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DEPARTMENT OF
PUBLIC WORKS

CITY OF SACRAMENTO
CALIFORNIA

1023 J STREET
SUITE 202
SACRAMENTO, CA
95814-2877

TRANSPORTATION DIVISION
PARKING

916-449-5354

June 7, 1989

Budget and Finance/Transportation and
Community Development Committees
Sacramento, California 95814

Honorable Members in Session:

SUBJECT: PARKING DOWNTOWN ECONOMIC STUDY

SUMMARY

This is a report on the Downtown Economic Study by Cambridge Systematics, Inc. which was done in response to a recommendation of the Mayor's Downtown Transportation Task Force to study the impact of parking fee increases on the downtown economy.

BACKGROUND

In March 1987 the Mayor appointed a Downtown Transportation Task Force to develop a joint City/County/State Transportation and Parking Management strategy to improve transportation and parking in the Downtown Sacramento area. In its studies and analysis, the Task Force perceived the problem of low public parking fees in City garages, especially in regards to the low fee for each of the first three hours of parking, which causes many vehicles to exit and re-park in order to avoid higher parking fees in excess of three hours. The task force recommended a general parking fee increase for the 1988-1989 fiscal year, which retained the low third hour fee until the ramifications of increasing the third hour fee could be studied in terms of the impact on the local retail economy.

The attached Executive Summary of the study discusses the study methodology, the survey results, the impact of a third hour parking rate increase and the recommendations based on these findings. In summary, through surveys of City parking garage users, office employees, pedestrians, and vehicle turnover in garages, profiles of the downtown daytime population were determined. Based on the survey findings of the Downtown Economic Study, an estimated 414 commuters would alter transportation modes if the third hour of parking was increased to \$1.00. Also, the study estimates 134 trips to downtown would be diverted to other competing retail areas, and 471 non-work trips would shift to alternative modes of transportation. This equates to a reduction in parking demand in the amount of 616 parking spaces (134 trips + 471 trips = 605 trips ÷ 3 vehicles per space = 202 + 414 commuter trips = 616 parking spaces).

FINANCIAL DATA:

Although the diversion of people from their vehicles to other transportation modes will result in initial losses of retail sales, the Downtown Economic Study emphasizes that these losses would be temporary and that the increased availability of parking (616 spaces) would attract new retail demand in excess of any such losses within 3 to 9 months. Recovery could be accelerated with joint City/merchant promotional campaigns.

The initial estimated daily retail sales loss is estimated in the study to be \$3,034 per day. (Refer to attachment "A" from the Downtown Economic Study). If 187 new shoppers are attracted by the new availability of parking, there would be no loss. This is less than 1% of the current daily downtown shopping trips. An increased merchant validation program could also add to the rate of recovery.

The study also notes that over 200,000 square feet of new retail space, 395 hotel rooms, and 712,000 square feet of new office space are planned for completion by the end of 1989 with parking demand outpacing supply under current zoning requirements. This will add further impetus to the recovery of lost retail demand.

The Downtown Economic Study projections on increases in retail sales are based on three possible scenarios shown in Attachment "B". A net gain in daily retail sales ranging from \$1,930 to \$3,537 is projected based on these scenarios.

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The average daily spending by trip purpose of garage patrons, taken from the study, is shown in Attachment "C". The highest spending category is the shopper who spends an average of \$16.22 per trip. The downtown worker spends an average of \$5.30. The downtown workers; however, are the largest contributors to the local economy, accounting for 34% or \$79.2 million in sales annually in the downtown area.

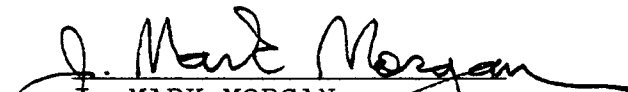
POLICY CONSIDERATIONS:

It is the City Council's policy to facilitate long-range economic development which promotes the short-term economic stability of the retail community. Increasing parking fees with a short-term loss in retail sales is consistent with this policy, if greater benefits will be realized within a twelve month period and thereafter.

RECOMMENDATION:

City staff recommends that the Budget and Finance Committee approve of the recommendations in the Downtown Economic Study as shown in the attached Executive Summary, in support of the parking fee increases being recommended in a separate report.


Respectfully submitted,


J. MARK MORGAN
Parking Administrator

Recommendation Approved:

Approved:

SOLON WISHAM, JR.
Assistant City Manager


MELVIN H. JOHNSON
Director of Public Works

JMM/tr

EXECUTIVE SUMMARY

In March, 1988, the Downtown Transportation Task Force recommended to City Council that a study of the impact of parking rate increases on the downtown economy should be conducted. The Task Force identified the need for a rate increase at City-owned garages, but felt that, if such an increase would have a substantial negative impact on the downtown retail economy, alternatives to the rate increase should be sought. In particular, the Task Force recognized that downtown commuters are major contributors to the downtown economy, and that this population would be the population most impacted by the proposed rate increase to \$1.00 in the third hour. The Task Force was concerned that changes in spending by this group in particular might negatively impact the downtown economy. Thus, the Task Force commissioned this study of the impact of a \$1.00 third hour parking fee increase on the downtown Sacramento economy prior to recommending that a rate increase be approved.

METHODOLOGY

The analysis of the impact of a third hour parking rate increase on the downtown economy required a two-staged methodology. First, an extensive data collection and statistical analysis phase was undertaken. The consultant team conducted four major surveys within the downtown study area:

- A mailback survey distributed in each of the eight city-owned parking garages in the study area.
- A mailback survey of office employees at seven office buildings in the downtown.
- In-person interviews of 1,000 pedestrians within the downtown shopping district.
- A license plate survey of all vehicles entering and exiting each of the eight city-owned garages on a given day.

The survey data provided primary data about the downtown daytime population, particularly with regard to trip purpose and mode of transportation to the downtown. Information about spending levels by mode of transportation and trip purpose was also collected.

Then, using data obtained from the surveying, and a modeling technique called Pivot Point Analysis, the consultant team estimated the impact of the proposed parking fee increase on the mode choice of commuters and other visitors to the downtown. These results then were combined with data about spending patterns by mode choice and trip purpose to estimate the impact of the parking rate increase on the downtown economy.

SURVEY RESULTS

Profile of Downtown Garage Patrons

The survey of *garage patrons* revealed that approximately 70% of the patrons of city-owned garages work in the downtown, and another 15.7% come downtown for work-related business. Only 5.9% of the respondents had come downtown specifically to shop. The average length of time parked in the garages was 7.6 hours. A majority (53%) of the garage patrons paid cash for parking, although a large percentage (43.8%) used monthly permits to pay for parking in the garages. The remainder used merchant validation.

The mean amount paid for parking by those who parked for eight hours or more was \$5.69. These long term parkers should have paid a minimum of \$6.05 for eight hours of parking, given current parking rates. The discrepancy between the average amount paid and the minimum this population should have paid indicates that garage patrons are moving their vehicles during the day, thus avoiding the higher parking fees associated with long-term parking.

The survey revealed that garage patrons who came downtown to shop spend the most on average (\$16.22), followed by sightseers (\$13.55), and those on personal business (\$6.47). Downtown commuters who park in the

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city-owned garages spend an average \$5.30 per day in the downtown.

Profile of Downtown Office Employees

The survey of *office employees* found that over 80% of this population drives to work, with 62.8% driving alone and 18.2% carpooling. Buses are utilized by 7.6% and light rail by 6.6%. Of those who drive, 25.8% park in city-owned garages. Only 15.1% pay cash for parking, and the average paid for parking was only \$4.83.

The spending patterns of the downtown office employees differed by mode of transportation to the downtown. Those who drive spend an average of \$4.82 per day. Average spending for bus riders is \$3.42, and the average for light rail users is \$3.09.

Profile of Downtown Consumers

Interviews with *downtown consumers* (i.e., pedestrians within the downtown shopping district) provided significant information about the spending habits by trip purpose for people who spend money in the downtown area. A total of 51.2% of those interviewed noted that their primary reason for coming downtown was to work, and an additional 6.2% came downtown on work-related business. Shoppers comprised 14.9% of those interviewed, and sightseers represented 9.4% of the consumer population.

For each trip purpose, over 60% of those interviewed drove to the downtown area. Those who come downtown on personal business have the highest concentration of drivers (78.3%), followed by shoppers (69.9%) and workers (69.6%). The market segment with the lowest percentage of auto trips (60.1%) is personal business trips. Bus was the second most popular form of transportation used by downtown consumers who are workers (13.7), shoppers (16.5%), sightseers (14.9%), and those who come to downtown on personal business (25.7%). Those on work-related business trips preferred light rail (8.7%) to bus (3.6%).

Within the downtown consumer population, workers who drive most frequently park at private garages, followed by city-owned garages. The

largest percentage of shoppers (46.2%) park in city-owned garages, although 25.9% park in commercial lots, and 23.7% park on-street. Those visiting downtown on work-related business utilize on-street parking most frequently, followed by utilization of city-owned garages. Sightseers and those on personal business tend to park on-street or in city-owned garages. Approximately 42% of downtown consumers use employer subsidies or a monthly permit to pay for parking. Another 48% pay for parking with cash. Workers who pay cash pay an average of \$5.69 for eight hours or more of parking. This average rate is lower than would be expected if vehicles remained parked all day, and is another indication that employees circulate their vehicles during the day, thus avoiding long-term parking rates.

Shoppers average the highest spending level for each mode of transportation, followed by sightseers. Those visiting downtown on work-related business average the the lowest daily spending level. For each trip purpose, those who drive to downtown spend more on average than those who travel by any other mode of transportation. Shoppers who drive spend over three times more on average (\$16.22) than workers who drive downtown (\$5.30).

Profile of the Overall Downtown Daytime Population

Overall, downtown employees spend less on average than do shoppers. This means that the contribution to the downtown economy of each individual shopper on a given day is greater than that of the average downtown employee. On an annual basis, employees contribute more to the downtown, because they represent a larger percentage of the downtown daytime population. On average, each of the 66,000 employees in the downtown study area annually spend \$1,200 in the downtown. As a whole, employees spend approximately \$79,152,000 in the downtown annually, accounting for 34% of all downtown sales. Shoppers contribute an estimated \$70,370,000 (30% of total sales) in the downtown each year, and sightseers account for \$36,662,000, or 16%, of total annual downtown retail sales. People on personal business trips, work-related business trips, and other visitors to the downtown account for the remainder of retail sales.

License Plate Survey Results

The license plate survey was undertaken to identify the extent to which long-term parkers at city-owned garages are circulating their vehicles and avoiding long-term parking fees. The survey found that 8.4% of long-term parkers circulate their vehicles once during the day, and 1.3% circulate vehicles more than once during the day. The greatest amount of circulation occurs at the K Garage, where 11.5%, or 510 vehicles, are circulated once, and 2.3%, or 117 vehicles are circulated two or more times. The least amount of circulation occurs at the P Garage.

IMPACT OF A THIRD HOUR PARKING RATE INCREASE ON MODE OF TRANSPORTATION TO DOWNTOWN

The survey results regarding modal split by trip purpose were used in conjunction with a Pivot Point Analysis Model to estimate how downtown consumers will respond to an increase in the third hour parking rate at city-owned garages. The model uses elasticities derived for a similar study in Portland, Oregon, to measure the sensitivity of various market segments to parking rate increases. Different elasticities are used for those who travel downtown to work, those who come to the downtown on work-related business, and those who make discretionary trips to downtown, such as shopping trips, sightseeing, and trips for personal business.

The latter group will be the most sensitive to price increases because trips to competing retail or business areas can be substituted for trips to the downtown. At the same time, there are currently people who do not come to the downtown for personal business or to shop because parking is inconvenient or in short supply. Some people in this groups will be attracted back to the downtown if the increase in parking rates frees up spaces in the downtown garages.

An average increase in parking rates across all garages of \$0.60 was assumed. This was derived from the current number of spaces in each garage, and the total number of spaces with current third hour rates of

\$0.35, \$0.40, and \$0.50.

The consultant estimated that approximately 134 discretionary trips (i.e., shopping, personal business trips, sightseeing, etc.) will be diverted from the downtown to competing shopping areas as a result of the rate increase. An additional 471 of these discretionary trips will shift to alternative modes of transportation. Approximately 45% will shift to bus, 14% to light rail, and 36% to other modes.

An estimated total of 414 commuters would alter their current transportation habits to the downtown. Approximately 34% will switch to newly opened peripheral lots in the downtown, 10% will begin to carpool, 25% will switch to bus, and 15% will shift to light rail. The remainder will select other forms of transportation. Overall, a total of 616 spaces will become available at the city-owned garages as a result of the proposed parking rate increase.

IMPACT OF A THIRD HOUR PARKING RATE INCREASE ON THE DOWNTOWN ECONOMY

The shift in vehicle trips to other modes or from the downtown altogether will result in an initial loss in retail sales in the downtown economy. However, this loss will soon be translated into a gain as additional short- and long-term parkers fill the spaces vacated by those particularly sensitive to the price increase.

Since, within each market segment, those who drive to the downtown spend more on average than those who use other means of transportation, the shift of some drivers to other modes will lead to a reduction in spending by those who changed mode. Overall, the total change in retail sales in the downtown related to the shift away from driving is estimated to be approximately -\$3,034. A reduction in spending by shoppers accounts for over 60% of this total, while the change in spending by workers will account for approximately 17% of the total.

This negative impact will never be realized on a single day. When shoppers and people on personal business, who currently avoid downtown because of inadequate parking, realize parking has become more

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available, they will begin to return to downtown to shop. Also, over 200,000 square feet of new retail space, 712,000 square feet of new office space, and 395 hotel rooms are slated for completion in downtown Sacramento by the end of 1989. This will generate a minimum of 3,533 new work trips and 7,179 new non-work trips to the downtown. At the same time, only 1,550 new parking spaces are required to meet zoning regulations. This means that the demand for existing spaces will increase with the new population influx.

Within three to nine months, it is estimated that the parking spaces vacated due to the parking rate increase will once again fill up with shoppers, personal business tripmakers, employees, sightseers, people on work-related business trips and others. Under three alternative scenarios, the new retail sales that will be generated by these parkers will be between \$4,424 and \$6,570 per day. After adjusting for the loss in sales due to the shift of the original parkers to other modes, the estimated net daily gain to the retail economy will be between \$1,930 to \$3,537. This translates into an annual increase between \$501,914 and \$919,555. As a percentage of 1988 total retail sales, these estimates represent sales increases of 0.2% and 0.4%. While these projected increases in sales are not substantial in percentage terms, they indicate that the increase in the third hour parking rate will have a slight positive impact on the downtown economy within three to nine months after the increase is implemented.

RECOMMENDATIONS

Based on the above findings, the consultant recommends that the City *increase the third* hour parking rates at downtown city-owned garages to \$1.00. To further encourage shoppers, people on personal business trips, and other discretionary tripmakers to visit the downtown, additional recommendations have been developed. These are:

- Work with merchants to expand participation in the merchant validation program, and advertise the program to increase the public awareness of merchant validation for parking at city-owned facilities.

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- Consider the establishment of a shuttle service to peripheral lots to encourage commuters to utilize these lower-priced lots.
- Consider future increases at the city-owned garages to \$1.00 for each hour to further discourage circulation by long-term parkers, and to bring the price of parking at city-owned garages in line with the price at private garages.
- Consider making all metered spaces in the downtown 1 hour spaces, and institute strict enforcement of the program.
- At the most centrally located garages, consider setting aside additional spaces for short-term parking, available only after 10:00 a.m., or restricted to two hour parking. Establish strict enforcement procedures.
- If, after six months, spaces vacated in response to the parking rate increase have not substantially filled with new parkers, consider a promotional campaign to educate people as to the availability of parking spaces in the downtown city-owned garages.

Table 4.1

INITIAL NET LOSS IN RETAIL SALES DUE TO INCREASE IN PARKING RATES
AT CITY-OWNED GARAGES*

	Work Trips	Shoppers	Personal Business	Other	Total
Diversion of Trips from Downtown	\$ 0.00	\$ -897.78	\$ -169.45	\$ -257.68	\$ -1324.91
Shift to Bus	-288.75	-226.01	-165.87	+114.05	-566.58
Shift to Light Rail	-75.60	-83.89	-59.13	-67.24	-285.86
Shift to Other	-149.50	-614.23	-13.68	-79.01	-856.42
Total	-513.85	-1821.90	-408.13	-289.88	-3033.76

* It is estimated.

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Table 4.2

PROJECTED INCREASE IN DAILY RETAIL SALES (A)
3-9 MONTHS AFTER PARKING RATE INCREASE

	Scenario 1 (B)	Scenario 2 (C)	Scenario 3 (D)
Gross Retail Sales Gain	\$4,424.21	\$6,339.13	\$6,570.52
Loss Due to Initial Shifts	\$3,033.77	\$3,033.77	\$3,033.77
Net Retail Sales Gain	\$1,930.44	\$3,305.36	\$3,536.75

Notes:

- (A) The retail sales figures in this table are calculated by multiplying the number of new trips attracted to the garage for each market segment by the average spending per vehicle trip for each market segment.
- (B) Scenario 1 assumes that parking garages fillup to current capacities, with workers, shoppers, and others utilizing new spaces in the same proportion that they are currently found in garages.
- (C) Scenario 2 assumes that the 134 shoppers that were attracted from the downtown to competing centers will be replaced by new shoppers attracted to the downtown because of newly available parking. The remaining spaces are filled with workers shoppers, and others attracted to new development downtown.
- (D) Scenario 3 assumes that workers will account for 35% of the parkers attracted to the newly available spaces, and the remaining spaces will be filled with short term parkers. This is the reverse proportion of the current situation.

Table 2.2
PROFILE OF DOWNTOWN GARAGE PATRONS
AVERAGE DAILY SPENDING BY TRIP PURPOSE

Trip Purpose	Amount Spent Downtown
Work Downtown	\$5.30
Work Related Business	\$4.00
Shopping	\$16.22
Personal Business	\$6.47
Eating	\$4.17
Sightseeing	\$13.55
Overall	\$7.59

Source: 1989 Survey of City-Owned
Garage Patrons