



Consumer Federation of America

**A BLUEPRINT FOR ENERGY SECURITY:
ADDRESSING CONSUMER CONCERNS ABOUT
GASOLINE PRICES AND SUPPLIES BY REDUCING
CONSUMPTION AND IMPORTS**

May 2006

**1620 I Street, N.W., Suite 200 · Washington, D.C. 20006 · (202) 387-6121 · Fax (202) 265-7989
www.consumerfed.org**

Table of Contents

Summary.....	3
The problem.....	3
Consumer concerns and impacts.....	3
Concerns.....	3
Economic impacts.....	3
Energy realities.....	4
Import dependence.....	4
Driving.....	5
Fuel efficiency.....	5
Future threats.....	6
Technical solutions.....	6
Overview.....	6
Motor vehicles.....	8
Technologies.....	8
CAFE.....	9
Consumer vehicle purchase.....	9
Incentives and disincentives.....	10
Feebates.....	10
Buybacks.....	10
Trade-in incentives.....	10
Information/education initiatives.....	11
Public education.....	11
Mileage disclosures.....	11
Gas guzzler ad ban.....	12
Consumer vehicle maintenance.....	12
State inspections.....	13
Consumer driving.....	13
Public education.....	13
Driving incentives and disincentives.....	14
Convenience incentives.....	14
Financial incentives.....	14
At work.....	14
Vehicle use pricing.....	14
Gas tax with offsetting tax credit.....	15
Alternative transportation.....	16
Resulting gasoline and import savings.....	16
Political solutions.....	17

Summary

Americans are very concerned about gasoline prices and supplies. These concerns reflect adverse economic impacts and nervousness about future gasoline prices and availability. They are also related to the reality of shrinking U.S. supply, growing dependence on oil imports, and rising oil demand in developing countries like China.

To restrain gas prices and reduce dependence on foreign oil, manufacturers must produce more fuel efficient vehicles, and consumers must purchase these vehicles, maintain them properly, and drive them more efficiently. The good news is that, over the next 25 years, dramatic improvements in motor vehicle efficiency -- doubling the average miles per gallon of the passenger fleet -- will pay for themselves through lower gas consumption (at \$3/gallon or higher). But in order to actually reduce gasoline consumption and oil imports, consumers must support a wide range of fuel efficiency policies and value this fuel efficiency more highly in their motor vehicle purchases, use, and maintenance.

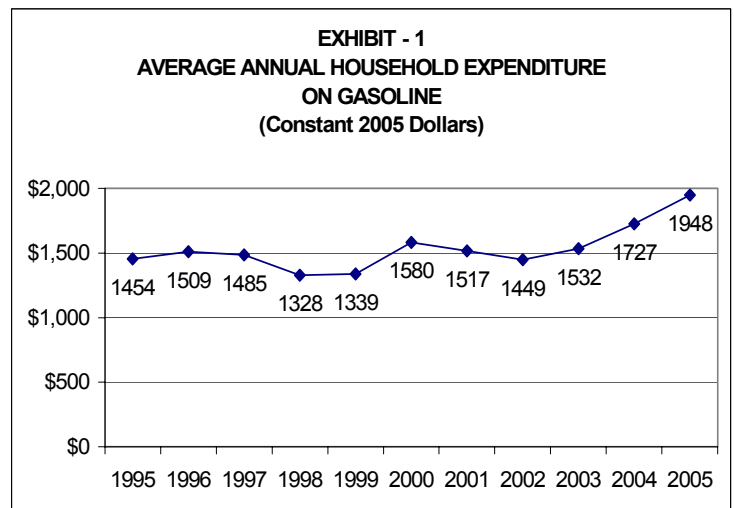
We believe that the most effective way to achieve these reductions is for broad-based nonpartisan coalitions to build consumer and institutional support for the achievement of long-term goals for gas consumption and oil imports. Fortunately, consumers already support many of the measures needed to attain these goals.

The Problem

Consumer Concerns and Impacts

Concerns: This May, in a survey commissioned by the Consumer Federation of America (CFA), over four-fifths of Americans (81%) expressed concern about gasoline prices over the next five years, with two-thirds (67%) expressing great concern (5 on a 1-5 scale). Low- and middle-income households -- those with incomes under \$50,000 -- expressed the most concern, with nearly nine-tenths expressing concern and over three-quarters expressing great concern.

Impact: This concern is certainly related to the adverse financial impacts of rising gas prices. Last year, according to a CFA economic impact analysis, families are conservatively estimated to have spent nearly \$2,000 on gasoline, up from only \$1,342 (in constant 2005 dollars) only three years ago, an increase of 45%, as Exhibit 1-1 (based on Bureau of Labor Statistics data) shows.

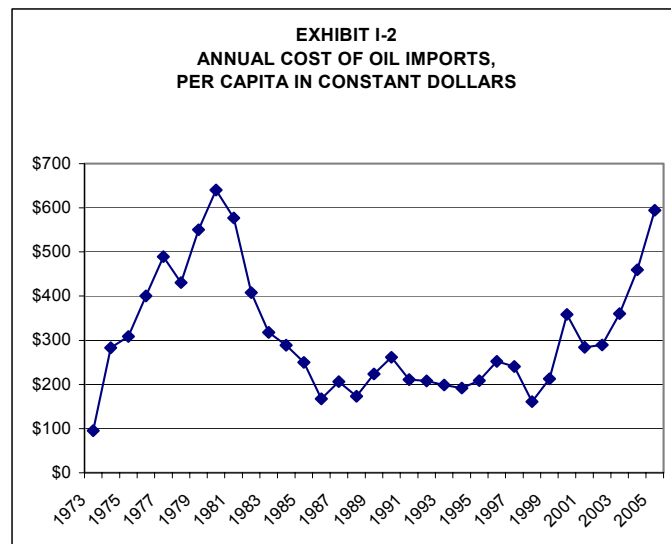


Not unexpectedly, the least affluent and those in rural areas suffer the greatest hardships. According to CFA's analysis, households with incomes under \$15,000 -- about one-fifth of all households -- last year spent, on average, more than one-tenth of their income just on gasoline. And, rural households spent, on average, more than \$2,000, compared to only \$1,705 for those in urban areas.

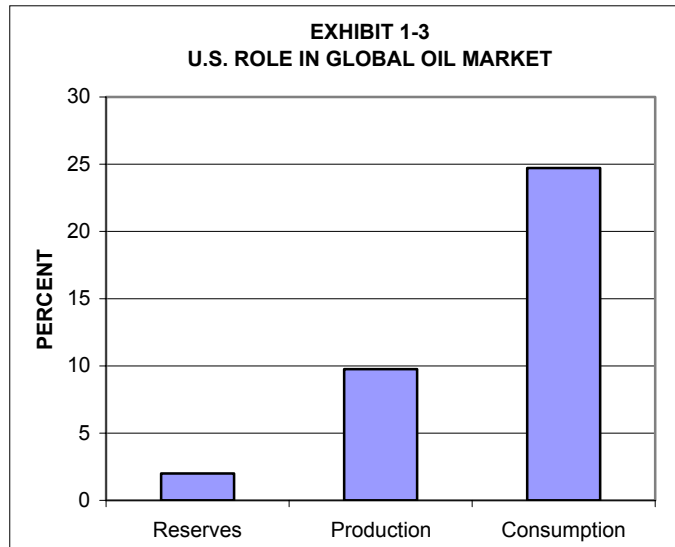
Imports: Consumer concern about high prices is also related to growing consumer concern about dependence on foreign oil. In our May survey, nearly three-quarters (73%) expressed concern about U.S. dependency on Mid-Eastern oil over the next five years, with more than half (54%) expressing great concern. That concern is highest among those over 45 years of age, possibly because they remember the Arab oil embargo of the late 1970s.

Energy Realities

Import Dependence: This rising concern about oil imports is well founded. Today, more than three-fifths of the oil we consume in the U.S. is imported from other countries. Last year, those imports cost us \$175 billion, about \$600 for every American. This was over triple the \$200 per capita only five years ago, as Exhibit 1-2 (based on Energy Information Administration data) shows. In fact, these per capita costs have now returned to the levels that existed during the energy crisis of the late 1970s and early 1980s.



Consumer concern might be even higher if Americans realized what a small portion of world oil reserves we hold (see Exhibit 1-3). In a 2004 CFA survey, respondents estimated that the U.S. holds about one-fifth of the world's reserves. In reality, we have less than three percent of these reserves. The dramatic discrepancy between our reserves, our production, and our consumption is shown by Exhibit 1-3.



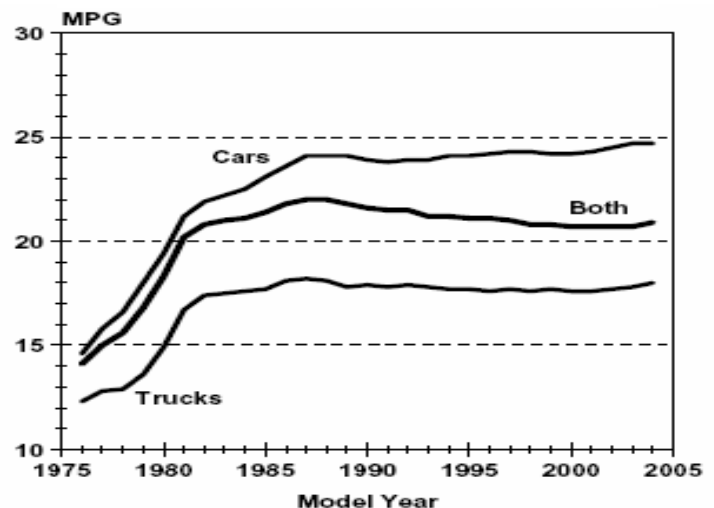
Vehicle Oil Use: Motor vehicles consume the largest amount of oil. The single largest product manufactured from crude oil for domestic consumption is gasoline, about 40% of total product. Consumers use most of this fuel for driving, about one-third of all oil products consumed in the country. Their gasoline consumption equals about three-fifth of all oil imports.

Driving: How do consumers use this gasoline? According to Department of Transportation estimates, in 2001 Americans took almost a quarter of a trillion household vehicle trips that covered more than two trillion miles. The main purpose of these trips was family and personal business (about 45% of trips), followed by social/recreational (27%), work and work-related (only about 18%), and school/church (10%).

From 1990 to 2001, the amount of driving increased substantially, far more than population growth. The number of household vehicle trips increased by 47%, and the number of household vehicle miles rose by 62%.

Fuel Efficiency: Yet during this period, the average fuel efficiency of all passenger vehicles increased marginally. From 1991 to 2004 the average miles per gallon of light duty vehicles rose by about one mile per gallon for cars (to 22.4 mpg) and a little less than one mile per gallon for trucks (to 16.2 mpg). The average for autos and trucks combined declined slightly because of the rising popularity of vans, trucks, and SUVs. As Exhibit 1-4 (based on Environmental Protection Agency data) shows, this lack of improvement of average fuel economy in the 1990s followed significant improvements in the 1970s and 1980s.

**Exhibit 1-4
ADJUSTED FUEL ECONOMY BY MODEL
YEAR
(Three-Year Moving Average)**



Future Threats

The continuing growth of gasoline consumption could well threaten our nation in very fundamental ways. First, as worldwide oil supplies peak then dwindle, prices are likely to continue to rise. Although experts disagree on exactly when oil prices will peak, a number of experts now project it will do so in the not too distant future. For example, the Energy Information Administration places the peak at 2016. Even if there is no peak as such, the cost of meeting the world's oil needs will rise sharply over the next couple of decades. While the future is always uncertain, most energy analysts such as the Energy Information Administration believe that, in this period, gasoline prices above \$3/gallon are more likely than prices below this level.

Political crises could drive prices well above this level should, for example, we lose oil from a major producer. In a sense, we are already living with the initial stages of such an event. The mere threat of upheaval abroad drove oil prices above \$70 per barrel recently.

Growing oil imports inevitably increase U.S. political dependence on key oil producing countries such as Saudi Arabia, Iran, Iraq, Nigeria, Russia, and Venezuela. Their accumulation of petrodollars provides these countries with political leverage over the U.S., thereby weakening the U.S. position in international relations. For example, in the dispute over the development of nuclear power in Iran, the use of the "oil card" is mentioned constantly as a threatening counter move. And Venezuela is pressuring oil companies and threatening nationalization of the commodity.

Even if oil exporters choose not to use this political leverage, simply their investment decisions may harm our economy. At present, most petrodollars are recycled back to the U.S. through purchase of Treasuries, stocks and bonds. In the future, these dollars could well be invested in Europe, Asia, or somewhere else in the world.

Finally, there is a growing scientific consensus that rising gasoline consumption, and the greenhouse gases it produces, is a major cause of global warming. Scientists are concerned that this warming will not only disrupt the world's agriculture but also cause rising sea levels and more extreme weather patterns, both of which would have significant economic impacts on Americans.

Technical Solutions

Overview

To reduce our current and future gasoline costs and dependence on foreign oil, Americans must reduce oil consumption by driving more fuel efficient vehicles more carefully (i.e., better maintenance and trip planning). We will find this much easier to do if manufacturers make more fuel efficient vehicles and market them more aggressively. And, we will have greater interest in doing so if we are encouraged by new financial incentives/disincentives and societal expectations.

We emphasize fuel efficiency, rather than increased domestic oil production, because of the fact that the United States contains less than three percent of the world's proven oil reserves. Even

aggressive domestic exploration and drilling -- on which the Consumer Federation of America has not taken a policy position -- are highly unlikely to significantly restrain U.S. oil prices and oil imports. However, given rising world demand for oil, we do recognize the importance of not only more vigorous oil exploration and drilling worldwide but also expanded refinery capacity in the mid-term, as well as development of alternative fuels in the mid and long-terms.

We believe that there is no one solution for reducing gasoline costs and consumption -- not CAFE, not technology, not public education. Rather these and other objectives should be pursued recognizing their interdependence: For instance, manufacturers will be much more willing to accept higher fuel efficiency standards (CAFE) if Americans are demanding more fuel efficient vehicles from manufacturers and insisting that elected officials support this demand through public policy. Similarly, we will not reduce gasoline consumption and oil imports if consumers take advantage of more fuel efficient vehicles to drive considerably more miles.

Furthermore, we believe that significantly reducing our nation's dependence on oil imports will be much easier if, as a society, we set ambitious goals for the next two decades. The good news is that such goals can be realized at much less cost than most people assume. In fact, as our analysis in Appendix A shows, at \$3/gallon, doubling the fuel efficiency of the passenger fleet from 21 mpg to at least 42 mpg over a 20-year period (after a 5-year startup) pays for itself. And, as our nation's experience with challenges related to smoking, drunk driving, and safety belt use shows, a combination of mandates, incentives/disincentives, and societal expectation can lead to significant behavioral change to the greater satisfaction of most Americans. Since reducing oil consumption involves not just our own individual and local interests but also our interests as a nation in a larger world, changing our energy behaviors as producers and consumers should be even easier to achieve than changing various health and safety behaviors.

The following section describes what we believe to be the most promising ideas to incorporate into an integrated national program to reduce our addiction to oil. Such a program, based on long-term goals over time would significantly change producer and consumer behavior, thereby reducing oil consumption and gasoline expenses. Some of these ideas are widely accepted, some are controversial, and some are new, as a recent consumer survey commissioned by CFA reveals. What is essential is that these kinds of ideas and others are seriously examined and debated as the country tries to reach a consensus on dramatically increasing not only our fuel efficiency but also, more broadly, our energy independence.

In brief, the most effective way to increase the average mpg of our passenger fleet is:

- For manufacturers to utilize existing and new technologies to offer consumers more fuel efficient, less gas dependent vehicle options, and
- For consumers to value fuel efficiency much more highly in their vehicle purchase, maintenance, and driving decisions.

These objectives can be achieved through a combination of government-established mandates and incentives/disincentives, and through government-private-nonprofit partnerships to increase the value individuals and the whole society place on less gasoline consumption and fewer oil imports.

Motor Vehicles

The single most important measure we could take to reduce oil consumption is to increase the fuel efficiency of vehicles available for consumer purchase and rental. The important point here, as Appendix A demonstrates, is that there are currently available technologies that could dramatically increase the fuel efficiency of existing models while effectively paying for themselves through reduced gas consumption. In other words, consumers could continue to purchase SUVs, as well as subcompacts, that would cost somewhat more because of these technological improvements, but drivers would fully recover this expense through lower gasoline costs.

Technologies

Currently available technologies include stronger and lighter materials, hybrid engines, computer-controlled fuel injection, multi-speed transmissions, 4-valve cylinders, and cylinder shut-offs. These technologies, and the expense of implementing them, are explained in an authoritative 2002 report by the National Research Council. At the time this report was published, lower gas prices did not allow a full recovery of the costs of implementing the technologies. But at \$3/gallon, as Appendix A explains, this implementation would be fully paid for by gasoline cost savings. Of course, if gasoline prices remain above \$3 in the future, there would be substantial net savings to consumers and to our society.

Beyond hybrids, alternative fuels also offer great potentials for reducing gasoline consumption. The most promising include bio-fuels and plug-in electrics. The great benefit of using corn, switch grass, and other agricultural products to produce ethanol is that these products can be produced domestically, thereby reducing oil imports. Their limitation is that, in addition to the costs of developing production capacity and distribution capability, they probably will not reduce prices. With gas at \$3/gallon, electricity is a competitive fuel for powering small, plug-in electrics that make short trips in urban areas. With anticipated advances in battery technology, electric vehicles could become an even more practical alternative.

Other alternative fuels seem less attractive, at least in the next decade. Diesel-powered engines are more fuel efficient than gas-powered engines, but in the U.S. must use diesel fuels that, when burned, emit more pollutants than do gasoline. Both fuel-cell and hydrogen powered engines could reduce pollutants and oil imports, but need significant technical improvements and investments in new infrastructure. Nevertheless, in the next two decades, a serious national program to improve fuel efficiency would likely stimulate unforeseen technical advances that make these and other alternative fuels more feasible.

CAFE

Corporate average fuel economy standards (CAFE), first introduced in 1975, were responsible for much of the increase in average fuel economy among passenger vehicles during the 1980s. These requirements worked so well because, even when consumers purchased the same models, fuel efficiency increased. And car buyers either did not notice or did not complain about any price increases resulting from the costs of fuel economy improvements.

Today, higher fuel economy standards are again being discussed and debated. But this discussion involves only marginal improvements that would not significantly restrain the growth in gasoline consumption and oil imports. Public policymakers should first decide by how much they think our country should reduce our gas consumption and oil imports, then "work backwards" to estimate the extent to which the average fuel efficiency of new cars sold must improve to meet these consumption and import goals. At that point, they can estimate the impact of higher fuel economy standards on U.S. auto manufacturers and their workers, and consider ameliorative actions. They should also consider the fact that if these manufacturers significantly improve the fuel economy of the vehicles they produce, their vehicles will be more competitive in both domestic and international markets.

Our recommendation is that we aim for an average fuel economy of 50 miles per gallon for new cars sold by 2030. As the analysis in Appendix A suggests, achieving this goal is both technically feasible and affordable because the cost of technological improvements are paid for fully by lower gas costs (assuming a price of \$3/gallon). That would at least double the average passenger fleet fuel efficiency from 21 mpg to over 42 mpg.

Consumer Vehicle Purchase

If consumers continue purchasing the same types of models they now purchase, and these models are far more fuel efficient, average vehicle fuel efficiency will increase. However, this efficiency will increase to a much greater extent, and oil consumption and imports can actually decline, if consumers value fuel efficiency much more highly in their motor vehicle purchases, and in the way they drive and maintain these vehicles. As the value which consumers and society place on more efficient transport increases, motor vehicle manufacturers and servicers will have even greater incentive to help consumers achieve greater fuel efficiency.

As a recent Consumer Federation of America report revealed, in every vehicle class consumers have a wide range of fuel efficiency choices. These choices typically vary by more than 100 percent. For example, for subcompacts, miles per gallon ranges from 18 for an Audi S4 to 47 for a Honda Civic (hybrid). And, for small SUVs, miles per gallon ranges from 16 for a Jeep Wrangler to 33 for a Ford Escape (hybrid).

As gasoline prices have risen, consumers have begun purchasing fewer gas-guzzling SUVs and more fuel efficient vehicles. Yet, there are new public policy incentives/disincentives and new information/education initiatives, which could dramatically increase the importance consumers place on driving more fuel efficient vehicles.

Incentives/Disincentives

Feebates: One proposed set of incentives and disincentives has been called "feebates," which combine, in a revenue-neutral way, fees on the purchase of fuel inefficient vehicles with rebates on the purchase of fuel efficient vehicles. We propose the consideration of increasing these fees on the purchase of highly inefficient vehicles on a graduated basis, so that someone purchasing a vehicle getting 15 mpg pays a higher fee than someone buying a vehicle getting 20 mpg. On the other hand, someone purchasing a vehicle getting 40 mpg would receive a greater rebate than someone buying a vehicle getting 35 mpg.

The breakeven mileage where a purchaser pays neither a fee nor receives a rebate needs to be discussed and established, as does the size of the fees and rebates, which should probably increase over time. In such a program, consumers are not penalized for past vehicle purchase decisions. But in the future, if they want to buy a low mileage vehicle, they will pay more not only for gasoline but also for the purchase. (In all probability, they will also probably demand that manufacturers increase the fuel efficiency of their favorite models.)

Buybacks: Another set of incentives would seek to retire gas guzzlers through a buyback program. To reduce air pollution, several areas in California have established programs in which a set number of old cars are purchased at a price ranging from \$500 to \$1000. These programs could be adapted, by local, state, or federal governments, to target old gas guzzlers. For example, the federal government could purchase and junk about 4 million of these gas guzzlers annually at a cost of \$1000 each. Such a program could be paid for by a 2-cent increase in the federal gas tax. If these vehicles could be profitably recycled, there might be additional revenues to retire even more gas guzzlers.

Trade-in Incentives: Another program to get gas guzzlers off the road would provide tax credits to those who trade in a fuel inefficient vehicle for one that is fuel efficient. The size of the tax credit could vary depending on the difference between the mpg of the vehicle traded-in and that of the vehicle purchased, though it must be large enough to serve as an effective purchase incentive. For example, someone trading in an SUV getting 10 mpg for one getting 30 mpg might receive a credit of \$300. To be effective, this program should apply to the purchase of used as well as new cars. To receive the tax credit, a consumer would simply submit a copy of the purchase contract showing the trade-in.

Both manufacturers and dealers should benefit greatly from this program because it would stimulate greater sales of new and used cars, vans, SUVs, and pickups. While the credits would impose an immediate cost on taxpayers, this expense would be offset, at least in part, by restraint on gasoline consumption, with its economic, national security, and environmental benefits.

Would these trade-in incentives actually increase the average fuel efficiency of the passenger motor vehicle fleet since there is no requirement that the traded-in vehicles be scrapped? In our view, they will because more fuel efficient cars are being purchased and the less efficient trade-ins are likely to be driven less and retired earlier. However, this trade-in incentive works most effectively to improve overall fuel efficiency when combined with a buyback program to incentivize dealers during a time of relatively high gas prices.

Both feebates and buybacks work most effectively if consumers do not drive their more fuel efficient vehicles far greater distances. That is why driving incentives and disincentives discussed later are also important.

Information/Education Initiatives

Consumers are more likely to value the purchase of fuel efficient vehicles if they understand the individual and societal importance of this efficiency, receive more timely information about fuel efficient and fuel inefficient models, and are given more encouragement to purchase fuel efficient models, and less encouragement to buy fuel inefficient ones.

Public Education: Many political leaders, editorial writers, economists, and energy experts have made it a priority to explain and remind Americans about the huge economic, political, and environmental costs and risks of rapidly increasing gasoline consumption and oil imports, and ways to minimize these costs and risks. But without an aggressive, coordinated, and convincing national public education campaign to inform and continually remind all Americans not only of these costs and risks but also of the cost-effective solutions that are available, we probably cannot dramatically reduce our dependence on oil. In particular, consumers must be assured that they will recover any motor vehicle price increases in lowered gasoline expenses.

Critical to this coordinated campaign are national goals. The public needs to persuade government leaders to set national goals for the fuel efficiency of cars sold, the miles they are driven, and the level of related oil imports. Then these leaders should monitor and widely publicize progress toward achieving these goals.

This education should take place in schools (driver education), the workplace, communities, and the mass media over a period of years since that is how long it typically takes for individuals to change strong perceptions and deeply felt values. This campaign will be most effective if it is led by our most respected political, business, media, religious, and other nonprofit leaders working together. As the transportation values of Americans change, so eventually will their behavior.

Mileage Disclosures: New vehicles sold by dealers are now required to carry a sticker disclosing their fuel economy. Considering that more than twice as many used cars than new ones are sold by dealers, used vehicles should also include a fuel economy sticker. It would be simplest if these estimates represented the mileage of models when they were new. But it would be more accurate if this mileage were adjusted downward to reflect typical fuel efficiency deterioration over the life of that car model.

We think these mileage disclosures could be even more effective if they carried a color-coded mileage rating (see Appendix B). In a 2006 report, CFA proposed that vehicles with mileage below 20 be rated poor (red), those with mileage between 20 and 30 be rated fair (orange), those with mileage between 30 and 40 be rated good (yellow), and those with mileage over 40 be rated excellent. We believe that such stickers will encourage car buyers to value fuel economy even more highly.

Also helpful in promoting greater fuel efficiency would be requiring manufacturers to add, to all new models, a dashboard feature indicating miles per gallon as you drive. Several models already have this feature. And anecdotal information reported in the press suggests that this feature by itself encourages people to drive and maintain their cars more carefully.

A third mileage disclosure that would frequently remind Americans of important mileage differences would be a requirement that advertising for all new vehicles sold disclose their fuel efficiency. For TV ads, this disclosure should be both printed and verbal. For print ads, it should be displayed prominently enough to be noticed. Such disclosures would not only remind consumers of important mileage differences between models but also encourage carmakers to advertise more fuel efficient models.

Gas Guzzler Ad Ban: Because of their individual and social costs, tobacco is not advertised on TV and liquor is not widely advertised. Given the growing consensus that our nation is suffering from a costly "oil addiction," would not it make sense to seriously consider a ban on TV ads of the least fuel efficient passenger vehicles? We can debate where the mileage line should be drawn -- at 15 mpg, 20 mpg, 25 mpg? This minimum standard to advertise on TV could be raised over time, as vehicles became more fuel efficient.

Such a ban would encourage manufacturers to increase the miles per gallon of popular gas guzzling models so that their sale can be promoted on TV. The ban would also weaken consumer demand for heavily advertised fuel inefficient models. Car manufacturers would not spend so much money on this advertising if it did not directly or indirectly stimulate sales of these models. The power of such a ban is revealed by research concluding that a ban on TV cigarette ads reduces consumption by about six percent.

Consumer Vehicle Maintenance

The way consumers maintain their vehicles significantly affects gas mileage. As a recent Consumer Federation of America report reveals, if consumers just made certain their air filter was clean, their alignment was straight, their engine was tuned properly, and their tires were properly inflated, they could reduce their gasoline consumption noticeably. Technology could be of help here, for example, tire pressure monitoring devices, in some form, will be required in all vehicles by the 2007 model year. Here, direct systems are more accurate than indirect systems, and the use of color to indicate low pressure would make the devices more effective.

State Inspections: How can we encourage consumers to perform this basic gas saving maintenance? In most states, cars must be inspected every year or two for safety hazards and excessive emissions. As a society, we should think of ways we could cost-effectively require these inspections to also consider fuel efficiency. For example, the inspection could look for under inflated tires, broken gas caps, and dirty air or oil filters.

Consumer Driving

As noted earlier, we can achieve much greater restraint, even actual reductions, in gasoline consumption and oil imports if consumers drive less and smarter as well as drive more fuel efficient vehicles. Is this even possible in a society in which most of us take instant mobility for granted, and would we be reluctant to part with it? Many of us do not think twice about driving to the mall for something, returning home, then going back to the mall because we forgot something else. Yes, we are somewhat appalled as we fill up our vehicles with \$3/gallon gas costing \$30-75, but we rarely think about reducing our driving miles (or, for each mile traveled, driving more efficiently).

We do have some ideas, though, about things we as a society could do to make all drivers more aware and desirous of reducing unnecessary miles driven. While some of these ideas may spark debate and others are rejected, we are convinced that, through a combination of various incentives/disincentives and information/education initiatives, Americans could reduce driving to some extent, and perhaps substantially.

Public Education

The public education campaign we discussed earlier, in the context of encouraging wise consumer purchase decisions, should also focus on driving habits. This campaign should adopt more of a marketing than an educational approach. In short and compelling messages, we need to link less and smarter driving to values such as reduced personal expense and energy independence - for example, Drive Smarter and Pay Less for Gas, Drive Smarter and Help America Achieve Energy Independence, or Drive Smarter and End Our Oil Addiction. And we need to accompany these messages with practical tips about how to drive smarter. As an early Consumer Federation of America report suggested, if Americans sped less, drove more smoothly, refrained from braking needlessly, and did not idle unnecessarily, they would use considerably less gas.

Again, it is essential that a broad coalition of leaders and groups endorses and promotes these messages. It is also important that this coalition sets national goals about driving and periodically tells us how we are doing in meeting these goals. These goals could be societal and individual. In regard to the latter, to reduce gasoline expenses and oil imports, all American households with cars could be encouraged to eliminate one trip per week. They also could be urged to periodically monitor their miles driven. In fact, if there were one national energy independence week, all drivers could be urged to check miles driven during the previous year (Measure Your Miles) and to develop a plan to reduce miles driven (Make Every Mile Count).

Driving Incentives and Disincentives

In the past 20 years, vehicle trips for shopping and other personal business rose nearly 250 percent. Many of these new trips probably were not absolutely necessary. What sort of incentives might persuade us to think twice before getting in our car and burning gasoline? Here are some ideas that involve driving convenience and cost.

Convenience Incentives

As a society, we should consider making driving easier for those who make an effort to drive more efficiently and consume less oil. For example, at work and at the mall, the closest parking spaces could be reserved vehicles not only driven by the disabled but also for highly efficient vehicles that used little or no gas. As cities like Austin, Texas, experiment with electric plug-in cars, why should not drivers be encouraged to use these vehicles by having access to the most convenient parking spots?

Financial Incentives

At Work: Beyond making parking more convenient, perhaps employers should be encouraged or required to financially reward those who consume less oil in their commuting. For instance, at company parking lots, solo drivers could be charged a fee that is rebated to those who car pool, use mass transit, or walk or bike. At the very least, those who drive solo should not be rewarded with free parking while those who use mass transit pay fares. For this to be successful, however, employers must not use this program to raise revenue from employees, but simply to treat all employees fairly and to be good employer citizens.

Vehicle Use Pricing: As institutions increasingly utilize cost-based pricing in an array of services, they should consider cost-based pricing of motor vehicle use. Such pricing should start with auto insurance. Some companies give policyholders modest discounts for driving less than a certain amount. All insurers should make the commitment of Progressive to establishing effective cost-based pricing related to miles driven. They should be encouraged or required to do so by state insurance departments.

Vehicle use pricing also could be extended to rental car use. While many of us benefit from being able to drive 500 miles at the same rental cost charged to someone who drives only 50 miles, this pricing is inherently unfair and uneconomic. Based on actual depreciation schedules, without using this as an opportunity to gouge, car rental companies should price more equitably in terms of miles driven.

This pricing should also be applied more rigorously to car leasing. Leasing agreements typically require lessees to pay higher costs for driving more than 15,000 miles a year. Should not those who drive less than 7,500 miles, say, receive a discount? Because for the entire leased fleet, miles driven are closely related to depreciation, this relationship should be incorporated into leasing pricing.

Gas Tax With Offsetting Tax Credit: The benefits of a guaranteed high gas price are being discussed by opinion leaders in the media. With higher gas prices, business would have a more substantial and predictable incentive to produce more alternative fuels and more fuel-efficient vehicles. Large institutions such as governments would have far greater incentive to purchase or lease fuel efficient vehicles. And consumers would have an additional incentive to purchase more fuel efficient vehicles, to maintain them more conscientiously, and to drive them more efficiently.

An effective way to maintain this price incentive is to use federal gas taxes to set a target price, then use taxes to make up the difference between this price and the current market price, if there is a difference. For example, if the target price were set at \$4/gallon, at present, there would be an increase of about \$1/gallon in taxes. But if pump prices were to increase to \$3.50/gallon, the tax would be reduced to \$.50/gallon.

But we would not stop there. Since many Americans have a strong aversion to higher gas taxes, particularly when gas prices are rising, we propose rebating all increased tax revenues back to drivers. All dollars collected by the federal government in increased gas taxes would be rebated to drivers in the form of federal income tax credits.

How high should the new target price be? As indicated in the above example, it could be set at a higher price than consumers currently pay, such as \$4/gallon. Less effective though more politically palatable would be a target price of \$3, roughly the current pump price. At this level, there would be no new gas taxes unless pump prices fell below \$3.

Would such a tax/rebate program actually promote fuel efficiency? A stable, high price would certainly stimulate the production of alternative fuels and more fuel efficient vehicles. But because payment of the tax credit would be divorced in time from payment of the tax, we believe that the new target price would act powerfully to influence consumer behavior as well.

How could such a tax/rebate program be administered? We propose for consideration a fairly simple program, based on a federal income tax credit that does not try to determine exactly how many miles are driven, which is the current challenge facing insurance companies like Progressive. We suggest that everyone who can prove that they own or lease a car, by showing proof of auto insurance, be given the same gas tax credit. Such a program would be relatively easy for the IRS to administer. While it would not rebate gas tax revenues according to mileage driven, it would rebate all gas tax revenues collected back to drivers. And, though some adjustment could be made for those required to drive long distances, in providing the same credit to all car owners or leasers who submit an income tax return, the program would reward those who drive less and drive more efficiently, thus helping restrain gasoline consumption and oil imports.

Alternative Transportation

Most Americans are highly dependent on motor vehicles for transportation. But some have transportation choices that could dramatically lower their expense, especially if their household would own or use one less car. These transport options include not only mass transit but also cabs and rental cars. It is important that consumers understand the real costs of all these options.

Resulting Gasoline and Oil Import Savings

We are convinced that, by implementing many of the ideas outlined above, as a society we could not only restrain the growth of gasoline consumption and oil imports, but actually lower both. That would occur, for example, if legislation that has been introduced by a bipartisan group of U.S. senators were enacted and successfully implemented. This legislation would require a reduction of 10 million barrels per day below the projected level of consumption without aggressive policies. The Energy Information Agency (EIA) projects growth in oil consumption from about 21 million barrels per day in 2004 to about 28 million barrels per day in 2030. Thus, a 10 million barrel per day reduction in 2030 would amount to a reduction of more than one-third from projected consumption levels.

The Senate legislation requires savings in all sectors of oil use. In our view, however, the 10 million barrel a day reduction could be achieved just within the motor vehicle portion of the transport sector. To achieve this level of savings will not be easy. For example, if new cars purchased get 10 mpg more than the ones retired, over a five-year period, national average gasoline consumption would be reduced by only about 1 million barrels per day. Similarly, the congressional mandate of an increase in ethanol consumption is equal to only 1 million barrels per day. But a reduction of 10 million barrels per day can be achieved if our country undertakes a comprehensive program addressing vehicle efficiency, alternative fuels, and behavioral change.

Fuel Efficiency: A program to increase the fuel efficiency of the vehicle fleet to 42 miles per gallon, as described in Appendix A, would be the cornerstone of the effort. After an initial period to ramp up the program, increasing new car efficiency by one mile per gallon per year from 2010 to 2030 would increase the fuel economy of new cars/pickups/SUVs sold to 47 mpg, thus pulling up the fleet average to 42 mpg. This would save about 5.8 million barrels per day compared to the base case.

Alternative Fuels: Beyond technological improvements and hybrids, the nation can add significant quantities of alternative fuels. Just using biofuels -- those alternative fuels with the greatest technical, economic, and political feasibility -- would save about 2.7 million barrels per day in 2030, according to estimates by the Natural Resources Defense Council.

Smart Consumer Purchases and Driving: It is impossible to estimate the potential savings from more fuel economy-sensitive consumer purchase and driving decisions. However, given

current practices, we believe that there is a potential for at least a 10 percent reduction in gasoline usage -- about half a million barrels per day.

All these measures would reduce consumption of oil by cars/pickups/SUVs by about 9 million barrels per day. The remaining 1 million barrel per day savings could well come from the fleet of non-passenger vehicles -- commercial and freight trucks and buses, and heavy duty vehicles -- which are projected to consume 5 billion barrels per day in 2030. Or, it could come from improved industrial efficiency or from more fuel efficient aviation.

Even with this dramatic reduction in oil consumption -- from 21 million barrels per day to 17 million barrels per day -- we would still be dependent on oil imports, but much less so. Imports could have decreased from about 12 million barrels per day to 7 million barrels per day. These levels would be comparable to the late 1990s, a period of relatively stable prices, when we produced about half of the liquid fuels that we consumed.

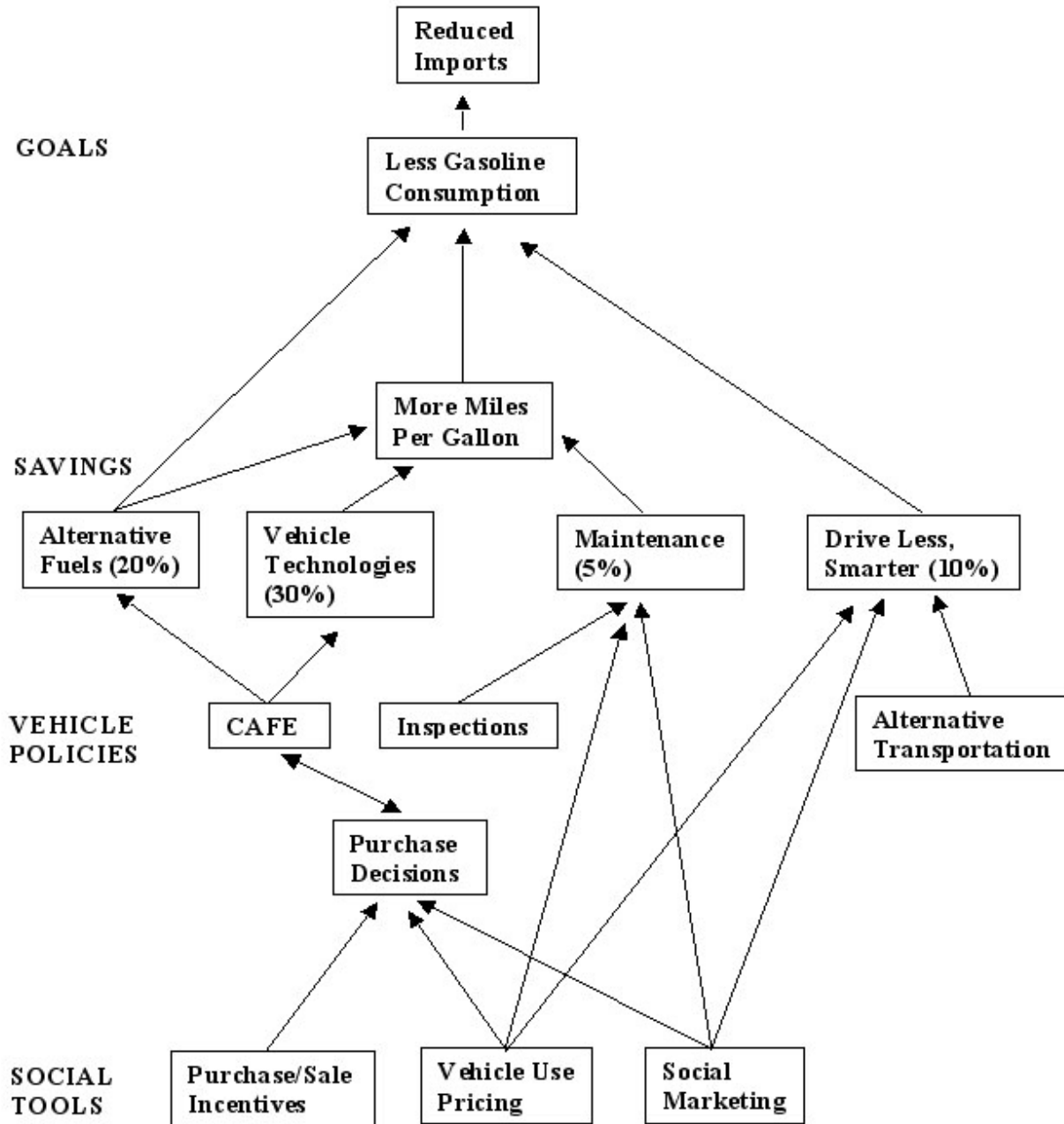
Political Solutions

To date, the energy efficiency issue has been framed in divisive ways -- environmentalists vs. auto companies, conservationists vs. oil producers, virtuous subcompact owners vs. immoral SUV owners. It is certainly true that dramatic improvements in motor vehicle energy efficiency, which actually reduce oil imports, will adversely affect some interests. Yet, it is also true that over time, such improvements would greatly benefit most individuals, families, communities, and the nation as a whole. Accordingly, the most effective political solution involves building broad-based support for needed changes among all those individuals and institutions that would receive these benefits while at the same time acknowledging those interests which are adversely affected. For instance, while the nation may see no need to accommodate oil companies enjoying stunning profits, it may decide that auto manufacturers should be given financial incentives to produce more fuel efficient vehicles, particularly if it can be shown that these incentives, considering a whole range of factors, benefit society.

As our society discusses and debates this increasingly important issue, we must not shirk from tough decisions necessary to achieving real energy independence. On the other hand, we should not go out of our way to demonize those who oppose these decisions either because of financial interest or simple shortsightedness. It will be far easier to make a broad array of significant changes needed if we try to persuade, not attack, companies that are reluctant to make more fuel efficient vehicles or consumers that are reluctant to give us their gas guzzlers. To succeed, as a society we must regard this challenge as akin to responding to the Great Depression, fighting World War II, or ensuring an adequate social safety net for all older persons. To meet each of these earlier challenges, most of the country united behind bold new public and private initiatives that often involved short-term sacrifices. We must treat energy independence as the same sort of societal challenge. Certainly, its profound economic, geopolitical, and environmental implications warrant such seriousness.

EXHIBIT II-1:

POLICIES AND PROGRAMS TO REDUCE GASOLINE CONSUMPTION AND OIL IMPORTS



APPENDIX A – 50 X 2030

http://www.consumerfed.org/pdfs/50_by_2030.pdf

Consumer Federation of America

Appendix B – CFA Energy Mileage Rating Scale

Mileage	Mileage Rating Scale
Over 40 MPG	Excellent
30-39 MPG	Good
20-29 MPG	Fair
Under 20 MPG	Poor

Mileage Rating Scale 2006 Overall Vehicle Performance

Rating	Number of vehicles (%)
Excellent	6 (1%)
Good	36 (3%)
Fair	611 (57%)
Poor	426 (40%)

Percentages don't total to 100% due to rounding.