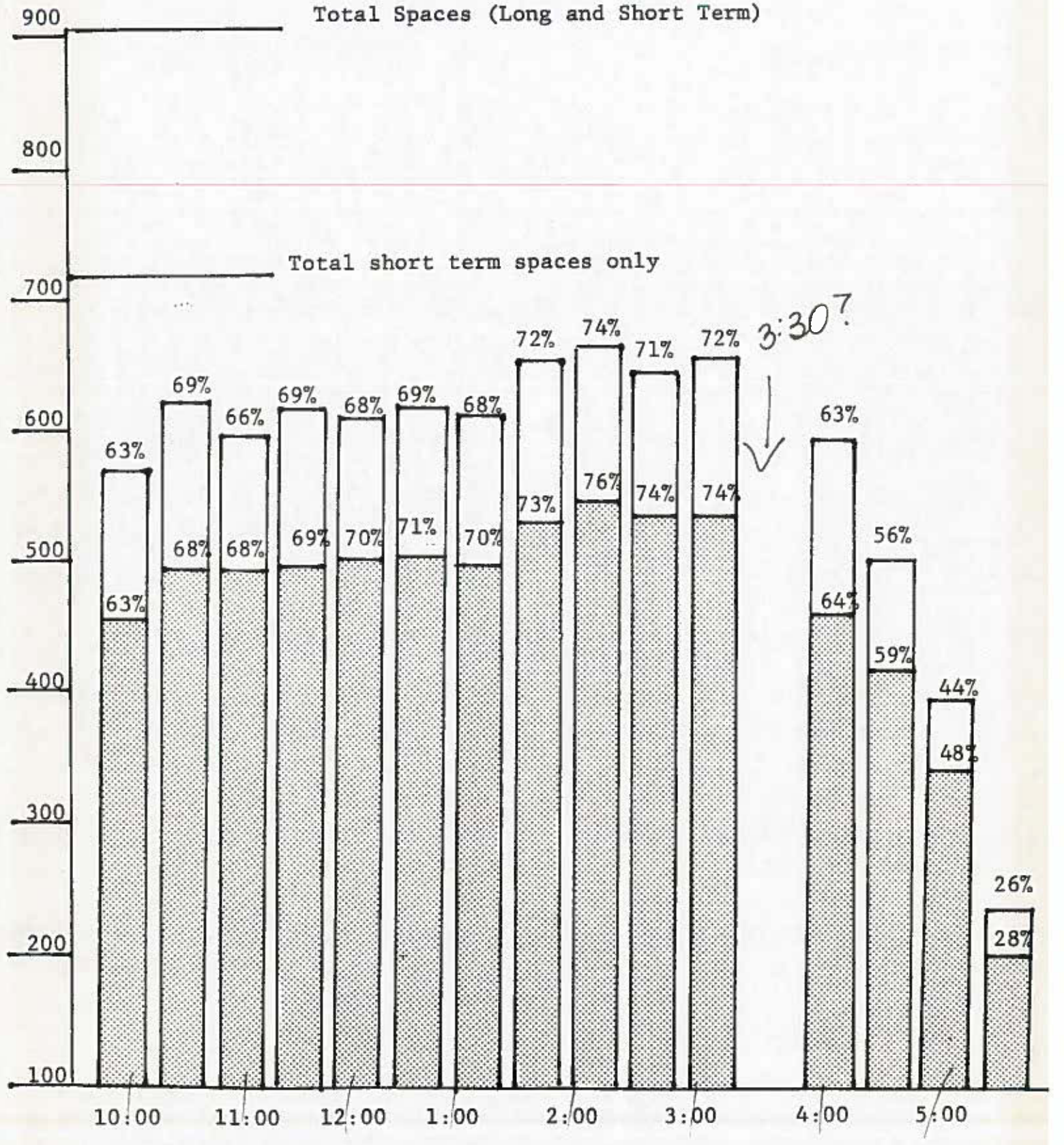
DOWNTOWN GRAND JUNCTION

	NO. SPACES	AVERAGE UTILIZATION	NO. CARS PARKED	TURNOVER NO. OF CARS PER SPACE	NO.OF CARS PARKED OVER 4 HR	NO. OF CARS PARKED OVER LIMIT	PERCENT CARS PARKED OVER LIMIT
2nd Street	51	60%	115	2.2	22	11	9.6%
3rd Street	83	60%	249	3.0	30	7	2.8%
4th Street	62	74%	433	7.0	5	40	9.2%
5th Street	49	77%	299	6.1	7	54	18.1%
6th Street	92	73%	416	4.5	30	76	18.3%
White Avenue	115	65%	398	3.5	41	63	15.8%
Rood Avenue	163	63%	679	4.2	43	115	16.9%
Main Street	112	82%	799	7.1	13	123	15.4%
Colorado Avenue	176	45%	502	2.9	29	40	8.0%
	903	63%	3,890	4.3	220	529	13.6%

FIGURE 2

GRAND JUNCTION CENTRAL AREA

ON-STREET
PARKING ACCUMULATION



On-Street Comparison

(14) In 1974, a similar study in generally the same area was conducted. In order to see what conditions had changed and whether problems had changed emphasis, a comparison of certain relevant findings was conducted. Current 1980 data had to be adjusted to correspond with that in 1974, so some results may differ slightly from figures shown previously in this report.

Table 4 reflects these pertinent comparisons in terms of percent use of spaces by street, overall areawide utilization and average length of stay. As shown, neither percent utilization of space on any street, or overall, nor the average length of stay has changed considerably from 1974 to 1980. This tends to indicate that parking conditions, needs, and demands have remained relatively constant in the area.

Off-Street Public Lots

As indicated earlier, turnover and accumulation data was gathered in four selected lots. These are identified as:

A. 400 Block of Colorado, northside
B. 500 Block of Colorado, northside
C. 600 Block of Rood, southside
D. Southeast corner of White/6th intersection

As shown in Table 5, these lots represent 278 spaces, all 2-hour limit. This equals 84% of all off-street metered spaces in the central area.

Although one lot, Lot D, across from the County Courthouse was 87 percent utilized, other lots were not so consistently used. The major lots on Colorado (A and B) were occupied at a rate of less than 50 percent. The primary reason for higher use rate of Lot D was the higher percent of spaces which were used all day, ostensibly by employees in the area taking up short-term spaces.

This higher than desirable long-term use rate is seen in all lots surveyed except Lot A, and the average lengths of stay are well over two hours, up to almost four hours.

Although the overall average space use in all four lots is only about 53%, the average length of stay reaches almost two and one half hours, in part the result of 18% of all spaces being used by all day parkers.

TABLE 2 (15)

ON-STREET PARKING SPACES
DOWNTOWN GRAND JUNCTION

SPACE LIMIT	NO. SPACES	% OF TOTAL	AVG. NO. OCCUPIED	AVG. % USE	PRACTICAL CAPACITY OF SPACES	% OCCUPANCY OF PRACTICAL CAPACITY
Unmetered No limit	107	11.8%	56	52%	102	55%
10 HR.	80	8.9%	46	56%	68	68%
4 HR.	15	1.6%	6	40%	13	46%
2 HR.	393	43.5%	237	60%	334	71%
1 HR.	238	26.4%	188	79%	202	93%
24 MIN.	70	7.8%	39	56%	60	65%
	903	100.0%	592	63%	779	73%

TABLE 3

METERED PARKING SPACES ON-STREET
DOWNTOWN GRAND JUNCTION

METERED SPACES	NO. OF SPACES	TOTAL NO. OF CARS USING SPACES	% OF TOTAL EXCEEDING METER LIMIT	AVG. CARS PER SPACE	AVG. STAY PER CAR
10 HR.	80	98	0%	1.2	4.02 hrs.
4 HR.	15	27	7%	1.8	1.80 hrs.
2 HR.	~~393~~ 417	1,022	14%	~~3.6~~ 2.5	~~1.82 hrs.~~ ?
1 HR.	238	1,499	14%	6.3	1.01 hrs.
24 MIN.	70	483	15%	6.9	.64 hrs.
	~~796~~ 870	3,129	13.6%	~~3.9~~ 3.8	~~1.27~~ ? hrs.

TABLE 4

COMPARISON OF ON-STREET PARKING DATA
DOWNTOWN GRAND JUNCTION

STREET	PERCENT UTILIZATION 1974	1980
Main - 3rd to 7th	95%	93%
Rood - 3rd to 7th	70%	69%
Colorado - 3rd to 7th	45%	49%
Third - Rood to Colorado	65%	60%
Fourth - Rood to Colorado	87%	80%
Fifth - Rood to Colorado	79%	82%
Sixth - Rood to Colorado	77%	73%
	70%	69%
Average length of stay (in hours)	1.37	1.43

TABLE 5

SELECTED PER STREET LOTS
DOWNTOWN GRAND JUNCTION

LOT	NO. SPACES	TYPE SPACE	AVG. % USE	% SPACES USED ALL DAY	AVG. LENGTH STAY (HRS.)
A	134	2 hr.	43%	4%	1.62
B	51	2 hr.	50%	37%	3.11
C	65	2 hr.	63%	23%	2.38
D	25 3	2 hr. 1 hr.	87%	42%	3.96
	278		53%	18%	2.46

Average accumulation throughout the day was also much lower than in the on-street spaces, reaching a high use rate of only 59 percent, that at about 1:00 P.M. and remaining at about 58% through 2:30 P.M.

Parker Surveys (16)

Downtown parker surveys were conducted from September 24th through September 27th, 1980, from the hours of 10:00 A.M. to 5:30 P.M. These were face to face interviews in which a number of marketing and perceptual questions were asked, as well as selected inquiries about parking. Some key findings included:

- 30% indicated some difficulty in finding a parking space, and over 93% of those said it was because they could not find any available spaces close to destination.
- 69% parked within 1 block of their destination and 89% parked within 2 blocks or less.
- 88% of those interviewed arrived downtown by car, and 61% said they would ride a bus if it was available.
- 42% of respondents wanted more parking, but based on other answers, only if it was within one block of destination. When comparing this to the availability of existing spaces a short distance away, it indicates that many parkers are not aware of, or do not choose to use available spaces around the perimeter of the central area.
- 27% of respondents mentioned the removal of meters.
- Over 45% of those surveyed stayed between 15 minutes and one hour, and almost 80 percent stayed less than 2 hours.
- The average length of stay was about 1.42 hours, which compares favorably with that found in the turnover surveys.

Conclusions

Based upon an analysis of the data gathered and presented, a series of conclusions have been developed which relate to the existing parking supply, demand and utilization. These are not necessarily all inclusive and are certainly not listed in order of importance. They do form the foundation of evaluation of current conditions and potential corrective actions and will serve as a guide to future needs based on development and change projected later in this report.

- People clearly choose parking spaces because of the location rather than the length of allowable stay. It is easier to feed the meter (which is allowable) rather than park a couple of blocks away in a longer limit space.

- The lack of enforcement for overstay on meters (not marking tires) reinforces the idea that meters are for revenue only, not parking control and management.

- The tendency to overpark is no greater in 1 hour meters that it is in 2 hour or 24 minute meters. All types of short-term spaces experience about the same percent of cars parking over the meter limit.

- The average length of stay for all short-term meters also indicates a tendency to overstay regardless of meter length, but particularly those of shorter duration.

- There appears to be insufficient traffic volume and peak hour directional traffic flows to really warrant the one-way streets or Rood/Colorado and 4th/5th. This one-way street pattern and circulation affects parking selection and space utilization. — 7 17

People tend to look for spaces as soon as possible and as close to destination as possible. Since they are not restricted to time limits they do not generally search out appropriate meters. Regarding circulation and its effect on parking selection, the following items should be noted: — 18

a. Rood tends to act as a primary entry route in downtown. (19)
b. Traffic on 4th Street from the north tends to turn right on Rood or left on Main, not reaching Colorado.
c. Traffic on 5th and 7th from south tends to turn west on Main and Rood, not east on Colorado.
d. Traffic from north and west on 1st Street and White also tends to circulate on Main and 4th Street pattern.
e. Colorado Avenue acts as a primary "exit" route, resulting in lower parking utilization because many cars do not "reach" Colorado before selecting a space elsewhere.

- Main Street experiences an almost unheard of utilization rate of 96% between 3rd and 7th Streets. This equates to over 113% of practical capacity and indicates that there are autos circling the blocks, double-parking, waiting in the traffic lane almost continually to achieve this type of intense use.

- One hour meters in the central area are utilized 93 percent of practical capacity and experience an average length of parking stay of 1.01 hours. This is a high rate, but is attributable to the prime locations of 1 hour meters (Main Street and close thereto) and the "no enforcement" policy (20) more than to the "desire to stay longer", as ample space are available in 2 hour or longer zones.

- Accumulation throughout the day from 10:00 A.M. to 4:00 P.M. is relatively constant, ranging from a low of 571 cars (out of a total 903 available spaces) to a high of 666. This indicates relatively constant demand for existing spaces. An analysis of various streets and blocks does show some slight variations in peaking by time of day but nothing unusual or atypical (i.e., Main Street showed 95% occupancy at 12:00 Noon, while 4th Street had its highest occupancy (87%) at 10:30 A.M. and Colorado at its highest occupancy (60%) at 3:00 P.M.

- The overall problem of "over-limit" parking and abuse of short-term spaces does not appear to be that the time limits are "too short". There is ample available capacity in the 2 hour spaces on Colorado and Rood and in the off-street lots along Colorado and Rood. General abuse of the hour and 24 minute spaces is generally attributable to the meter locations, driver perceptions, and lack of enforcement practices.

- A survey of occupancy of long-term public off-street lots (10 hour meters) shows a very high utilization, approaching 95 percent in the lots surveyed. However, use of on-street spaces for long-term use was only about 56 percent. It is not clear that there is a shortage of long-term spaces except in the immediate vicinity of the Courthouse/City Hall area. Spaces in the northwest and southwest quadrants of the area are generally underutilized (overall only about 55 percent of practical capacity). However, in view of the tendency to use off-street spaces more extensively for long-term use and the number of cars parked in 2 hour (or less) meters both on-street and off-street, there appears to be a need to provide more long-term spaces in conveniently located lots. This could be balanced by converting some 10 hour on-street spaces to shorter time intervals.

(21)

Findings/Conclusions of Other Reports

In the report "Expanded Shopping and Parking for Downtown Grand Junction" in November, 1976, the Downtown Parking Committee made the following observations:

- Make all off-street public parking lots at no charge to customers, and at a cost to the business-man/property owner which is reasonable in relation to benefits the tenant receives, and

- Increase cost for on-street meters to raise some additional revenue to assist in providing the free off-street parking.

- In 1975, approximately 32% of parking revenue came from off-street lots. (Since then, this proportion has increased to 38% in 1976, 39% in 1977, and 42% in 1978, making it increasingly difficult to make up those funds lost if off-street meters are removed.)

- Controlling the new free parking must receive careful attention so that it works for the shopper (possibly 3 hour limits, enforced by tire marking and tickets issued to violators.)

- Parking for downtown employees should be provided in designated areas with parking authorization decal issued. Violaters would be ticketed.

In June 1979, the "Report from the Grand Junction Parking Authority" to the Grand Junction City Council made the following points:

(In their opinion--)

- There is need for additional parking and
- remove the meters to provide "free" parking.

The report stated, however, that there is no such thing as "free" parking and that the costs of continued parking availability would have to be paid one way or the other.

The report further stated:

- "we do not have a good definition of the need"
- "perhaps it's not possible to determine exactly the number of spaces that are needed"
- "If 80% of the spaces are occupied on normal business days throughout the year, additional spaces will probably be needed and could be justified.
- "When 95% are occupied and utilized during peak shopping seasons, additional spaces will be needed"
- "We feel that at the present time, there is a need of 150 to 210 spaces in the downtown area"

Parking Availability

Within the central area of downtown Grand Junction, there are 1,278 public spaces, 903 on-street and 375 off-street. The inventory of spaces by type is shown in Table 6.

Over 50% of all parking spaces in the central area are two hour metered spaces and almost 20% are one hour metered spaces. Although only 11.2% of all spaces (not counting unmetered spaces) are for long term parking. This is moderated somewhat by the fact that the unmetered spaces are primarily for long-term use and additional long-term spaces are available immediately adjacent to the central area along Third Street and Ute Avenue and in lots on Sixth Street and under Two River Plaza.

The average use rate of these spaces is shown in Table 7. From these use rates and turnover of spaces it is possible to calculate the number of cars which could have parked if existing spaces were used to the level of practical capacity attributable to the space type.

TABLE 6

EXISTING CONDITIONS
PARKING AVAILABLE WITHIN AREA
DOWNTOWN GRAND JUNCTION

TYPE SPACE	ON-STREET	OFF-STREET	TOTAL	PERCENT
10 Hour	80	43	123	9.6%
4 Hour	15	6	21	1.6%
2 Hour	~~393~~	274	667	52.2%
1 Hour	238	2	240	18.8%
24 Minutes	70	6	76	6.0%
Unmetered	107	44	151	11.8%
TOTAL	~~903~~	(375) ?	1,278	100.0%

(23)

TABLE 7

AVERAGE USE OF EXISTING PARKING
BY TYPE
DOWNTOWN GRAND JUNCTION

	ON-STREET				OFF-STREET			
TYPE SPACE	SPACES	% USE	AVG. STAY (1)	TURNOVER (2)	SPACES	% USE	AVG. STAY (1)	TURNOVER (2)
10 Hour	80	56%	4.02	1.2	43	96%	5.62	1.4
4 Hour	15	40%	1.80	1.8	6	83%	*	*
2 Hour	393	60%	1.82	2.6	274	53%	2.46	1.7
1 Hour	238	79%	1.01	6.3	2	87%	*	*
24 Minutes	70	56%	.64	6.9	6	63%	*	*
Unmetered	107	52%	4.80	0.9	44	*	*	*

(1) in hours
(2) number of cars per space
* unknown

For example, as shown in Table 8 the total number of cars which could park during a given day assuming achieving practical capacity (roughly 85% of total capacity) and assuming current usage rates and enforcement patterns. Existing metered spaces could accommodate approximately 5,000 cars in an average day, about 35% more vehicles in available capacity over what is presently using the spaces.

Table 9 shows the total number of vehicles which could use the existing spaces if enforcement of time limits was initiated and resulting usage factors and lengths of stay per meter type adjusted to anticipated levels shown. In this event, existing spaces could accommodate almost 8,000 vehicles in an average day or 60% more than current practical capacity and over 100% more than currently use the spaces under existing use patterns.

Under enforcement, changing use pattern will effect the number of cars which can use each space type. Table 10 shows the comparison. If enforcement is successful, it will result in a decreased capacity in long term spaces and an increased capacity of short term spaces. In general, almost 90 less cars will be able to use 4 hour and 10 hour meters due to these shifts, which will increase the pressure to provide more long term spaces. Because of the excess capacity which will result in short-term spaces it will be possible to balance out these space needs by making adjustments to space types by time limit without the need to increase the total number of spaces.

This analysis does not finalize supply/demand relationships, not indicate future parking needs based on potential development changes. It does indicate, however, that available existing parking in total will accommodate current need if properly localized and utilized.

Parking Policy

There are two basic parking policy options which address themselves to the local concerns and perceived parking problems and needs. The two policies and the likely results of each are summarized on Tables 11 and 12.

The question of meters or the removal of meters is a policy and revenue question. Either system can be implemented and will function whether meters are continued or discontinued. Enforcement of parking limits, will be necessary under Option 2 in either event.

Each of these policies dictates different specific corrective actions with regard to location and types of spaces. These different actions, coupled with alternate future developments will cause different approaches to be taken and different recommendations to be made.

The program for change and future parking needs can be developed only considering these decisions and prospective development actions.

TABLE 8

PRACTICAL CAPACITY OF EXISTING METERED SPACES
UNDER EXISTING USAGE PATTERNS

ON-STREET SPACES	No. Spaces Practical Capacity	Average Stay (In Hours)	Potential No. Cars With Practical Capacity
10 hour	68	4.02	135
4 hour	13	1.80	58
2 hour	334	1.82	1,468
1 hour	202	1.01	1,600
24 minutes	60	.64	750
			4,011
OFF-STREET SPACES		(1)	
10 hour	43	5.62	76
4 hour	6	1.80	26
2 hour	247	2.46	803
1 hour	2	1.01	16
24 minutes	5	.64	62
			983

(1) on-street length of stay used when off-street average not available.

Total potential cars which could be parked under practical capacity limits.	4,994

TABLE 9

PRACTICAL CAPACITY OF EXISTING METERED SPACES
UNDER ENFORCEMENT
AND ANTICIPATED RESULTING USAGE PATTERNS

ON-STREET SPACES

	No. Spaces Practical Capacity	Anticipated Avg. (in hours) Stay	Potential No. Cars With Practical Capacity
10 hour	68	6.0	90
4 hour	13	2.5	41
2 hour	334	1.4	1,908
1 hour	202	.6	2,693
24 minutes	60	.3	1,600
			6,332

OFF-STREET SPACES

10 hour	43	6.0	57
4 hour	6	2.5	19
2 hour	247	1.4	1,411
1 hour	2	.6	26
24 minutes	5	.3	133
			1,646

Total potential cars which could park in existing spaces under practical capacity limits and enforcement.	7.978

TABLE 10

COMPARISON OF PARKING CAPACITY SHIFTS

DOWNTOWN GRAND JUNCTION

	Potential No. Cars With Existing Use Patterns	Potential No. of Cars With Enforcement	Net Change In Numbers of Cars Per Space Type
10 hour	211	147	-64
4 hour	84	60	-24
2 hour	2,271	3,319	+1,048
1 hour	1,616	2,719	+1,103
24 minutes	812	1,733	+ 921
	4,994	7.978	2,984

TABLE 11

OPTION 1 AND LIKELY RESULTS

DOWNTOWN GRAND JUNCTION

1. Make it easier for people to stay longer in the downtown area through strategies which encourage longer-term space use, low parking rates and small fines for any violations which occur.

   - Increase average length of space use.
   - Decrease turnover.
   - Make it more difficult to find parking spaces close to Main Street destinations.
   - Increase vehicle miles and circulation looking for spaces (may encourage standing, double parking, parking in "no parking" zones and misue of handicapped spaces.
   - May discourage more people from continuing to come downtown because of increased difficulty in finding prime spaces.

TABLE 12

OPTION 2 AND LIKELY RESULTS

DOWNTOWN GRAND JUNCTION

II. Discourage over-limit parking and encourage correct utilization of parking spaces and areas to promote parking management and control. (This does not discourage people from staying 2-4 hours; it merely requires them to use proper spaces).

- Decrease average length of space use in short-term space.
- Encourage use of properly located longer term spaces (2 hr. and 4 hr.).
- Increase turnover in short-term spaces, tend to make short-term parking easier to find.
- Provide adequate spaces, properly located, to accommodate longer term (2-4 hours or longer). This may actually encourage shoppers to relax and stay longer since they will not have to worry about "feeding" meters.
- Will tend to remove some of the negative feelings regarding meters for revenue (tax) only.
- May attract additional persons to the area that had not come downtown because of difficulty of finding a parking space.

Since operational changes and parking needs will vary for each policy option, it is imperative that decisions be reached regarding the role of parking in the downtown area and how it will be used to complement future development need. At that point, corrections to existing condition and needs can be tied to long-range needs so that short-range programs are compatible with overall downtown plans.

TABLE 13 DAILY

AVERAGE WEEKLY VEHICULAR VOLUMES

LOCATION			AVERAGE WEEKLY VOLUMES
STREET	DIRECTION	BETWEEN	
5th	NB (one-way)	Grand/Ouray	7623
4th	SB (one-way)	Grand/Ouray	5667
7th	NB	Grand/Ouray	5682
7th	SB	Grand/Ouray	7619
5th	NB	Ute/Pitkin	7888
5th	SB	Ute/Pitkin	5906
Grand	EB	8th/9th	5591
Grand	WB	8th/9th	2367
Main	EB	7th/8th	2097
Main	WB	7th/8th	3341
Grand	EB	1st/2nd	6811
Grand	WB	1st/2nd	5854
4th	SB	Ute/Pitkin	4718
Ute	WB	7th/8th	11,603
7th	NB	Ute/Pitkin	2371
7th	SB	Ute/Pitkin	3213

NO reference or warrants made to this table

MEMORANDUM

Synopsis of TDP Reports

Grand Junction Downtown Development Strategy Plan
September 17, 1980

The purpose of this synopsis is to present an evaluation of the three DAVE consulting TDP working papers in terms of their effect on the Downtown area. A brief description of the contents of each working paper is presented followed by a discussion regarding the effects. The discussions presented are meant to highlight possible effects only.

Working Paper #1

This working paper is primarily a review of the existing transportation systems available to the residents of Grand Junction and Mesa County. Currently there is no strictly public transportation system operating in the county but there are several private non-profit services available. These are primarily dial-a-ride services available for the elderly and the handicapped and are funded by local, state and federal sources. Continental Trailways and Yellow Cab are profit related transportation alternatives.

The other transportation alternatives available to a very limited number of residents are encouraged through incentives provided by private business to carpool, vanpool, or in some cases ride in a company vehicle.

Of all the alternatives reviewed only one has the potential to alleviate problems experienced in the downtown; that being incentives for carpooling etc., which possibly would help alleviate parking congestion or circulation problems. Virtually none of the other alternatives, if expanded, would dramatically increase the market share for the downtown.

Working Paper #2

The purpose of working paper #2 was to analyze needs, patterns and demands for public transit. The important elements which relate to the downtown study area are summarized as follows:

- highlights travel destination as employment centers, government facilities, medical complexes and schools. (The first two easily apply to the downtown study area.)

- reviews population projections to analyze potential user groups.

- indicates general adult population ages 18 to 60 would most likely use public transit. (This group however also has more transportation options available to it - particularly the private automobile.

- discussion of areas within county most likely to generate highest demand for transit use.

The last item could be important as it is based on socio-econmic characteristics of census tracts within Mesa County. Even though the study does not deal specifically with areas most likely to generate auto traffic a similar methodology could be employed which did so. The result would be the identification of areas generating the most auto traffic for the downtown. This then could be acknowledged and utilized when the design alternatives are conceptualized.

Working Paper #2 clearly indicates that at this time the downtown is considered the primary trip generator and is the most concentrated of all the activity centers. The result is that in Paper #3 the downtown becomes the logical transfer point in all the alternatives presented for public transportation. Also, because the downtown is considered the major trip generator for public transit, the assumption can be made that if public transit is implemented a certain percentage decrease in parking demand can be expected. It appears that a projection of that decrease in parking demand could be made with relatively little additional study.

Working Paper #3

Working Paper #3 discusses alternate levels of services to meet all or part of the demand of the projected transit demand identified in Paper #2.

Level 1 consists of an increase in specialized services but no implementation of general public transportation. It is keyed to the elderly and handicapped and would have virtually no effect due to the relatively small number of users.

Level 2 is comprised of two alternate fixed route transit systems. Each alternative would satisfy minimum effect service criteria. Both alternatives identify the downtown as the system transfer point, the benefits of which would be positive in terms of increased people in the downtown area, the possibility of extending hours to match house of transit service and contribution to the identity of the downtown as the hub.

Alternate 1 differs in its effect on the downtown as opposed to Alternate 2 primarily because the Mesa Mall and North Avenue shopping districts are serviced by one-way bus routes. The effect is that shoppers utilizing the bus to either of those areas is committed to a longer total trip time to and from the downtown transfer point. The result is that people may decide to go to downtown rather than transfer to other districts. Alternate 2 provides for 2-way transit service and basically negates the argument presented above.

Non-urban systems are also presented but have negligible effect on the downtown so are not discussed here.

Other alternatives discussed are those involving transportation support systems. This involves promoting ride sharing or similar transit options. Included are promoting employer sponsored alternatives or possibly utlizing the concept of a publically funded transit "broker" whose job it is to connect various service options with demand.

Respectfully submitted,

Rahenkamp/Oldham, Inc.

Thomas W. Kopf

TWK:ca