IMPACT OF THE ENERGY SHORTAGE ON TRAVEL PATTERNS AND ATTITUDES

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This paper examines the effect of the energy shortage on transportation patterns and attitudes in the automobile-oriented, suburban Dutch Fork area in Columbia, South Carolina. Data from several nationwide surveys and selected transit operations are also used. The findings from the Dutch Fork area show that the energy shortage did not appreciably reduce (10 to 15 percent) the amount of automobile travel and did not substantially affect transit patterns or attitudes. Traffic volumes decreased primarily on weekends; there was less decline on weekdays. Travel was reduced by driving slower and limiting social-recreational and shopping trips. Shifts in travel behavior were moderate, although people expressed an interest in public transit. Gasoline supply more than price appears to have greatly affected travel habits, although the effect of price appears to be reflected in the buying of more small cars. In other words, people did not move away from relying on the car but rather adjusted their driving behavior to conserve gasoline. Data from national surveys also show this pattern. Possibly, local public transit will not realize appreciable comparative advantage against the automobile on the basis of price, and this further emphasizes the inability of transit to serve a substantial ridership. In addition, failures of public transit to capture and hold a greater part of the market during the energy shortage are a product of poor service quality. The one favorable result for public transit is the verbal support given to transit as a method for dealing with the energy shortage. Public transit can benefit from this support by garnering greater governmental resources, although there are still many reservations about the likelihood of converting public support and governmental investment into substantial patronage increases.

WHEN the energy shortage began in fall 1973, there was considerable expectation that the ever-increasing reliance on automobile travel might be changed by gasoline supply problems and higher prices. To what extent these expectations were verified is the topic of this paper. The focus was on the automobile-oriented, suburban, Dutch Fork area in Columbia, South Carolina. Supplemental data from several nationwide surveys and selected transit operations are also used. Of particular interest was whether the consequences of the shortage, inadequate gasoline supply and higher gasoline prices, have or have not made drivers more amenable to using public transit.

To explore the nature and extent of the impact, several facets of transportation were examined.

1. By how much did the amount of driving decrease during the shortage?
2. By what means were the reductions made? Particularly, what switches were made to public transit and how much use was made of car pooling?

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3. How seriously did the suburban residents perceive the gasoline problem to be and how long did they expect it to last?
4. What short- and long-range transportation solutions did people prefer to counter problems of energy shortage?
5. Did they express more willingness during the shortage than in the past to use public transit?

RESEARCH APPROACH

The primary approach used to study the impact of the energy shortage was an analysis of travel attitudes and patterns in the Dutch Fork area in Columbia, South Carolina. The Dutch Fork area was chosen because it was the site of a broad-based study on suburban travel patterns and attitudes conducted before the energy shortage in late 1972 and early 1973 (2). A follow-up study was done in April 1974; this made a before and after comparison possible. April was chosen because the worst of the shortage was over, but the experience was still fresh in people's minds. Consequently, both a short- and long-term assessment could be made without significant interference from the emotional factor that might have existed during the peak of the shortage in the first 3 months of 1974.

In both the 1972-1973 study and the 1974 follow-up study, data on travel attitudes and patterns were collected from household surveys and roadside counts. Although the household surveys were based on random samples in each case, the two surveys differed in the method by which the data were collected and in sample size. The 1972-1973 survey was based on a 10 percent sample of households and was conducted by telephone. The 1974 survey was based on a 3 percent sample and was conducted by personal interview. The changes in sample size and method of data collection were made primarily to reduce the cost of data collection and to accommodate the fact that the 1974 questionnaire was much longer than the 1972-1973 questionnaire. The reduction in sample size was not considered a threat to the representativeness of the sample since the Dutch Fork area has a relatively homogeneous, middle-class population, and homogeneity permits reduction in sample size without loss of representativeness.

Supplemental data from nationwide experiences were also incorporated into the present analysis to get a more general picture of the effects of the energy shortage. The additional data come from the National Opinion Research Center (NORC) (1) national study of the impact of the energy shortage and also from the Transit Fact Book (5).

BACKGROUND

Dutch Fork, like many other middle-class suburbs, is heavily automobile oriented. Of the 318 households surveyed in 1974, only 1 household did not have a car. The majority of the households, 83 percent, had two or more cars. The existing transit service in the area is limited, inasmuch as only 20 percent of the population is within ¼-mile (0.4-km) walking distance from the local bus route.

The gasoline situation in the Dutch Fork area was not too much different from that in other parts of the country. Gasoline allocations for the Columbia area were 90 percent of the 1972 level, and the price of regular gasoline rose from about \$0.35 to \$0.55/gal (\$0.09 to \$0.14/liter between October 1973 and May 1974. However, population had grown by about 10 percent between 1972 and 1974 in the Dutch Fork area. The population growth put great pressure on the shortage.

To what extent and by what means did drivers meet this shortage? Did they exceed the needed cuts and do so by drastically switching away from traditional driving patterns or did they do only as much as needed and do this by making minor modifications on their traditional, one-person, one-vehicle patterns? The following sections examine the impact of the shortage on driving habits, modal shifts, and future possibilities of adjustments to energy problems.

IMPACT OF ENERGY SHORTAGE ON TRANSPORTATION PATTERNS AND ATTITUDES

Change in Amount of Driving

There are a number of ways to assess reduction in driving, and in this paper several methods are used. First, people were asked directly how much, if any, they reduced their driving. They, however, may overestimate the magnitude of their conservation effort. To take this possibility into consideration, additional data were also collected on traffic volumes and gasoline consumption.

In the 1974 Dutch Fork survey, the respondents were asked how much change the gasoline problem made in their personal or family driving. Surprisingly, few people, 15.8 percent, said they had made a considerable change (i.e., greater than 30 percent reduction). Most of the people either felt they made little or no change or only a moderate change (i.e., between 10 and 30 percent reduction). The average reduction is estimated to be around 15 percent (Table 1). In a national survey conducted by NORC, about 30 percent of the car-owning households did not cut down on driving during January through February 1974. Although the question in the Dutch Fork survey was not strictly comparable with the question in the national survey, both showed that most people were not reducing their driving or were reducing it very little.

To evaluate the motorists' perception of their travel reductions, traffic volume data on I-126 were examined. This route is the major highway connecting the Dutch Fork area and the Columbia CBD. Table 2 gives traffic volume data on I-126 for the weekday, the weekend (Saturday and Sunday combined), and the week by month for the period between October 1973 and April 1974. These data were provided by the South Caroline State Highway Department. (The traffic counter was located at I-126 and Greystone Boulevard.)

The average weekly ADT has consistently declined since October 1973 (Table 2). However, these reductions could have been caused by seasonal variations in traffic volumes. Unfortunately, historical monthly data on I-126 were not available. The only available data were seasonal counts at two stations in the general vicinity of the Dutch Fork area. Analyses of these counts indicated that traffic volumes in the winter and spring of 1974 were 95 percent and 101 percent of the volumes in the fall of 1973. However, data supplied by the local telephone company indicated that population in the Dutch Fork area increased by 10 percent between October 1972 and March 1974. This corresponds to a 7 percent average annual rate of increase. Thus, the declines of 10 to 13 percent on the weekday and 15 to 25 percent on the weekend given in Table 2 reflect the influence of the energy shortage to the extent of 5 to 10 percent for the weekday and 10 to 20 percent for the weekend.

Higher declines on the weekend than on the weekday were also indicated in Table 2. This decline could be explained by the ban on Sunday sales of gasoline and by the normal effect of winter on recreational travel. Motorists in the Dutch Fork area made less reductions on the most necessary trips, e.g., the weekday journey to work, and more reductions on the least necessary trips, e.g., those for shopping and social-recreational purposes. In fact, an examination of the 1974 Dutch Fork data based on purpose of trip for weekdays shows that weekday trips for nonwork purposes were all down from the 1972 results (Table 3). The results from the traffic volume changes in the Dutch Fork area correspond to the household results in the NORC survey. When asked about cutting down on driving, 71 percent of the people interviewed in January mentioned that they cut down on driving on Sundays, 56 percent mentioned Saturdays, and 54 percent mentioned weekdays.

The magnitude of the reductions receded in April when gasoline lines were shorter than in the more frugal January to March period although prices continued to rise in April (Table 2). This suggests that price, at least within current levels, has a limited effect on the amount of driving.

In general, these sets of data show that driving reductions during the shortage period, January to March, were about 10 percent, but that they receded in April. This is supported by a recent report (4) that shows that, on a nationwide basis, conservation efforts amounted to a 10 percent reduction in demand during the January to March 1974 period and a 3.4 percent reduction in April 1974. Data from the South Carolina State Highway Department indicated that 1974 total vehicle miles (kilometers) of travel in the Charleston area were about 8 percent less than those in 1973. It should be noted that the Charleston area population has been growing at a slower rate than that in the Columbia area.

Means of Reducing Driving and Gasoline Consumption

In the Dutch Fork survey, respondents were asked how they reduced gasoline consumption. Table 4 gives the percentage of respondents who said they frequently used a particular method for reducing gasoline consumption. The response receiving the most attention was drove slower. Almost 90 percent of the respondents in the Dutch Fork area said they frequently drove slower. The next method receiving a high response was reduced shopping and recreational trips. About 32 percent of the people said they frequently reduced shopping and recreational trips. Few, on the other hand, used car pooling frequently, and even fewer used public transit frequently.

Additional information on changes in travel patterns was collected by comparing the 1972 and 1974 survey results on mode used for the first trip to the CBD. The results of the comparison between the 1972 and 1974 surveys for the morning inbound trip to the CBD by mode are given below.

	Percent	
Mode	1972	1974
Drive	94.0	91.0
Passenger	6.0	8.0
Bus	—	1.0

As can be seen there is a slight departure from the 1972 pattern. This result is not startling when it is remembered that about 80 percent of the first trips to Columbia are for work purposes. (Bus service between Dutch Fork and the Columbia CBD did not exist in 1972-1973.)

In addition to the interview data on travel mode, data were also collected by field count on passengers per vehicle. Although the interviews showed that the amount of car pooling increased somewhat during the shortage, the field data on the average number of people per vehicle did not increase. In all three roadside counts taken on I-126 (July 1973, January 1974, and May 1974) the average automobile occupancy was around 1.27 at the Broad River bridge. Results from the NORC data similarly show little change in the amount of car pooling.

Analysis of the impact of the energy shortage on transit ridership was made by examining passenger data from the Dutch Fork transit route, from several city systems, and from nationwide totals. The data from the Dutch Fork route and from the selected cities are used to examine when the greatest impact was felt. The data from the nationwide totals are used to assess the overall effects for the entire year.

Figure 1 shows the weekly ridership data for the Dutch Fork transit route. Review of Figure 1 reveals that ridership was highest from February 18 to March 15, 1974. This period corresponds to the tightest gasoline situation in the Columbia area as evidenced by the long lines of cars at service stations.

These results are similar to those based on the experience in Columbia and

Table 1. Respondents' assessment of their reduction in driving.

Reduction		Respondents (percent)
Amount	Percent	
Considerable	30	15.8
Moderate	10 to 30	40.6
Little	2 to 10	28.1
None	0 to 2	15.5
Total		100.0

[a]Average reduction equals 15 percent.

Table 2. Changes in average traffic volume on I-126.

Month	Year	Weekly ADT	Change[a] (percent)	Weekday ADT	Change[a] (percent)	Weekend ADT	Change[a] (percent)
October	1973	37,588	—	43,856	—	53,635	—
November	1973	36,527	-2.8	42,251	-3.6	54,643	-1.9
December	1973	33,769	-10.2	38,186	-12.9	44,555	-16.9
January	1974	32,828	-12.7	38,464	-12.3	45,415	-15.3
February	1974	34,406	-8.5	39,419	-12.4	40,201	-25.0
March	1974	34,347	-8.6	39,158	-10.7	44,130	-17.7
April	1974	36,439	-3.1	40,870	-6.8	49,784	-7.2

[a]October was used as the base month.

Table 3. First trip to Columbia by purpose.

Trip Purpose	Percent 1972	Percent 1974
Work	80.2	86.4
Shopping and bill paying	3.6	1.8
School	10.8	9.6
Serving passengers	1.1	1.3
Other	4.3	0.9
Total	100.0	100.0

Table 4. Frequency with which respondents said they used a particular gas-saving method.

Method	Used Method to Save Gas (percent)				
	Frequently	Sometimes	Rarely	Never	Total
Drove slower	88.6	8.8	1.9	0.7	100.0
Reduced shopping and recreational trips	31.4	45.0	12.6	11.0	100.0
Used car pooling	13.6	12.2	10.4	63.8	100.0
Used public transit	0.6	4.4	5.1	89.9	100.0

Charleston, South Carolina, and in other cities such as Washington, D. C.; Baltimore, Maryland; and Norfolk, Virginia. Table 5 gives the percentage of change in ridership for these cities. (Columbia and Charleston data were provided by the South Carolina Electric and Gas Company; data on Washington Metrobus are from the Washington Post, June 30, 1974; and data for Norfolk and Baltimore are from an Associated Press report, April 26, 1974.) Increases in ridership were evident and were the greatest in January and February when gas lines were the longest, but the increases were not substantial. In addition, the increases receded as the gas lines dwindled in March and April, even in the face of rising gasoline prices. These results suggest that, although there was an increase for the year, most of the increase was likely due to gasoline supply problems rather than price. Overall, there was a nationwide increase of 6.6 percent for all public transit systems and 11.1 percent for motor buses between 1972 and 1974 (5). Except for a small increase in 1973, which was probably also energy related, the 1974 increase in public transportation ridership was the first in 20 years.

These data on driving and modal choice provide a picture of how much and by what means the travelers managed to adjust their travel patterns during these several months when gasoline supply was in the range of 10 to 20 percent less than in 1972. Adjustment was not made in terms of dramatic shifts from usual patterns but rather in terms of those actions that could be most easily taken without deviating from reliance on the automobile. Drivers, in other words, did make changes and reductions but primarily those that would permit them to continue using their cars.

Policy Preferences and Potential Long-Term Effects

The data in the last two sections show that the energy shortage had only a limited impact on the amount of driving and modal shift. This limited effect is likely a function of the context in which the shortages occurred. First, the shortage never reached crisis stage. The supply deficits did not run much more than 10 percent although there was a considerable amount of uncertainty. Second, the shortage did not last long although prices continually mounted. Third, many people had little choice about mode selection. Switching to car pooling appears to be a greater possibility than switching to public transit since many people are not within realistic distance of public transit. The conditions, therefore, constrained the amount of change. It is possible, however, that the energy shortage will still be responsible for change, but it will be occurring over the long run. It is also possible that the energy shortage could have far greater impacts on travel habits if local transportation systems offered more choice or quality in mode selection. To explore both of these possibilities, data were collected on people's perceptions of how long the energy problem would last and on what kind of solution they would prefer if presented with varying degrees of choice.

To examine the consumer's likelihood of searching for and using alternative transportation modes in the future, we asked the respondents in the Dutch Fork study if they thought the gasoline situation would be serious in the next few years. Very few respondents, 5.7 percent, thought that the gasoline situation would be critical in the next few years, but almost 40.1 percent thought it would be bad.

Perceived Seriousness	Percent
Critical	5.7
Bad	40.1
Slight problem	34.7
No problem	10.7
Undecided	8.8
Total	100.0

In addition to inquiries about the future seriousness of gasoline problems, inquiries were also made about whether people perceived the energy problem as real or created. More than half of the Dutch Fork respondents felt that the gasoline situation was created.

Evaluation	Percent
Real	22.9
Created	57.2
Undecided	19.9
Total	100.0

Both these results suggest there will be a lack of propensity for use of or search for drastically different means of transportation. The results do, however, indicate a moderate level of concern and thus a moderate level of search in the future. One likely direction of future changes is a greater shift to use of economy-sized cars. When asked how they would adjust to \$0.80/gal (\$0.21/liter) for gasoline, 40 percent of the respondents in the Dutch Fork survey said they would buy an economy car.

Further evidence that the experiences with the energy shortage and expectation for future energy problems will not engender a serious search for change in current life-styles is the fact that few, only 6 percent, of the Dutch Fork respondents said they would not have moved to this suburban setting had they anticipated the gasoline shortage. This percentage does not change much when consideration is given to the respondents' perception of the authenticity of the energy shortage. In addition, the results do not change appreciably when a control is placed on the length of time the respondent has lived in the Dutch Fork area.

Although neither the observed change during the shortage period nor the anticipated measures of change indicate a drastic shift in transportation mode, it is possible that energy concerns and problems could or would have a greater impact on modal shift if there were more choice or better public transit quality. To explore this possibility, three hypothetical situations that combined problems of the energy shortage with varying availability of transportation modes were presented to respondents in the Dutch Fork study. Each situation offered the possibility of using public transportation, but under different circumstances. The first focused on what choices people would make for short-run solutions to energy problems; the second, on choices for long-run solutions; and the third, on choices if gasoline prices increased to \$0.80/gal (\$0.21/liter).

For short-range solutions to energy shortages, the alternative choices were expand public transit, ration gasoline, raise the price of gasoline, and encourage car pooling. Table 6 gives the short-range preferences of the respondents for alleviating the fuel shortage problems.

Corresponding results were obtained in a similar question on the NORC survey, in which respondents were asked, What three things would you like federal, state, or local government to do to cut fuel consumption? The alternatives included set a limit of 50 mph (80 km/h), ration gasoline, increase the gas tax, improve public transit, relax antipollution standards, and set a limit of 60 mph (97 km/h). As a first choice, 23 percent of the respondents preferred improve public transit and 22 percent preferred set a limit of 50 mph (80 km/h). Set a limit of 50 mph (80 km/h) and set a limit of 60 mph (97 km/h) together were preferred first by 36 percent of the respondents. Only 10 percent of the respondents preferred the other alternatives first.

On the surface, these results show support for public transit and car pooling when the choice is presented, but assessment of these outcomes must be interpreted with caution. The alternatives presented in the NORC question were all difficult choices, each requiring a considerable shift from current levels of travel convenience. This suggests that public transit does well only when other choices are undesirable. Even under this situation, it is only a plurality, not a majority, who rank public transit high.

Furthermore, we may not often find ourselves in a situation where all the choices require a shift from regular travel patterns. Finally, a preference for public transit may only mean that it should exist so the other person can use it.

When the range of choice of the consumer is broadened to include those choices that allow him or her to continue driving in a more or less unencumbered fashion, then the preference structure changes. On the issue of long-range policies, the consumer most often preferred the alternative of increased production of gasoline. According to Table 7, 39 percent of the respondents preferred this alternative first. Somewhat surprisingly, however, improvement of public transportation received slightly more than one-quarter of the first preferences. Horsepower restrictions also receive about one-quarter of the first preferences. Thus, when given a range of alternatives that includes wide-scale use of the car, the respondents chose the car but did not entirely relinquish their interest in public transit.

Additional support of the preference for continued use of the automobile is found in the response to a question about using public transit if the price of gasoline goes to \$0.80/gal (\$0.21/liter). When the alternative of buying an economy car is included with using public transit, forming a car pool, and paying the price for gasoline, few people give public transit as an alternative. Most people say they would either buy an economy car or pay the price of gasoline (Table 8).

Part of the reason for the poor showing of transit as a preferred solution to the energy problem, except when use of the car is constrained, is perhaps a function of the poor image people have of local public transit. To further answer the question of potential ridership under improved service conditions, the 1974 Dutch Fork survey repeated a question from the 1972 survey on willingness to use rapid transit. This way the same question, use of a quality transit service, was posed under two conditions: low fuel prices in 1972 and high fuel prices in 1974.

Table 9 gives a comparison of the percentage of respondents who said they would be willing to take an express bus for their trip to the CBD in the 1972 survey with the corresponding percentage in the 1974 survey. The results show that only at the cheapest fare is there a difference between the 1972 data and 1974 data. These differences are consistent for all three time comparisons and cannot be explained by differences in the sample sizes between the 1972 and 1974 surveys. However, they could be ascribed to the higher price levels and the uncertainty of the availability of gasoline caused by the energy shortage.

The increased willingness to use transit in the 1974 survey should be interpreted with care. These increases are probably inflated for earlier sections of this paper show that professed interest in using transit and car pooling is higher than actual usage. For instance, 26 percent of the respondents said they saved gasoline by car pooling (Table 4). However, counts of passengers per vehicle showed that the average vehicle occupancy did not change during the 1972-1974 period. Similarly, Table 4 indicates that 5 percent of the respondents saved gas by using the local bus. However, ridership statistics show a lower value, although the one-way fare was \$0.40. Tables 6 and 7 also indicate a preference for using the automobile when it is posed side by side with public transit. Thus, there is a danger in literal interpretation of attitudinal data, and these data must be juxtaposed with cost consideration and information on how people actually behave.

SUMMARY AND CONCLUSIONS

The purpose of this study was to assess the impact of the energy shortage on travel attitudes and patterns of residents of an automobile-oriented, middle-class suburban area. The main questions asked were, To what extent did the gasoline shortage change the amount of travel by the automobile, increase use of and interest in local public transit, and increase car pooling?

Overall, the energy shortage did not appreciably reduce the amount of automobile travel and did not exert a substantial effect on transit patterns or attitudes in the study area. National patterns seem not to differ greatly from the results in the study area.

Figure 1. Ridership by week.

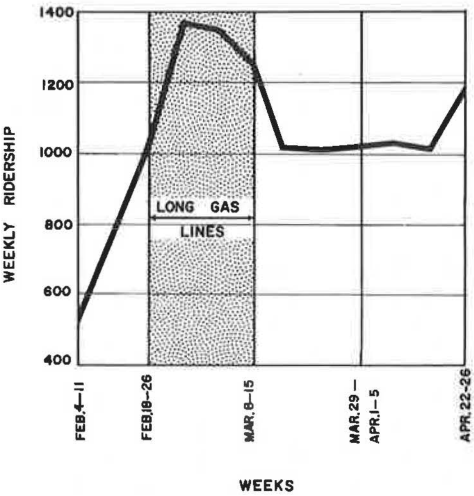

Table 5. Percentage of change in transit ridership, selected systems.

Transit System	Change (percent) From Previous Levels: February 1974	April 1974
Columbia, S.C.[a]	7.9	5.5
Charleston, S.C.[a]	17.4	7.1
Baltimore, Md.[b]	25.0	7.5
Norfolk, Va.[b]	12.3	0.2[c]
Washington, D.C.[b]	8.0	0.0

[a]Based on difference between current month and average ridership for that same month for previous 2 years, 1972-1973.
[b]Based on difference between current month and ridership for that month for previous year, 1973.
[c]For March 1974.

Table 6. Short-range preferences for alleviating gasoline problems.

Alternatives	Percentage of Respondents by Preference: First	Second	Third	Fourth
Expand public transit	34.9	34.6	24.0	6.1
Encourage car pooling	29.2	36.5	23.4	10.3
Raise the price of gasoline	18.8	12.9	23.9	42.1
Ration gasoline	14.1	15.1	28.5	39.1

Table 7. Long-range preferences for alleviating gasoline problems.

Alternatives	Percentage of Respondents by Preference: First	Second	Third
Expand oil production, exploration, and refineries	39.1	31.1	26.3
Improve public transit	28.6	34.9	34.0
Put a limit on horsepower	25.7	31.7	37.5

Table 8. Preferred solution if gasoline prices go to $0.80/gal ($0.21/liter).

Alternatives	Percentage of Respondents by Preference: First	Second	Third	Fourth
Buy an economy car	40.5	26.7	16.4	15.4
Pay the price of gasoline	26.4	24.1	17.0	31.2
Form a car pool	18.0	29.6	29.9	21.9
Use public transit	14.5	20.3	35.4	28.6

Table 9. Percentage of respondents willing to take express bus.

One-Way Bus Fare (dollars)	Comparisons With Automobile Travel Time: 15 Min Longer		Same Time		Half the Time	
	1972	1974	1972	1974	1972	1974
1.50	8.6	6.7	11.7	9.6	14.4	15.7
1.00	13.6	13.8	20.9	20.6	25.8	28.9
0.75	—[a]	33.2	—[a]	43.9	—[a]	57.0
0.50	26.3	63.5	38.1	69.7	45.6	77.3

[a]Data not collected in the 1972 survey.

It is estimated that automobile travel by residents of the Dutch Fork area was reduced by 10 to 15 percent. Traffic volumes decreased primarily on weekends; there was less decline on weekdays. Travel was reduced by driving slower and limiting shopping and social-recreational trips. Moreover, only 6 percent of the respondents thought that they would have changed their place of residence had they anticipated the energy shortage. The shifts in travel behavior were, in other words, moderate. People did not move away from relying on the car but rather adjusted their driving behavior to conserve gasoline. They conserved by adjusting their driving habits, not by shifting mode. Data from national surveys also show this pattern.

In general, gasoline price did not appear to have much immediate impact on driving patterns. If price had gone up without shortages, it is likely that traffic volumes would not have decreased much. The impact of gasoline price appears to be more on the purchase of more economy-sized cars. The factor that produced the most change in both volume and mode was the shortage of gasoline supply. When the shortages were at their peak, there were decreases in traffic volumes and increases in public transit ridership.

One possible conclusion that can be drawn from these findings is that public transit will not realize appreciable comparative advantage over the automobile on the basis of price and that this is further evidence of the inability of transit to capture substantial ridership. There are several reasons for this result. First, the automobile still has too many other advantages in terms of flexibility and convenience. Second, gradual adjustments, such as greater gasoline economy from more economy-sized cars, will help reduce gasoline consumption. Third, motorists did not perceive the gasoline shortages as a serious long-range problem. It is possible, however, that the failure of public transit to capture and hold a greater part of the passenger market during the energy shortage is a product of poor service quality.

Seventy to 80 percent of the respondents in the Dutch Fork study did indicate that they would patronize a bus rapid transit system if it were attractively priced ($0.50 one-way fare) and if it were to offer the same or better time than the automobile. Comparison of attitudinal data with corresponding field data suggests that the stated high percentage of transit use is overinflated and should be cautiously interpreted.

The one positive result for public transit is the moderate support given to transit as a solution to energy problems. This support for transit was also apparent during the 1960s when the environment was a key political issue. The progress public transit legislation made during the 1960s was in part a function of the environmental movement. It is possible that local public transit can gain the same kind of federal legislative benefits during the 1970s as a result of the energy concern. The legislative benefits can in turn be a force for improving the quality of transit service, although there are reservations about whether public interest and governmental investments will be converted into substantial patronage gains for public transit.

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