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ANALYSIS OF GASOLINE RATIONING

Energy Conservation and Environment  
Federal Energy Administration  
January 24, 1975



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SUMMARY

Description of Rationing System

- o Each licensed driver in the country would receive an equal monthly allotment of coupons entitling him to purchase 36 gallons/month at the controlled price. These coupons could be freely traded or sold. The coupon market would permit those drivers with needs greater than those represented by the monthly allotment to purchase additional coupons from those who use less than their monthly amount.
- o Commercial users would receive coupon allotments equivalent to 90 percent of their consumption during the 1973 base period.
- o For that limited class of users for whose special needs the coupon resale market is not a reasonable solution, 3% of the coupons would be set aside and distributed by the state. This distribution would be based primarily on emergency or hardship.
- o Coupons would be picked up in person at Post Offices by each eligible individual. They will be invalidated at the pump at time of purchase, and deposited by retailers with banks in a special coupon account. Gasoline deliveries to suppliers will be made to retailers only for amounts equivalent to coupons collected.

Gasoline Use Data

- o Estimated consumption in 1975 is 6.4 million barrels per day or 270 millions of gallons per day (MG/D)
- o Number of licensed drivers in 1974 was 125.1 million. There will be an increase of up to 15 million anticipated if coupon rationing is put into effect.
- o Without rationing, each driver would use 50 gallons per month.
- o With the expected increase in licensed drivers and supply limited by 1 million barrels per day, by rationing, the allowance for each licensed driver would be:
  - per day = 1.2 gallons
  - per month = 36 gallons
  - per year = 432 gallons



## Problems with Gasoline Rationing

### Gallons per month and price of Gasoline

- o To save 1 million barrels per day, while assuring adequate fuel for business will mean limiting each licensed driver to about 36 gallons per month, compared to current average of 50 gallons/month. It is expected that the coupons will sell for about \$1.20 per gallon. Hence, for those who must purchase more than their basic ration, the effective price of gasoline (pump plus coupon price) is estimated at \$1.75/gallon.

### Impact on National Energy Goals

- o Gasoline rationing, while it may limit consumption in the short run, makes no contribution to our mid- and long-term goals of energy independence, because it provides no incentives for increasing supply.
- o Gasoline consumption is only 40% of total petroleum use. Residual and fuel oil comprise a substantial amount of total petroleum imports. By concentrating exclusively on private vehicles and gasoline, other fruitful areas for energy conservation are not addressed -- such as improved industrial efficiency and better constructed and insulated buildings. In the final analysis, we cannot be independent unless these other petroleum uses are also reduced dramatically.

### Potential for Inequities

- o Each person receives an equal number of coupons, but use of gasoline varies widely among drivers. Thus, rationing inevitably leads to inequities. Some examples are:
  - A widowed secretary with two children living in the suburbs who commutes 16 miles each way to work in a car that gets 12 mpg will experience a 68% increase in her commuting costs, because she must purchase 17 additional coupons each month at an average cost of \$1.20 per gallon. This amounts to about \$245/year in additional costs.
  - A blue-collar worker who owns a car that gets only 9 mpg can drive just over 320 miles/month on his basic ration, and could not easily afford to purchase a new, more efficient automobile. On the other hand, an affluent neighbor can readily trade in his equally inefficient old car to purchase one getting better

than 22 mpg. This allows him to drive over 790 miles on the same allotment of coupons.

- Substantial regional inequities would exist. The average driver in some rural states such as Montana travels nearly 600 miles per month versus about 300 in less rural states such as New York and New Jersey. Similar disparities exist between city dwellers and suburbanites. Under rationing each would receive the same gallonage.

- Certain very poor persons, such as migrants, drive large distances each year. They can neither afford to buy additional coupons nor are alternative methods of transportation available to them.

- The recreation and tourism industry would be very heavily impacted, as would the auto industry. Automobile sales could decrease 35% from what they would otherwise be.

#### Increase Bureaucracy and Complexity

- o The Government would be involved in many new aspects of our every day life, adding an inescapable portion of bureaucracy, complexity, and inconvenience.
- o The Government would decide:
  - if a new business should get fuel;
  - if expanding businesses deserve more fuel;
  - if specific individuals would qualify for more coupons because of hardships.
- o Gasoline rationing can be implemented but it is complex, expensive, and at best a short term solution. It takes 4-6 months to implement, about 15 to 25,000 full-time people and \$2 billion in Federal costs, uses 40,000 Post Offices for distribution, and requires 3,000 state and local boards to handle exceptions.
- o Because coupons are transferable, they must be picked up by each driver in person quarterly at Post Offices. Long lines and delays are inevitable.
- o Gas stations, with limited quantities to sell, are unlikely to maintain more than the most limited service hours. Evening and weekend closings are almost a certainty.



#### Impact on GNP

- o Use of allocation and rationing to reduce imports by one million barrels per day could create a drop of nearly 13 billion dollars in the GNP and place several hundred thousand more workers on unemployment rolls. Also, rationing would have an inflationary impact due to the significantly higher clearing price of gasoline coupons sold by those having excess coupons.

#### Comparison of Gas Rationing and President's Program

- o Each option has major regional impacts; rationing hits the mountain states, the southwest and the mid-west hardest. The President's program affects New England and the east coast.
- o Rationing will reduce consumption in the short term but is inadequate as long term solution. The President's program is effective in both the short and long run.
- o Both rationing and the President's program transfer about \$2 billion to poor families in the first year.
- o Rationing is costly and complex; the President's program is inexpensive and easy to administer.
- o Rationing raises the CPI by over 2.5 percentage points; the President's program by about 2.5 points.
- o Rationing could cost the country \$13 billion in GNP and a substantial increase in unemployment; the President's program would have negligible effects in each area.

DESCRIPTION OF COUPON RATIONING SYSTEM

At the time of the 1973 embargo an effort was begun to design a rationing plan. After much analysis regarding various possible approaches, that effort culminated in the development of a proposed rationing program and the purchase of 4.8 billion coupons. A description of that proposed plan is outlined below.

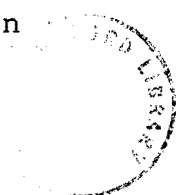
I. SYSTEM OPERATION

A. Entitlements

- o An estimated 140 million licensed drivers receive an equal monthly coupon allotment (estimated at 36 gallons per month). These coupons could be freely traded and sold.
- o Commercial users receive a coupon allotment equivalent to a percentage of base period consumption, estimated at 10% less than 1973 consumption.
- o State set-aside for special cases (3% of available supply), i.e., migrants, the handicapped, etc.
- o Government and non-profit organizations included in commercial sector.
- o Coupons for first quarter are all of the same denomination, and are not serialized. Changes could be made in subsequent quarters.

B. Distribution

- o Postal Service would distribute coupons at the 40,000 Post Offices four times a year.
- o Estimated that 4.8 billion coupons would be needed in first quarter (amount currently in storage).
- o Under special conditions, an agent could pick up coupons for those not able to do so themselves.
- o Users would pay a fee of \$3.00 per quarter amounting to \$1.5 billion. (This would cover most of estimated program cost).
- o Local Boards throughout the states would handle special appeals from state residents with emergency or hardship gasoline needs.
- o In first quarter, individuals would turn in self-executed application forms at their Post Office. Postal employees would validate application, examine and mark driver's license, and issue ration coupons.





- o In subsequent quarters, licensed drivers would receive state-issued authorization cards in the mail, entitling them to pick up ration coupons at their post offices.
- o For first quarter, commercial users would submit an FEA form to their bank, which would issue them an allotment in the form of a coupon draft. These drafts would be exchanged for coupons at the Post Office. Forms would be forwarded by banks to FEA so that FEA could issue coupon drafts for the second and following quarters.
- o Forms retained for audit purposes.
- o U.S. agencies would apply directly to FEA for coupon allotments.

C. Banking System

- o Commercial banks would be mainstay of coupon redemption mechanism.
- o Initially, gas stations take deposit ration coupons received from motorists to local banks and receive gasoline drafts (in gallons) enabling them to purchase additional gasoline from their supplier.
- o In subsequent quarters, a complete ration banking system would be established, in which commercial, government and non-profit users along with gas stations, and suppliers, would participate.
- o FEA Processing Centers would handle initial applications and maintain records of all commercial users. These centers would issue drafts for ration coupons in subsequent quarters, through the mail.

D. Coupon Resale Market

- o Unused coupons would be freely traded or sold. Those with excess coupons could sell them to those willing to pay the price.
- o Federal Government would make no attempt to control or regulate trade in coupons except to identify and prohibit practices which inhibit natural interplay of market forces.
- o It is estimated that excess coupons would be sought by more than one half of all users.

E. State Set-Aside

- o State set-aside of coupons (about 3%) would be available to recognize claims of users for whom the resale market is not a vehicle for their special needs.
- o About 3,000 local boards throughout the states would administer the set-asides, replying to applications.
- o The State set-aside will also be used for organizations or governmental units performing essential public health or safety services.
- o Federal Government could provide guidelines to assure uniform application of eligibility criteria.

F. Enforcement System

- o Vigorous enforcement program would be required to prevent widespread abuses.
- o The audit program would focus on commercial and non-profit users to detect overstatement of base period volumes, and on gasoline suppliers to detect illegal shipments of gasoline.
- o There would also be a system to detect multiple applications by individuals.

II. PRELIMINARY ESTIMATE OF RESOURCES REQUIRED (STEADY-STATE ANNUALIZED BASIS)

A. Personnel Resources

(1) Federal

FEA Headquarters - 625 positions

FEA Regions - 3,250 positions (1,200 opl; 2,000 enforcmt)

U.S. Post Office - unknown

Non-FEA Enforcement - 2,500 positions

(2) State and Local

3,000 local boards @10 each (15,000 volunteers;  
15,000 support staff)

51 Department of Motor Vehicle @100 each - 5,100  
positions



<u>B. Costs</u>	(million \$)
USPS Distribution @ \$1.60 per transaction	845
USPS shipping costs	50
Coupon printing serialized	195
Forms printing	30
ADP system	200
Public Education Materials	<u>10</u>
	1,330
 Direct Salaries	
o Federal (6375 @ 20K)	127.5
o State and local (20,100 @ 20K)	<u>402</u>
 <u>GRAND TOTAL</u>	 <u>1.86 billion</u>

GASOLINE USE DATA

Use Data

- A. Estimated consumption in 1975
- |                                    |          |
|------------------------------------|----------|
| Millions of barrels per day (MB/D) | 6.4 MB/D |
| Millions of gallons per day (MG/D) | 270 MG/D |
- B. End use categories - volume (MG/D) and percent
- |                     |     |     |
|---------------------|-----|-----|
| Private use         | 205 | 76% |
| Business/Commercial | 57  | 21% |
| Government          | 8   | 3%  |
- C. Number of registered vehicles in 1975 130.75 million
- D. Number of licensed drivers in 1974 125.1 million  
(increase of up to 15 million anticipated if coupon rationing is put into effect)

Programmatic Assumptions for Rationing

- A. Will achieve 1 MB/D saving through reduction in gasoline consumption
- B. Business will receive 90% of 1973 gasoline consumption
- C. Coupons will be provided to licensed drivers as opposed to allocations based on registered vehicles

Key Parameters of Data and Assumptions

- A. Savings target (1 million B/D) 42 MG/D
- B. Business and Government Allowance
- |                                |         |
|--------------------------------|---------|
| o Estimated 1975 consumption   | 65 MG/D |
| o Less 10% of 1973 Consumption | 6 MG/D  |
| o Allowance                    | 59 MG/D |
- C. Private Use Allowance
- |                              |          |
|------------------------------|----------|
| o Estimated 1975 consumption | 205 MG/D |
| o Less reduction             | 36 MG/D  |
| o Allowance                  | 169 MG/D |
- D. Allowance for Each Licensed Driver
- |          |                |
|----------|----------------|
| Gallons: | Per day = 1.2  |
|          | per month = 36 |
|          | per year = 432 |



E. Private Use of Automobiles by Trip Purpose

Work trip	31%
Recreational trip	31%
Family business	34%

## PROBLEMS WITH GASOLINE RATIONING

### Gallons per Month and Price of Gasoline

- o To save 1 million barrels per day, while assuring adequate fuel for business will mean limiting each licensed driver to about 36 gallons per month, compared to current average of 50 gallons/month and restricting businesses to 10% less than their last year's use. It is expected that the coupon will sell for about \$1.20 per gallon during the first year. Hence, for those who must purchase more than their basic ration, the effective price of gasoline (pump, plus coupon price) is estimated at \$1.75/gallon.

### Impact on Energy Conservation Goals

- o Gasoline rationing, while it may limit consumption in the short run, makes no contribution to our mid- and long-term goals of energy independence.
- o Rationing limits the consumption of gasoline not through price but through proscription. Thus, an artificial shortage is created, inciting people to attempt to "beat the system" rather than to conserve fuel.
- o Moreover, because of the inherent complexities in even the most carefully designed rationing system, and the fluid nature of American society, a rationing scheme is probably limited to a useful life of no more than two years. Thus, even as a conservation tool, it has a limited utility.
- o Rationing provides no incentive for increasing domestic petroleum supply or bringing on alternate energy sources.
- o Gasoline consumption is only 40% of total petroleum use. Residual and fuel oil compromise a substantial amount of total petroleum imports. By concentrating exclusively on private vehicles, many other fruitful areas for energy conservation are not addressed -- such as improved industrial efficiency, better constructed and insulated buildings, less wasteful use of electricity and natural gas. In the final analysis, we cannot be independent unless those other petroleum uses are also reduced dramatically.

### Potential for Inequities

- o Each person receives an equal number of coupons, but use of gasoline varies widely among drivers. Govern-

mental decisions will be based on statistical averages and broad, objective criteria; they cannot possibly take into account most of the differences in individual needs and preferences. Thus, rationing inevitably leads to inequities. Some examples are:

- A widowed secretary with two children living in the suburbs who commutes 16 miles each way to work in a car that gets 12 mpg will experience a 68% increase in her commuting costs, because she must purchase 17 additional coupons each month at an average cost of \$1.20 per gallon each. This amounts to about \$245/year in additional costs.
- A blue-collar worker who owns a car that gets only 9 miles/gallon can drive just over 320 miles/month on his basic ration, and could not easily afford to purchase a new, more efficient automobile. On the other hand, an affluent neighbor can readily trade in his equally inefficient old car to purchase one getting better than 22 mpg. This allows him to drive over 790 miles on the same allotment of coupons.
- A single individual with a mid-size car (14 mpg) could drive up to 17 miles/day. If he wanted to take a 500 mile trip over a long 4-day weekend, he could only use his car for that four-day period during that month. He would have to arrange for other transportation for the remaining 26 days of the month, or purchase additional coupons.
- A Congressman living in Georgetown has enough gas to drive his 10 mpg car to work by himself 5 days a week and still travel 54 miles on the weekend.
- Substantial regional inequities would exist. The average driver in some rural states such as Montana travels nearly 600 miles per month versus about 300 in less rural states such as New York and New Jersey. Similar disparities exist between city dwellers and suburbanites. Under rationing each would receive the same gallonage.
- A family of 4 with two licensed drivers and one car which gets 15 mpg moves from New York to California. This move would take 2-3/4 months of the family's coupons. One out of every five families moves every year.
- Certain very poor persons, such as migrants, drive large distances each year. They can neither afford to buy additional coupons nor are alternative methods of transportation available to them.

- A family in which the husband, wife and two teenage children all drive would receive sufficient coupons to drive approximately 2160 miles per month while the next door neighbor with only one licensed driver could drive only 540 miles per month, assuming both own cars which get 15 mpg.

- The recreation and tourism industry would be very heavily impacted, as would the auto industry. Automobile sales would decrease 35% from what they would otherwise be.

- A small successful Midwestern sales firm which had increased its business and sales area 50% since 1973 would have the market area it can cover reduced 40% under its basic rationing allotment.

#### Increased Bureaucracy and Complexity

- o The Government would be involved in many new aspects of our everyday life, adding an inescapable portion of bureaucracy, complexity, and inconvenience.
- o Gasoline rationing can be implemented but it is complex, expensive, and at best a short term solution. It takes 4-6 months to implement, about 15 to 25,000 full-time people and \$2 billion in Federal costs, uses 40,000 Post Offices for distribution, and requires 3,000 state and local boards to handle exceptions.
- o The Government would decide:
  - if a new business should get fuel;
  - if expanding businesses deserve more fuel;
  - if specific individuals would qualify for more coupons because of hardships.
- o Because coupons are transferable, they must be picked up by each driver in person quarterly at Post Offices. Long lines and delays are inevitable.
- o Gas stations, with limited quantities to sell, are unlikely to maintain more than the most limited service hours. Evening and weekend closings are almost a certainty.
- o The longer a rationing program is in place, the more likely collusive and illegal behavior becomes, such as counterfeiting or pilferage of coupons.





### Impact on GNP

- o Use of allocation and rationing to reduce imports by one million barrels per day would create a drop of nearly 13 billion dollars in the GNP and place several hundred thousand more workers on unemployment rolls. Also, rationing would have an inflationary impact due to the significantly higher market clearing price of gasoline (pump plus coupon) resulting from reduced supplies.
- o Rationing leads to distortions in the marketplace as adjustments in business investments, modes of distribution, and purchases are made based on artificial, rationing-imposed costs.

### Impact on Poor

- o Low income people are likely to drive less than average and thus, have excess coupons to sell. If speculators buy large quantities of coupons from the poor at low prices in order to resell them at high prices to the more affluent, the potential income benefits of the rationing program will be garnered by these entrepreneurs rather than by the poor.

### Effects on Refining Runs

- o A reduction of 1 million barrels per day in the use of gasoline through rationing would have the following effects on refining production:
  - 1,500,000 b/d crude oil imports
  - + 500,000 b/d product imports (made up of approximately 300,000 b/d residual oil products and 200,000 b/d middle distillates)
- o Such a reduction is likely to reduce domestic petroleum related employment, increase the cost/barrel of domestic production, and decrease the production rate and efficiency of U.S. refiners.

COMPARISON OF GAS RATIONING  
AND PRESIDENT'S PROGRAM

There are two principal options for reducing petroleum imports in the short to mid-term. They include the President's program of a petroleum tariff and decontrol of domestic oil prices; and a cap on imports with gasoline rationing and petroleum allocation. This paper briefly describes these options and discusses the impact of each on reducing imports, regional equity, inflationary impact, impact on the poor, administrative complexity and cost, and impact on the recession and employment.

OPTION A: IMPORT CAP/RATIONING

- o A volumetric limit would be placed on imports equivalent to the reductions called for in the President's program. A reduction of 1 million barrels per day cannot feasibly be allocated without rationing.
- o The current system of price controls for petroleum would be strengthened, including control of new domestic crude; thus an artificial shortage would be created.
- o Since price is not used to determine distribution of petroleum products, the government would maintain its system of allocating to retailers, based essentially on historical use for products other than gasoline. The government would also control refinery yields.
- o To prevent long gas lines, coupon rationing would be introduced. Such a program would include as its basic features:
  - 1) Each licensed driver would receive an equal monthly coupon allotment; these coupons could be freely traded or sold. The coupon market (the "white market") permits those drivers with needs greater than those represented by the monthly allotment to purchase additional coupons from those who use less than their monthly amount. Thus the market, rather than the government, is responsible for assessing "need" for gasoline above the basic minimum ration. Failure to provide a white market would invite a black market and increase the inequities.



- 2) Commercial users, whether they buy in bulk or at the pump, would receive coupon allotments equivalent to a percentage of their consumption during the 1973 base period.
- 3) For that limited class of users (migrants, handicapped, etc.) for whose special needs the coupon resale market is not a reasonable solution, a proportion of coupons would be set aside and distributed by the state. This distribution would be based primarily on emergency or hardship needs.
- 4) Coupons would be picked up in person at Post Offices by each eligible individual. They will be invalidated at the pump at the time of purchase, and deposited by retailers with banks in a special coupon account. Gasoline deliveries to suppliers will be made to retailers only for amounts equivalent to coupons collected.

OPTION B: PRESIDENT'S PROGRAM OF TARIFF, TAX DECONTROL  
AND REBATE

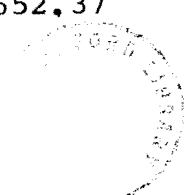
- o After April 1975, this program would consist of an additional tariff on petroleum imports of \$2 per barrel and an excise tax of \$2 per barrel on all domestic petroleum.
- o Domestic oil prices will be decontrolled and a wind-fall profits tax implemented to ensure that the revenue generated will accrue to the government, not the oil companies. This will raise the overall price of petroleum by \$2 a barrel. The tariff, taxes and decontrol, then, will add \$4 to the price of a barrel of oil.
- o In addition, an excise tax on natural gas equivalent to \$2 a barrel would be adopted and new natural gas prices deregulated to equalize the impact on oil and natural gas consumers and decrease natural gas consumption.
- o \$30 billion will be collected by the government from the tariff and taxes. These revenues will all be rebated to consumers and governments.

Regional Disparities

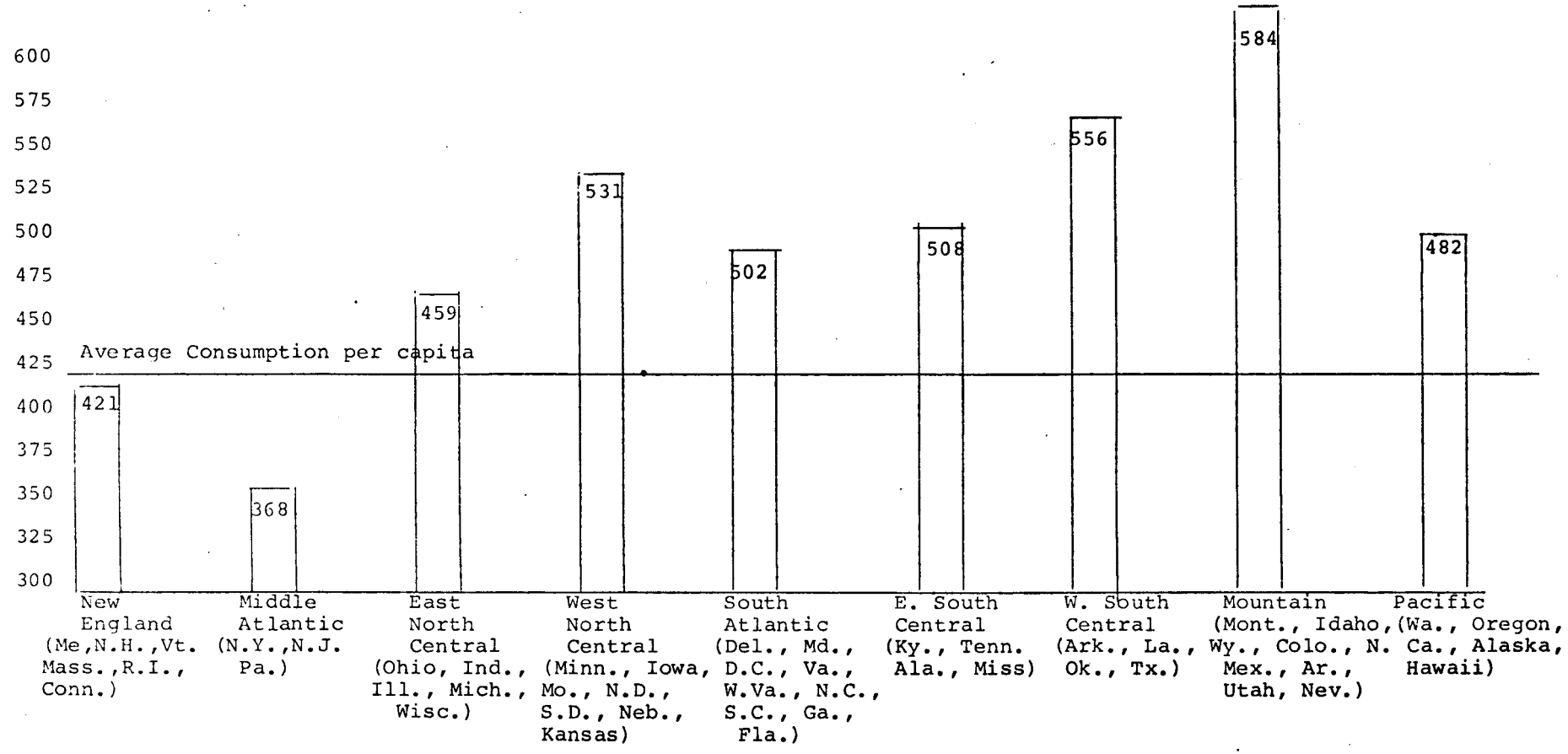
- o Both options have major regional impacts. There are substantial regional variations in per capita gasoline use. Those in the Middle Atlantic states use less than two-thirds the gasoline of those in the Mountain states. Gasoline rationing as the attached chart shows, weighs more heavily on residents of the mountain states, southwest, and mid-west than on other citizens.
- o Reliance on gasoline to bear the brunt petroleum cutbacks also discriminates against rural dwellers and in favor of those in cities. In the aggregate, rural dwellers use almost twice the gasoline/year of city dwellers.
- o The President's program, which includes oil, natural gas and electricity generated from petroleum, impacts most heavily on the New England, West North Central, West South Central, and Mountain states.

Petroleum and Natural Gas Use by Regions of the United States

* Per Household per Year	<u>Petroleum Consumption (bbl) *</u>	<u>Natural Gas Consumption (MMCF) *</u>	<u>Petroleum &amp; Natural Gas (BTU) *</u>
United States Total	744.02	3.307	7384.8
New England	120.57	.071	731.74
Mid-Atlantic	85.81	.156	625.86
East North Central	66.19	.326	688.85
West North Central	74.12	.386	792.61
South Atlantic	88.62	.164	649.80
East South Central	62.34	.299	640.76
West South Central	97.89	1.158	1694.87
Mountain	80.51	.467	907.81
Pacific	67.97	.280	652.37



Gasoline Consumption per capita (gallons/year)



### Effectiveness in Reducing Imports in Short and Long Term

- o In the mid to long term the elasticity for gasoline is lower than that for other petroleum products. This is because there are fewer substitutes for gasoline than there are for other fuels. This means that an increase in the price of all petroleum products (President's program) will reduce imports more than an equal increase in the price (gasoline tax) of gasoline. In the short term this is not the case.
- o The reduction in imports from the President's program option is 900,000 barrels per day in 1975, 1.6 million in 1977, and 2.1 in 1985. This estimate is not a guaranteed saving, but is based on econometric studies.
- o The rationing/allocation option could obviously be adjusted to any level desired. The level considered in this paper is 1 million barrels per day in 1975 moving to 1.5 million in 1977. Because of the complexity of the administration and the limited ability of a rationing program to adjust to changes in the economy (e.g., people moving, new businesses started) it is probably not a viable option for more than one or two years. Hence, it is not really a feasible part of a mid or long term program. Moreover, the longer the system lasts, the more exceptions are made, the more people learn how to evade the rules, and the greater are the opportunities for counterfeiting and abuse.
- o If we are to reduce significantly our vulnerability to imports in the mid and long term we must adopt an option to reduce consumption of petroleum that can be effective in 1980 and 1985.

### Income Effect

- o Gasoline rationing would have some beneficial impact as lower income people sell their excess coupons to those with higher income who in general use more gasoline. This effect would be somewhat limited by the plan to distribute coupons only to licensed drivers. The actual income transfer effects depend on the size of the shortage and the marginal price of the coupons.

- Private sector demand for gasoline in 1975 is estimated to be approximately 206 MG/D. Reducing daily petroleum consumption by 1 MMB/D solely through reductions in gasoline would result in a 17 percent reduction in supplies. The equilibrium price of gasoline would be about \$1.75 per gallon (\$.56/gal pump price plus \$1.19/coupon).
- The average "poor" household consumes 404.7 gallons of gasoline per year per vehicle while the "lower," "middle" and "well-off" households average 632.2, 823.1, and 800.8 gallons per year per vehicle, respectively. The average number of gallons of gasoline consumed per vehicle is 727.8. The surplus/shortage of gasoline per household group and the potential income transfer can be calculated by comparing the individual household consumption rates with the average consumption rate. The table shows the average gasoline use, by household income, the surplus/shortage of gasoline, and the net income transfer likely to occur through the sale of coupons.

GASOLINE CONSUMPTION  
AND INCOME TRANSFER

Income	<u>(0-5,000)</u>	<u>(5,000- 12,000)</u>	<u>(12,000- 16,000)</u>	<u>(16,000+)</u>
Gal/Veh	404.7	632.2	823.1	800.8
Net Surplus/ Shortage (Gal/Veh)	+199.4	-28.1	-219.0	-196.7
Net Income Transfer (\$Billions)	+2.20	-.20	-.92	- 1.08

- The poor household would have surplus coupons for 1,852 billion gallons of gasoline. The coupons for purchase of gasoline would trade at \$1.19/gallon which would result in a net transfer of 2.20 billion dollars to the poor category of households in the first year.
- o Similarly, the President's program would transfer roughly \$2 billion from those with incomes above \$12,000 to those with lower incomes, preliminary calculations indicate.

	<u>Income (\$1,000)</u>			
	<u>0-5</u>	<u>5-12</u>	<u>12-16</u>	<u>16+</u>
Additional Cost of Energy (\$Mil)	725	8,200	2,900	7,500
Rebated Revenues (\$Mil)	3,520	7,350	3,610	4,520
Net Transfer (\$Billions)	+1.36	+0.44	-1.06	-.74

Administrative Complexity and Cost

- o The cost and number of people required to implement the President's system of tariffs, taxes and rebates is estimated at about \$50 million and 400-500 additional people on the government payroll.
- o The complexity of administering gasoline rationing and allocation is considerably greater than the other option, both because of the printing, distribution, collection, and control of coupons and because of the exceptions process for the poor necessary in every state and local community. Rationing will require an additional 17,000 government employees and approximately \$2 billion per year to administer.

Inflationary Impact

- o A \$2/barrel import tariff plus excise taxes on domestic petroleum and natural gas would increase the Consumer Price Index by about 2.5 percentage points in 1975. Again, these fees would be returned to consumers so that the overall level of disposable income would not be changed.



- o Under rationing, the cost of buying an additional coupon should stabilize at the market clearing level of \$1.19. Thus, there would be an "inflationary" impact of over 2.5 percentage points on the Consumer Price Index in 1975.

ADDENDUM

To save 1MMB/D of petroleum imports in 1975 could be accomplished by reducing market supplies of gasoline, distillates, residual etc., in varying amounts. The amount of gasoline that would be available for private use and the costs of gasoline would depend on the amount of petroleum saving that is "loaded" onto gasoline. The table shows the amount of gasoline per registered driver, the percent reduction of gasoline supply, and the estimated cost of coupons under 100, 70 and 50 percent application of petroleum saving to gasoline.

<u>% of 1MMB/D Applied to gasoline</u>	<u>Gasoline per driver/wk (gals)</u>	<u>Gasoline per driver per month (gals)</u>	<u>Cost of coupon (\$ per gal)</u>
100	8.4	36	1.19
70	9.1	39	.64
50	9.5	41	.38

A similar computation for a rationing program lasting through 1977 and equaling the impact of the President's tax package (1.6 MMB/D savings of petroleum imports) can be made:

<u>% of 1MMB/D Applied to gasoline</u>	<u>Gasoline per driver/wk (gals)</u>	<u>Gasoline per driver per month (gals)</u>	<u>Cost of coupon (\$ per gal)</u>
100	7.5	32	.70
70	8.2	35	.41
50	8.8	38	.26



## GASOLINE RATIONING

### What is Gas Rationing?

In order to force Americans to use less automobile gasoline, some propose that the Government deliberately reduce the amount of gasoline available. In effect, the Federal Government would impose a gasoline embargo on ourselves, lasting 5 to 10 years.

Government officials would then determine how much gasoline each individual and each business could use.

In general, individuals would have to make do with nearly 30% less gas. Therefore, most of us would have to get by on one and two-tenths gallons a day which means a tankful would have to last about two weeks.

Businesses would have to get by with 10% less.

Each driver would have to go to the local post office four times a year and pick up a coupon book. If you did not need all of your coupons, the Government would permit you to sell them on the "White Market." This "White Market" would allow those who could afford it to buy extra coupons. An "extra" gallon of gas would cost about \$1.75.

### Will Gas Rationing Work?

Gas rationing can be made tough enough to reach the President's near-term energy conservation goals. Rationing cannot solve our Nation's energy crisis. Our problem is two-fold. First, we are rapidly becoming more and more dependent on foreign energy and a disruption could severely damage our economy. Second, we are paying foreign countries \$25 billion a year for needed energy. This means we are losing our national wealth and the jobs which go with it. Five or ten years of rationing will reduce the rate at which our dependency and energy costs are increasing.

Rationing does absolutely nothing to solve the basic energy problems. Only by increasing our domestic energy supplies can we regain our energy freedom, however, rationing actually discourages domestic production because price controls inevitably follow rationing.

What is Wrong With Gas Rationing?

Rationing is unfair. Individuals who must use their cars and who can't afford to pay \$1.75 for those "extra" gallons will often be unable to make necessary trips such as to work or school. Certain regions of the country -- where automobile travel is above the national average -- will have to shoulder a disproportionate share of the burden. It will be most severe for some States, such as Montana and Arizona, and for others, such as California and Texas, it will simply be unfair.

The Government will make all key decisions over the next 5 to 10 years for individuals and businesses. Gas rationing will likely lead to rationing of other petroleum products, such as home and factory heating fuels, and thus the rationing officials will control any decision affecting the use of energy. This would include decisions to move, to buy a new car, to start a new business, to increase production, to print a newspaper, to change jobs, etc.

Gas rationing costs too much. It will cost taxpayers \$2 billion to pay the bureaucrats, coupons and other administrative costs. It will result in a \$13 billion drop in GNP and put several hundred thousand out of work.



## ENERGY - AIRLINES

### Question:

Recently several airline executives have said that the President's energy proposals will require a 20 to 30 percent increase in airline fares. They also indicate that several airlines may not be able to financially survive because of the increased cost of oil due to the taxes and tariffs. Does the President plan to give the airlines a special dispensation from his energy taxes?

### Answer:

The airlines consume over a billion gallons of fuel every year. It is essential that they must do their part to reach our energy conservation goals. They must conserve along with the rest of us.

We recognize that we do have a legitimate problem with the airlines. Their costs will go up very substantially. Many of the airlines are currently in financial difficulty, and thus, they will not fully benefit from the President's proposed tax level decrease.

Under the President's energy plan, businesses will be able to recoup their increased costs and we, of course, want to ensure that the airlines receive similar treatment. This may mean that the President will propose specific rebate mechanisms to cope with this problem. We are also taking a hard look at other alternatives, and the President has not ruled out any options. Top economists and other advisors point out that even if all these costs had to be taken up in increased fares, it would be nowhere near as large as the number you have used. It would be closer to 10 to 15 percent.

Another alternative we are looking at is a method to reduce the number of empty seats on airline flights. Increasing the number of passengers per plane will save energy, will help the airlines financial position and, importantly, it can result in lower fares.

We are very confident that we can work out this airline problem in an equitable manner. But the important point is that they must shoulder their fair share of our energy-saving burden.

Q: Sen. Humphrey states that the President's plan would increase oil prices to over \$14 per barrel after decontrol and the excise tax and cause a new wave of inflation. Is this true?

A: We estimate that the average price of oil will rise to over \$13 per barrel as a result of the full tax and decontrol program. This will result in an increase of about 2.0 percent in the CPI during the first full year of program which will result in increases of about \$275 total costs per household. This is the price we have to pay to start on our way to independence.

Q: Senator Humphrey stated, in his response to the President's message, that there is no hard evidence that consumption of energy would be significantly reduced by the energy program. What is your response to this?

A: We certainly don't agree. We expect that import fees and excise taxes together will increase petroleum prices by about \$.10 per gallon and cut demand substantially. Our average demand response to price is lower than that used by most other forecasting models. Over the last year, using the same forecasting tools, our estimates of price effects were consistently close to actual impacts. As a result of a 10 cent rise in petroleum prices, we estimate demand to drop by 900,000 barrels a day.

Q: Senator Humphrey states that the effect of decontrol and the excise taxes on imported and domestic oil add up to about \$45 billion which is \$15 billion more than the proposed tax reductions. This means that consumers will be paying out more in higher energy costs than receiving back in lower taxes. Is this possible?

A: We are confident that Senator Humphrey's figures are overestimated by \$15 billion. The President's program will raise the average family's direct expenses for energy by about \$170 per year and their total costs about \$275 per year. The tax rebate program will offset increased energy costs for middle and lower income groups.

Q: Senator Humphrey states that the energy industries will profit handsomely, in fact coal and natural gas producers stand to gain at least \$12 billion per year in extra profits. How does the Administration propose to handle excess profits for these industries?

A: These will not be large windfall profits in the natural gas and coal industries. There are long-term contracts that cannot be renegotiated and average prices will rise very slowly. We will, however, watch the profits in these industries and if any unforeseen windfalls occur, we will be prepared to take action to deal with these problems.

Question:

How do you think the President's program takes care of the special hardships it creates within various areas of the country?

Answer:

Before the President approved this program, he ascertained that it had the capability of being fair not only in geographical areas of the country but in the disadvantaged groups of our society as well as special industries which are particularly affected.

In the area of geographical burdens in the Northeast, New England is the best example. This section of the country depends mostly on foreign oil for energy. As a result, these states have had the greatest effect from the recent cartel country increases and are naturally sensitive to any additional increases. We have therefore made a special effort to ensure that the Proclamation signed by the President on January 23rd does not have any greater impact in the Northeast than in any other part of the Nation. The President has directed a lower tariff for the special kind of oil which is imported and used by Northeastern utilities.

In the case of the disadvantaged people in our society, the President has submitted a program to the Congress which pays special interest to their needs. The energy tax revenues which will be returned in such a way to benefit those on the low end of the income scale -- that is, on the average they will receive more back in dollars than their increased costs due to conservation taxes.

With respect to special industries, the President has directed the Administrator of the Federal Energy Administration to meet with those special industries which are energy-intensive or have some other special problem concerning this program. We will review their information and where the burden is extreme we will take steps to assure that it is corrected.

In summary, when the President looked at the effects of a rationing program and the problems which come from the approach which he proposed, he concluded that the Administration program has fewer problems to resolve and can be made fairer than rationing or any other plan.